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ECOMMERCE IN THE GEMS & JEWELRY INDUSTRY

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1. INTRODUCTION

Ecommerce has brought significant changes in several sectors of the business world, and today it affects nearly every industry to a high degree. This study investigates the influence of Ecommerce on the Gems and Jewelry (G&J) industry by connecting industry characteristics with factors induced by the changing external environment. To approach this goal the Market-Based View (MBV), the Resource-Based View (RBV) and Transaction Cost Economics (TCE) are combined and this "new lens" constructed is employed to focus on the attributes of the G&J Industry and investigate the influence of Ecommerce on this industry. Furthermore, this article closes a gap in the literature as little is known about the influence of Ecommerce on Small and Medium Enterprises (SMEs) in the G&J industry. These influences and the resulting managerial and strategic implications are the unit of analysis when investigating the changes of the external environment due to Ecommerce.

Regarding these factors, one of the contributions is to link the different concepts and theories, and investigate their relevance for the G&J industry. For members of the industry, the understanding of the interrelation of these key factors is essential, no matter whether they participate directly in Ecommerce or not. By integrating these considerations this article provides the necessary theoretical background, indicates possibilities and provides insights into how SMEs in the G&J industry can successfully participate in Ecommerce despite their limited resources.

2. BACKGROUND

The investigation of the influence of ecommerce on the G&J industry is performed by a combination of different approaches. First, the development and status quo of Ecommerce is investigated to obtain understanding of the current situation. Second, the nature and characteristics of the G&J industry are extracted to understand the specific features of the

industry and how they are subject to the changing environment. This provides the basis for the subsequent investigation employing the MBV, the RBV and TCE. These three theoretical frameworks are used as this approach promises to provide a comprehensive perspective to understand the current development and provides insight into the forces that govern the future of this industry.

2.1. Ecommerce & the G&J industry

In recent years the technical barriers to enter Ecommerce decreased rapidly, resulting in the fact that it is now cheaper and easier to conduct business electronically. The consumers as well are becoming more and more sophisticated in using the benefits of the internet to maximize their advantages when shopping online. These developments affect the G&J industry in different ways. The G&J industry is an old and traditional industry, and concerning several characteristics a unique Industry. For centuries the G&J industry has been by nature an inhomogeneous industry; which combines elements from arts to commodity products, from workmanship to high tech, and touches areas of both the highest emotionally and investment-driven considerations. This makes up a highly intransparent and fragmented industry, which consists mainly of micro-, small and medium-sized companies. The in-transparency was one of the main reasons why very high margins could be achieved by some industry members. These high margins were necessary and justified by high operating expenses and low inventory turnover rates making high margins necessary to achieve an acceptable return on investment in the stock. Moreover, in the past the G&J industry used to be a fairly impenetrable "insider" business, and this situation was beneficial for the members of this industry.

Internationalization and globalization have altered the whole production and distribution process of goods and services (David, 2007, p. 27). Concerning the G&J industry changes have occurred because of the increasing availability of the different goods traded by the industry in the source countries as well as in Germany. This increasing supply has also lowered the possible margins substantially (Samuelson & Nordhaus, 2010). G&J products have a relatively high value compared to their size and weight, which makes them very easy and lucrative to ship. This in

combination with the much easier possibilities to communicate and travel internationally made these once relatively scarce products now abundant in Germany.

2.2 .The Influence of Ecommerce on the G&J Industry from a MBV Perspective

Focusing with the MBV (Porter, 2001) on the G&J industry and the changes induced by Ecommerce and Internet (E&I) reveals important influences. E&I increase the influence of all of the five forces, which changes the whole industry environment for existing companies. The threat of new entrant's increases due to decreasing entry barriers as it is now easier for newcomers to enter the industry. On the one hand, this increases the supply but on the other hand, it leads to a loosing of the former competitive advantage of the existing firms (Canzer, 2006). The increasing bargaining power of buyers decreases the profitability of the G&J industry and the increasing transparency suggests to the customers that they now can compare prices and find the best offer. Theoretically this should make the market more efficient, which would be beneficial for the customers, and for the companies it would decrease the possibility of reaping above-average profits. Due to the complexity of the G&J industry, this is only partly true, as the increase in transparency due to E&I leads superficially considered to the possibility for the customers to compare prices, but due to the problems in comparing quality, and by this the value of the product, comparing only prices is just one side of the coin.

The increasing bargaining power of suppliers also increases the competition, thereby decreasing profits. The possibilities induced by E&I make it easier for suppliers and producers to directly reach the final customers, which has a great impact on the G&J industry, which is traditionally composed of a complex network of importers, exporters, producers, suppliers, intermediaries, wholesalers and retailers. Because of the possibilities of forward integration producers and suppliers will now aim to reap the margins which were formerly earned by intermediaries and retailers. This development is not limited to national borders and offers opportunities to producers and suppliers in the source country as well as in cheap labor countries. All together this strongly influences the G&J industry. The increasing threat of substitutes due to E&I also affects the

G&J industry. Regarding the retail business in particular, switching costs from one vendor to another are reduced, as the next vendor is literally just one mouse click away. As no physical relationship was developed with the jeweler, as it traditionally used to be the case in the G&J industry, the customer does not feel bound to the respective company. In the case of the G&J industry the threat of substitutes is even amplified because the product has not be substituted by the exact same product; instead, the customer is in most of the cases searching for a somehow comparable product. Thus, as the products do not have to be exactly the same, sometimes not even equal, the threat of substitutes rises drastically compared to the previous, traditional situation in which the customer had a limited supply, for example, in a jewelry shop.

All these factors increase the competition within the industry (Porter, 2001). The main source of differentiation, which was for many jewelry retail outlets often simply their location, loses its role. The fact that the revenues of the G&J industry in Germany have not grown in the past years, and the fact that new competitors have established themselves due to the above-described reasons have contributed to the increase in competition in this industry. Another influence of E&I on the G&J industry is that because of the increasing transparency and availability of information for the customers strategic groups arise where they have never been before. The classical retail jeweler is now competing not only with mail-order and TV sales companies, but also with his remote peers and colleagues. It does not matter too much whether the respective company is participating actively in Ecommerce or not, but as many SMEs with equal resources and focus participate and start participating in Ecommerce, new strategic groups emerge. In summary, this also increases the competition for the individual participants.

2.3. The Influence of Ecommerce on the G&J Industry from a RBV Perspective

Employing the RBV (Penrose, 1995) perspective and focusing on the G&J industry and the changes induced by E&I reveals important influences. Due to the changes induced by E&I, many of the traditional resources of the companies in the G&J industry change their value and in many cases the value is decreasing. This factor is often amplified due to the traditional nature of the industry

which makes rapid adoption to change not something that is regarded a general strength of this industry. The fact that many of the traditional valuable resources have lost rapidly in value causes additional problems to many of the members of the industry.

However, the RBV perspective does not only reveal negative aspects, but also suggests that especially the managerial requirements increase in many areas and arise in new areas. This development is a revolutionary change for many companies. Many of the managerial competencies and company capabilities of companies in the G&J industry in the past where much more focused on G&J-related topics than on pure economic and business considerations. Even if all the companies are affected by the changing environment to a certain degree, the degree of exposure to the changing environment is important for each individual company. This becomes clear when using analytical tools like the VRIO framework (Barney, 2011) for considering the pre- and post-Ecommerce environments and requirements to access which resources have still the same value, which resources increased and which ones decreased in value. The companies in the G&J industry have to acknowledge that it often is not a single resource, but a combination of different resources, competencies and capabilities which might lead to a sustainable competitive advantage. This can be also explained by applying VRIO considerations on the transformation process the industry is undergoing due to Ecommerce. On the one hand companies possess the traditional G&J-related Resources, Competencies and Capabilities (RCC) that they developed in the past and that underwent a development process which makes them rare and difficult to copy due to path dependencies and time compression diseconomies (Prahalad & Hamel, 1990). On the other hand, there are the RCC which have become important now and which are related to Ecommerce. They have to be adopted quickly for the company to be able to be competitive.

This leads to the consideration that, from a RBV perspective, if planned strategically wise and executed properly, it should be easier for companies rooted in the G&J industry to learn how to deploy Ecommerce than for Ecommerce companies to learn about the G&J business. If doing so, the company could design and generate a competitive re-

source bundle which would be difficult to imitate by both industry insiders and outsiders. To stay competitive this bundle of RCC must be exploited in an efficient manner, which requires a proper organizational context (Wernerfelt, 1984). The mentioned lack of managerial and economic focus apparent in SMEs in the G&J industry has led to problems for many of the industry members, also bears opportunities, waiting for the ones able to exploit them.

As the environment is changing due to Ecommerce, the Critical Success Factors (CSFs) of companies in the G&J industry are changing as well in evolutionary or revolutionary manner. Companies has to adapt these changes, which means it has to restructure the RCC bundle it possesses (Collis & Montgomery, 2005). Due to limited resources, this may be difficult, but inevitable since it can be assumed that in the future the propensity of the external environment to change will not decrease. Compared to the past, the companies in the G&J industry will have to develop new RCC, to change and to adopt them on a much more regular basis than they used to. Therefore, the ability to do so will be a highly important key success factor in the future. Being small is not always a disadvantage; it can also be used for creating and exploiting the advantages of being much more flexible and able to react quickly. This refers to the requirements of being dynamic and flexible and to generate meta-competences (Rasche, 1994), which means being able to quickly generate the competencies required in a new environment. Therefore, the importance of organizational learning will increase further in the future. These abilities strongly will influence the value of all other resources in the future. By doing so the company will be able to transfer the former valuable competencies over the internet in an efficient manner. This in turn requires entrepreneurial competencies of the executives, which have to constantly develop, arrange and govern the resources, thereby creating the RCC bundle which fits best the complex requirements of a changing environment.

2.4.The Influence of Ecommerce on the G&J Industry from a TCE Perspective

Transaction costs (Coase, 1937; Williamson, 1985) in the G&J sector have been generally high due to industry characteristics. These trans-

action costs were also partly causing the abnormal high margins, which the customers had to pay. Ecommerce has changed this as it has lowered transaction costs significantly, allowing industry members who are using the new technological possibilities in a proper way to transfer the decreased transaction costs to their customers and thus to achieve a competitive advantage. For industry members who are not able to use and participate in E&I, this development causes severe problems, and in the long run it can destroy their competitiveness.

Based on TCE considerations and as different studies (Paquin, 2000; Strebinger & Treiblmaier, 2006) show, it is not enough to participate in Ecommerce by only fulfilling the technological requirements, which means optimizing mainly IT-related topics. Ecommerce also influences processes which are not IT related and these processes have to be reengineered as well (Gardner & Ash, 2003). It is highly possible that this affects the organizational structure and the pre-Ecommerce processes, as these components were installed and designed to optimize the internal transaction costs before Ecommerce was introduced (Strebinger & Treiblmaier, 2006, p. 88).

Because of their traditional attitude, which goes hand in hand with a certain aversion to change, Ecommerce may thus constitute a threat to the companies in the G&J industry. In fact, there is the danger that even if the management and the company are able to initiate the necessary changes, they may lack the willingness to do so. As the required changes often affect the organizational structure and processes, they typically face emotional resistance from those who are concerned (Strebinger & Treiblmaier, 2006, p. 104). Due to the nature of the G&J sector, an avoidance behavior is conceivable, leading to the possibility that the Ecommerce operations of the company will never reach the necessary level of efficiency to be profitable. To sum up, from the TCE perspective, Ecommerce offers many opportunities for companies in the G&J industry, but it also entails the great risk of not participating at all or not participating successfully and thus gaining a bad competitive position in the future.

3.DISCUSSION, RESULTS AND LIMITATIONS

The investigated influences of Ecommerce entail threats for most of

the members of the G&J Industry, especially the small and very traditional companies. This however also entails opportunities to exploit for those members who are able adapt to this new environment.

Based on RBV considerations, the main threat is that the value of the traditional resources and competencies will be further decreasing. This is true for most of the (traditional) competitors in the investigated industry. However, this threat also entails some opportunities that can be exploited if performed properly. By the right combination of the "traditional" competencies of the G&J industry with the competencies required in the Ecommerce environment a unique bundle of resources could be created, which passes the VRIO criteria and would be sufficient to create a quasi sustainable competitive advantage. This leads to the requirement of being dynamic and flexible, as well as constant enhance organizational learning, which enables to react quickly to changes and create new competencies. In this shift, which becomes inevitable, lies a unique opportunity to exploit and create a highly valuable bundle of competencies, which becomes clear when combining RBV considerations with TCE.

This would also enable SMEs to link still unexploited network resources inherent in the G&J industry, by the use of the already existing knowledge, competencies and experience and to connect them with the Ecommerce environment. This would be of highest value, also in terms of possible monetary exploitation, as it would also lower the TC for all members of the network thus created. For companies this means that strategies, business models, values and competences might have to be modified and that flexibility and constant learning, adaption and improvement become more important. As this change has to be initiated and managed, also a shift of importance from G&J industry-specific knowledge to managerial and business-related knowledge take place. Ecommerce makes the G&J business more "business" than ever before.

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