How sales person bridged over the structural hole.

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Abstract:

The purpose of this paper is to illustrate the process of a sales network change and investigate the salesperson behavior related to the change in the network. We present a case of network change in which a longitudinal closed relationship, a dense network of relationships between a large manufacturer of automobile parts and a paint distributor, changed dramatically. We will illustrate how their relationships changed, and analyze what caused the change. The paper concludes by discussing the implications of this case study for sales management researchers and professionals.

Keywords: Industrial sales, social network, structural hole, buyer-seller dyad

Introduction

Managing social networks is no doubt one of the most important sales tasks. Salespersons play a unique role as boundary spanners (e.g., Donnelly and Ivancevich 1975), who develop interpersonal ties with people inside and outside of their firms. In recent years, a significant body of research on sales networks has been published in not only academic journals (Plouffe, Williams, and Leigh 2004; Sparks and Schenk 2006; Seevers, Skinner, and Kelley 2007; Palmatier 2008), but also practitioner outlets (Casciaro and Lobo 2005; Cross, Liedtka, and Weiss 2005; Üstüner and Godes 2006). Some leading marketing scholars have encouraged these studies (e.g., Achrol and Kotler 1999; Iacobucci 1996).

The relationship between firms' network structure and their performance has been an important research issue. Much research on the subject has been conducted by many scholars. However, academic research may not be particularly useful for salespersons who prefer practical know-how on how to change their network structure to resemble the kind suggested by research scholars. An exception to this is Üstüner and Godes' (2006) work. They claim that each stage of the sales process requires a salesperson to build and use a different kind of social networks. They acknowledge the importance of a salesperson's skills at managing information flows and coordinating efforts to contact customers through his/her network. In the earlier stage of a sales process, spare networks, i.e., non-redundant networks are desirable for identifying prospects. On one hand, spare networks enable a salesperson to gather diverse information while on the other hand, dense networks are more desirable for coordination purposes. What is needed for salespersons is a research explaining the practical usage of sales networks as Üstüner and Godes' (2006) work does.

However, even if Üstüner and Godes' (2006) claim is considered to be true, is it possible for a salesperson to alter his/her sales networks in different situations? If so, what should the salesperson do? In industrial sales, changing one's existing sales networks seems to be especially difficult. Usually, an industrial sales relationship tends to be steady and longitudinal with same partners. It is hard to imagine that a salesperson can change his/her networks occasionally and flexibly.

The purpose of this paper is to illustrate the process of a sales network change and investigate the salesperson behavior related to the change in the network. We present a case of network change in which a longitudinal closed relationship, a dense network of relationships between a large manufacturer of automobile parts and a paint distributor, changed dramatically. We will illustrate how their relationships changed, and analyze what caused the change. The paper concludes by discussing the implications of this case study for sales management researchers and professionals.

The Case: Hall-effects IC Business in Japanese automobile industry

The case we will look at in this paper is the interaction between three companies (O-well, Micronas, and Denso) from 1999 to 2005. We conducted ten interviews from 2005 to 2008 with key informants in O-well and checked documents related to this case study in the company. Furthermore, our consulting relationship with O-well from 2003 to 2007 also provided a source of information for this case study. The case is described mainly from the viewpoint of a manager who developed O-Well's Hall-effects IC business.

O-well and Denso maintained longitudinal relationships in paint and paint-related goods for many years. Recently, they also began to deal with a new electronic part for an automobile, the Hall-effects IC. Given the different nature of the products, the longitudinal relationship between the two companies in paint business came to an end, and entirely new relationships for electronic parts were needed. We investigate how O-well's manager built the much-needed new relationships. First, we introduce three focal companies. Then, we show how the new business network was built.

Three companies

DENSO: DENSO is one of the biggest automobile parts suppliers in the world. In FY 2006, which ended on March 31, 2007, DENSO reported another year of record results. Consolidated net sales increased 13.9% year on year to ¥3,188.3 billion (27.7 billion Euros; hereafter 1 Euro = ¥115), exceeding ¥3 trillion (26 billion Euros) for the first time. Operating income rose 24.6% to ¥266.6 billion (2.3 billion Euros), and net income jumped 27.9% to ¥169.6 billion (1.47 billion Euros). DENSO was established as Nippon DENSO Co., Ltd. after segregating from Toyota Motor Co., Ltd. with ¥15 million (130 thousand Euros) capital in 1949.

O-well: O-well is an independent paint distributor with a capital of ¥860 million (7.47 million Euro) and annual sales of ¥50 billion (43.4 million Euros) in 2005. Dealing in paint, paint equipments, interior design goods, and other miscellaneous goods, O-well not only sells paint and paint equipments, but also bids to design and manage paint projects for corporate clients. O-well has 38 branch offices and three colors-mixing factories. Moreover, O-well deals with electronic products and building materials through seven subsidiaries, defining its competitive advantage by diversifying in a wide range of industrial goods.

O-well was founded in 1943 as Ohmi Kogyo Co. LTD (hereafter Ohmi Kogyo) at Osaka, Japan. Ohmi Kogyo was founded to oversee the sales activities of paint and coatings, after paint and painting materials became government-controlled goods in 1947. To gather information on the Japanese government and the General Headquarters/Supreme Commander for the Allied Powers (GHQ/SCAP), Ohmi Kogyo established its branch in Tokyo. Since then, its branch network expanded widely in Japan according to the business needs of key customers, and so did subsidiary companies. Currently, there are seven subsidiary companies under O-well group. Uni-electronics Inc., established in 1966, became the first subsidiary of O-well. Ohmi Kogyo extended their business and therefore changed their name to "O-well Corporation" in 1992.

Micronas: Micronas, a semiconductor designer and manufacturer with worldwide operations, is a leading supplier of cutting-edge IC and sensor system solutions for consumer and automotive electronics. It serves all major consumer brands worldwide, many of which are in continuous partnerships seeking joint success. While the holding company is headquartered in Zurich (Switzerland), operational headquarters are based in Freiburg (Germany). Currently, the Micronas Group employs about 2000 people. In 2005, it generated CHF 845 million (646 million Euros; 1 CHF = 0.765 Euros) in sales. In order to engage in business with Japanese automobile manufactures and their parts suppliers, Mirconas Japan, a branch of Micronas, was established in 1996. However, the effort of building their own distribution channel failed. This forced Micronas Japan to choose a Japanese agency to enter the Japanese market.

Considering that a lack of knowledge of Japanese market was the cause for this failure, Mincronas asked support from Uni-electronics Inc., (hereafter Uni), a subsidiary of O-well and distributor of consumer electronics parts. Micronas had a relationship with Uni in their electronic parts business. First Uni tried to sell the parts by themselves. However, not having any relationships with the automobile industry, Uni couldn't sell "Hall-effects ICs" to an automobile industry. Then, Uni brought this business proposition to O-well in 1997.

The new relationship between DENSO and O-well

In February 1999, the "Electronics Project" (hereafter "E-project") was initiated in O-well's merchandise department to supplement the company's paint business, also its main business, by joining this growing electronics field. The project, lacking a well-defined purpose and market survey insights, was more accurately a test case of business expansion with only two staff members assigned to the department at the beginning.

The "Hall-effects ICs" technology used a non-contact IC to monitor the movements of objects. This technology was capable of transforming a mechanical treatment into an electric treatment even without any physical contact between two parts. The less the physical contact among parts, the less friction will occur. Moreover, if the friction among parts could be reduced, then fewer contact faults will occur. However, although the engineers of the E-project realized this logic, they did not know where and how to apply it. In other words, "contact less" was just an ideal concept at that time.

O-well had plans to sell Hall-effects IC to an automobile manufacturer. Since the "Hall-effects ICs" was a non-contact IC to monitor the movements of objects, O-well tried to apply this product in the automobile parts. In the paint business, O-well had built some connections with automobile manufacturers, so they tried to find prospective buyers through these connections in the automobile industry. But unfortunately, no automobile manufacturer was interested.

O-well then decided to contact parts makers. In June 1999, they attended a meeting for new product development in DENSO, a major parts manufacturer in the supply chain of Toyota. They also got an opportunity to deliver a presentation to the staffs from departments of R&D, IC technology, ABS technology, and electronics parts purchase. However, this effort on O-well's part still did not bring them any business opportunity.

Although, some manufacturers enquired about this technology, O-well could not get the order at the time. In order to respond to the inquiries received, O-well planned a precise presentation with the support of a technological staff from Micronas. In July 1999, O-well contacted Micronas and became its agency to run its business in Japan.

However, even as many parts manufacturers showed interest in O-well's technology, they hesitated to introduce it in their product line-ups not only because using "Hall-effects IC" was expensive, but also because there were some technical problems in its application. Another key reason was that most Japanese semiconductor makers and their downstream manufacturers were not familiar with this technology. Therefore, both potential suppliers and end users had reservations.

At last, "Hall-effects IC" technology caught the attention of a manager in DENSO's throttle valves business. In response to the excessively high defective rate of DENSO's throttle valve products, Toyota issued an order for product improvement. In the process of analyzing the source of the high defective rate, it was found that the physical frictions among valve parts were the main reason.

But the automobile parts business offers "design-in" services. That is, since every part is designed for a specific car in the design phase, if an automobile parts manufacturer wants to extend their new valves business, they will have to wait until the development of a new car or a new model. In fact, O-well joined hands with DENSO in choosing their focus on a complete model change of "Windom (Lexus ES300 in international)" in 2001.

Consequently, in May 2001, a new style of electronic controlled throttle valve that uses the “Hall-effects IC” was loaded into the new model of “Windom.” At that time, the total production of “Hall-effects IC” was just 6,000 pieces per month, which was expected to increase. The reduction in the throttle valve’s defective rate to almost zero won DENSO an official commendation from Toyota.

Following this success, other departments in DENSO began introducing the “Hall-effects ICs” technology into their own businesses, a reaction that also influenced other automobile manufacturers such as Honda and Nissan. The sales amount of “Hall-effects ICs” in O-well was ¥90 million (600 thousand Euros) in 2001, and increased dramatically to ¥500 million (3.33 million Euros) in 2002.

The sales amount kept increasing in subsequent years: ¥1,500 million (10 million Euros) in 2003, ¥3000 million (20 million Euros) in 2004, and ¥5,000 million (33.3 million Euros) in 2005. Subsequently, the “E-project” team was separated from the merchandising department and became the electronics department. Although, the profit amount became negative in FY 2003, by FY 2004, the accumulated losses were cleared.

The precise story of the network change

Now, we examine the case more closely at the interpersonal level. The network change mentioned above came about following network changes at the interpersonal level.

At the beginning of O-well’s E-project, its manager, Mr. O, had a personal connection with automobile manufacturers. The most supportive person in Mr. O’s network of personal connections was Mr. N, a manager at NISSAN and an old business partner of Mr. O in the paint business. Introducing Mr. O to his friends, colleagues, and business partners, Mr. N also informed him about a new technology review meeting at DENSO. Moreover, it was he who introduced Mr. O to Mr. X, a manager in throttle valves business at DENSO. Although NISSAN did not have formal business connections with DENSO, Mr. N had a personal connection with Mr. X.

Demoted from another business department and having absolutely no knowledge about throttle valves, Mr. X was an outsider in the throttle valves department who nonetheless had formal managerial authority and connection in throttle valves business. Mr. X’s unique background allowed him to decide to adopt Hall-effects ICs in throttle valves parts. Since Hall-effects IC was a developing technology and had no track record as automobile parts, adopting it involved certain risks. Almost all the members and parts distributors of the throttle valves department raised an objection against adopting Hall-effects IC. But Mr. X was free of constraints or past bonds in the throttle valves business. On the other hand, he had many personal connections with engineers working on electronic devices in other departments of

DENSO. Because throttle valves are mechanical or non-electric devices, he needed the help of experts in electronic devices to assess the feasibility of adopting Hall-effects IC. Fortunately, in cooperation with experts in electronics devices, Mr. X weighed the potential benefits against the different risks involved without feeling restrained by past bonds. In this way, he decided to gamble on the possibility that Hall-effects IC could reduce the defective rate of throttle valves.

Analysis

From this case, we could say that O-well's success was a result of bridging the structural hole (Burt 1992) between DENSO and Micronas. Once O-well moved into the position bridging the structural hole, sales volumes of Hall-effects IC grew tremendously. Following the tremendous growth of sales volume to DENSO, O-well's business expanded to other companies, such as NISSAN and HONDA. The business with DENSO enabled new relations with NISSAN and HONDA. All these changes stemmed from the network structure to bridge the structural hole between DENSO and Micronas.

While bridging a structural hole is a critical goal for salespersons, simply stating so does not provide behavioral directions on how a salesperson could link and with whom. Moreover, network building is not always valuable. While formal network theory states that network building with anyone creates new value, asymmetric resource distribution is natural in the real business world. A value created from a network stems from linking with whom should be linked on the right timing.

The value network concept (Christensen 1997) revealed this contradiction. In our case study, Mr. O first tried to sell a new technology, i.e., Hall-effects IC, to the contacts he had built in his current business network in the paint business. However, no one was interested in adopting the new technology. The old technology of throttle valve based on mechanical functions was completely different from the new technology enabling Hall-effects IC. No engineer in Mr. O's old value network was committed to Hall-effects IC, so the network already formed based on the old technology worked as a hindrance or structural constraint in Mr. O's current networking project. However, this does not necessarily imply that value network is always a hindrance. Value network sometimes works as a route to acquire new resources and cooperation. In Mr. O's case, what he actually needed was a new network with possible collaborators who could help him make new throttle valves using Hall-effects IC.

From this perspective, Mr. O was lucky that he built a connection with Mr. X, who had been relegated to a lower position. He recovered his position as a managing director of the new throttle valve division. As for this reason, he was free from the restraints inherent in the previous mechanical throttle valve network. Despite his lower position, he had resource networks in the area of electronically controlled throttle valves. Driven by a strong motivation to improve the failure rate of throttle valves, he was willing to try anything possible without preconceived notions.

It is thus clear that a salesperson should build links with those individuals who, like Mr. X, have both resource network and motivation to build a new value network.

Implications

We conclude that finding someone who is free from the current value network and who has a motivation to create a new value network is critically important for effective sales management. However, this is still a tentative conclusion. In our future research, we look forward not only to support this conclusion empirically, but also to develop a network theory of sales management.

We believe that one of the future research directions involves revisiting the dyadic approach on sales management (e.g., Evans 1963). In the late 1970s, researchers taking the dyadic approach gradually shifted their research focus to the influence strategy of a salesperson (e.g., Bush and Wilson 1976; Spiro and Perreault 1979). These researches focused on the power base theory (French and Raven 1959). Researchers clearly intended to show why a specific salesperson behavior is effective. However, the presence of a network structure certainly affects the power balance of any buyer-seller dyad (e.g., Emerson 1962). Moreover, a network has exclusive properties that are different from player to player, as well as from one buyer-seller dyad to another. Therefore, we should view dyadic relationships in the context of a specific network rather than in isolation.

However, the formal network theory is not sufficiently useful for salespersons. Although it can explain an ideal network structure, it does not explain how to build it. In our research, the characteristics of a particular node and its timing might be critically important. But these factors are omitted in network studies, much to the disadvantage of a practicing salesperson whose job is to build a network, not to describe the network structure. While the theory helps a salesperson to know what type of network should be built, it does not explain how to build it in practice. As for sales management, an important issue is how and to whom salespersons must be linked.

From this point of view, a cognitive approach or an adaptive selling approach (e.g., Weitz et. al. 1986) to sales management should be revisited. But a cognitive approach also has its problems. Even though some studies endorse an appropriate sales behavior in a specific sales situation, they lack theoretical rigor in explaining why specific salesperson behaviors are effective. While appropriate for describing what specific behaviors lead to results in specific situations, a cognitive approach lacks explanation of why they are so. Findings of network theory are expected to explain why specific salesperson behaviors are effective.

In conclusion, we need to further explore how salespersons build their sales networks. Network theory can provide us with a hypothesis, while a cognitive approach can provide a method to test the hypothesis.

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