PARTNER KNOWLEDGE, INTERNAL COMMUNICATION AND CUSTOMER RELATIONSHIP QUALITY IN THE LIGHT OF STUDY CONDUCTED IN SLOVENIA *

Maciej Mitrega¹, Gregor Pfajfar²

¹University of Manchester, UK
²University of Ljubljana, Slovenia

Abstract: The popularization of some network-based research constructs is widely observed among IMP scholars. Most existing studies about inter-firm networks are descriptive and qualitative in nature which resulted in generating many new concepts but the ability of this kind of studies in providing managerial guidelines has been questioned (Golletto, Salle, Borghini, Rinallo 2007; Brennan & Turnbull 2002).

On the basis of resource-based theory of the firm there were some recent attempts to develop constructs which allow for quantitative and explanatory studies (Ritter, Wilkinson and Johnston 2004; Walter, Auer and Ritter 2006; Human 2007; Human and Naudé 2009). Corresponding with results of these studies this paper aims at evaluating some previously suggested measurement scales for network knowledge and internal communication (Walter, Auer and Ritter 2006) in the context of Slovenian B2B companies.

Some scholars make a distinction between relationship marketing (RM) or Customer Relationship Marketing (CRM) and the network approach to marketing. It is especially observable among IMP scholars who treat their projects as based on interaction and network approach to marketing (Ford, Gadde, Håkansson, Snehota 2003). This distinction is not clear if we take into consideration that interaction, relationship and network are strongly related concepts and both IMP-related scholars and RM-related scholars treat buyer-customer relationship as the main research object.

Widely speaking the inter-firm network is phenomenon built from companies and the relationships between them. It is also argued that enriching network studies by relationship-based concepts is crucial for increasing managerial usefulness of network studies. The network notion seems to be an extremely general concept for managers. Managers are interested mostly in so-called focal networks and especially relationships with various stakeholders built around their companies. This paper draws attention to the connection between network knowledge, internal communication as network-based constructs and customer relationship quality. Regression analysis was used to verify statistical relationships between these constructs.

Keywords: partner knowledge, internal communication and customer relationship quality.
Introduction

Many industrialists have claimed that the economies and innovations sought by managers, may be obtained more efficiently with stable and ongoing suppliers through cooperation and the rationalization of the supply chain, rather than by simply putting pressure on prices (Michel, Naude, Salle, Valla; 2003). Ritter and Gemünden (2003) identified changes which take place in today’s business environment that stimulate managers to implement relationship-based strategies. Indeed, some business practices oriented at developing business relationships are observable in a B2B context in terms of Key Account Management or CRM/SRM systems implementation.

The popularization of some network-based and relationship-based research constructs is evident among IMP scholars. Most of existing IMP studies in these areas were descriptive in nature which may be treated as disadvantageous in terms of not fulfilling the need to support managers with some practical guidelines (Golletto, Salle, Borghini, Rinallo 2007; Brennan & Turnbull 2002). Tikkanen (1998) has stressed that it would very often be reasonable to take a focal company viewpoint of the network the focal firm is acting in. In comparison with the boundless vision of an industrial network suggested by Ford, Gadde, Håkansson, Snehota (2003), we prefer the focal net concept as presented by Möller and Rajala (2005) because it is more objective-focused and there is at least a chance that managers as research informants may understand this phenomenon more easily.

There are some different scientific approaches toward relational phenomena in marketing. The evident difference may be found between: Customer Relationship Management (CRM) and the Network Approach to Marketing (briefly the IMP approach). The CRM concept generally refers to processes oriented at effective management of a portfolio of customer relationships (Karantinou 2010, McDonald and Christopher, 2003). There is no doubt that IMP, which focuses on industrial networks, and CRM are two conceptually interconnected research streams. Industrial networks literally contain relationships between companies which are treated just as part of the greater whole. Networks are perceived as complex relational structures which include various stakeholders and both direct and indirect relations between them. The connections between network capabilities originating from the IMP tradition with various constructs from RM tradition are not frequently investigated. Thus, the study presented in this paper empirically investigates links between partner knowledge and internal communication as constructs based on the network capability concept and customer relationship quality as a construct based on the CRM research tradition. We argue that customers remain the main source of company profitability in a B2B context, so if the company develops the ability to deal with network opportunities and constraints effectively, it would positively influence the relationships that this company has with its customers. Corresponding to the classification proposed by Möller, Rajala, Svahn (2005) we suppose that the positive influence of network capability on customer relationships will be stronger in case of vertical value nets than horizontal value nets built around the focal firm.

This paper is organized as follows. First, we introduce the main theoretical concepts for our study and the hypothesized interrelationship between them. The presentation of the research results is preceded by a description of the field research including non-trivial problems encountered during the development of the measures. The hypothetical relations between research constructs is then verified using multiple regression analysis. Finally, the research results are discussed with regard to previous literature, suggestions are made and some implications are proposed.
The Partner Knowledge and Internal Communication as network-based concepts

The conceptualizations of partner knowledge and internal communication used in this research are based on prior studies about network capability/competence (Ritter 1999; Ritter, Wilkinson and Johnston 2004, Walter, Auer and Ritter 2006; Human 2007, Human and Naudé 2009), Walter, Auer and Ritter (2006) proposed treating “the network capability” as a firm’s multidimensional ability to develop and utilize inter-organizational relationships. The term “network” was used by Walter et al (2006) to express that managing relationships goes beyond coping with single relationships and alliances (p. 546). In this approach network capability has four main components: coordination, relational skills, partner knowledge and internal communication (p. 547). The interaction processes taking place between the actors of intra-organizational network are treated as the basis for dealing with other firms in the net surrounding the focal company. Thus, one may say that in the network capability concept both the company interior and the company surroundings are perceived from the network perspective. In our study we focus on two components which both refer to organizational processes of accumulating and spreading information in the context of intra-organizational (internal communication) and inter-organizational (partner knowledge) networks. The information processes and systems of the company were suggested as the drivers of company performance in previous studies on market orientation (Jaworski, Kohli 1993; Fonfara 2001). The vision of communication among employees positively influencing market performance has been supported in previous studies about team coordination (Moon, Armstrong 1994; Jones, Dixon, Chonko, Cannon, 2005; Dubois, Wynstra 2005) and internal marketing (Lings, Brooks 1998; Hwang, Chi 2005). Hence, we argue that these studies justify the hypothesis that partner knowledge and internal communication are crucial components of a company’s ability to deal effectively with network opportunities and constraints.

The Customer Relationship Quality as the key concept in RM

The quality of customer relationships as the mediator of some relationship benefits is consistent with previous studies on relationship marketing (Crosby, Evans, Cowles 1990; De Wulf, Odekerken-Schröder, Van Kenhove 2003). While these empirical studies were conducted mainly in the context of consumer markets, there is no reason to believe this construct would be not effectively used in the area of business markets. Generally, there is no definitive set of dimensions that can be said to make up relationship quality. It is preferred to use an overall relationship quality construct over its more specific dimensions because, even though these various forms of attitude may be conceptually distinct, respondents have difficulty in making fine distinctions between them and tend to lump them together (Crosby, Evans, Cowles 1990; DeWulf, Odekerken-Schröder, Iacobucci 2001). In most of studies relationship quality is linked only with customer loyalty, however there are some empirical studies which support the hypothesis that quality of customer relationships have a positive impact on a company’s profitability (i.e. Hibbard, Brunel, Dant, Iacobucci 2001).

The Hypothesized Link Between Partner Knowledge, Internal Communication And Customer Relationship Quality

In comparison with studies about buyer-seller relationships the network approach to relationship marketing is rather new. There is a lack of studies which verify connections between the attitude of a company toward various internal and external players and the quality of customer relationships. The directions and strengths of these connections may be diverse. Here, we follow the vision of customer relationship quality as being the mediating variable in some business practices and relationship effects which has been explored in RM studies and we treat customer relationship quality as dependent upon partner knowledge and internal communication. Thus, it is hypothesized that:
**H1:** The higher partner knowledge (KNOW), the higher customer relationship quality (QUAL)

**H2:** The higher internal communication (COMM), the higher customer relationship quality (QUAL)

It is likely that these statistical relationships are not fully universal with regard to all business sectors. The most typical division between sectors takes the form of dividing companies into: manufacturing companies, distributors and service companies. Nowadays this division is not sharp because all companies must at some extent deal with various companies, institutions and individuals and augment their products with services (i.e. complex post-sale services). However, the roots of network-based marketing are mainly in an industrial setting, thus it is hypothesized that:

**H3:** The impact of KNOW and COMM on QUAL is the strongest in the subgroup of manufacturing companies in comparison with mainly trade and/or services companies.

**Development of Measures**

The main field research was preceded by a pilot study conducted among 6 companies operating in the B2B area and based in Slovenia. These companies were highly diverse in terms of number of employees and type of products/services offered. The questionnaire used in the pilot study comprised of scales previously suggested for particular dimensions of network capability (Walter, Auer and Ritter 2006, Human and Naudé 2009). It seems that validity of scales was pre-tested by interviewing academic entrepreneurs (Walter, Auer and Ritter 2006) and industrialists (Human and Naudé 2009). Unfortunately, neither Walter et al. (2006) nor Human and Naudé (2009) presented detailed information about the results of these pilot studies. Thus, we identified the need for additional construct validity inspection. In addition to mathematical procedures like CFA we found that there was a need to conduct “face validity inspection” by discussing the meaning of the scales with various respondents (Trochim and Donnelly 2007). It seemed reasonable to conduct it in other research settings, especially including “average managers” instead of experts and with people from countries in which the cultures are perceived as distant to these which were already investigated.

All scales were presented to managers of companies and they were asked to reveal doubts and comments with respect to them. They were also asked to express in their own words the meaning standing behind particular scales. The most important problem faced by respondents was about using the general term “partners” in most of scales. When asked about the first association connected with term “partner”, respondents usually identified some expressions which were conceptually close to “business customers”, “agents” or “intermediaries”. Despite explaining to them the wide meaning of the term “partner” as it was proposed by Walter, Auer and Ritter (2006), they usually found it impossible to assess “the average” company’s attitude or relationships with regard to different stakeholder types: customers, intermediaries, suppliers, mass media or other influence groups. They suggested that companies behave differently with regard to particular groups. Taking these observations into consideration, using the term “partner” was decided to be too general and not valid. In the final questionnaire scales were rebuilt to use commonly known expressions like: customers, suppliers, influential persons/institutions. To avoid multiplication of all scales in relation to different stakeholder segments, only selected scales were used. These were scales for KNOW and COMM which were perceived as most understandable by respondents. There were also four scales corresponding with previous conceptualization of “customer relationship quality” (Crosby, Evans, Cowles 1990; De Wulf, Odekerken-Schröder, Van Kenhove 2003) that were used. All scales used in final version of the questionnaire are presented in the Table 1. The response categories for each scale were anchored by 1 (strongly disagree) and 5 (strongly agree).
Table 1. The scales used for measurement of research concepts

<table>
<thead>
<tr>
<th>KNOW – partner knowledge (alpha = 0.687)</th>
<th>COMM – internal communication (alpha = 0.788)</th>
<th>QUAL - customer relationship quality (alpha = 0.763)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- We have substantial knowledge about activities of our suppliers</td>
<td>- In our company superior and subordinate know exactly their responsibilities</td>
<td>- Customers are more satisfied with us than with our competitors</td>
</tr>
<tr>
<td>- We know intentions of persons and organizations which have influence on the success of our company</td>
<td>- In our company communication between employers goes without problems</td>
<td>- We have better relations with customers than our competitors</td>
</tr>
<tr>
<td>- We have complete knowledge about our key customers</td>
<td>- In our company there are good relations between employees</td>
<td>- We are able to cooperate flexibly with our customers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- In practice, customers more frequently stop purchasing from us than from our competitors (REC)</td>
</tr>
</tbody>
</table>

The sample and data collection

When the variables are difficult to measure (e.g., the firm’s evaluation of partner knowledge, internal communication etc.), qualitative methods may be more suitable for assessing the real company orientation (Albaum et al. 1989). However, quantitative methods have usually been used to measure customer relationship quality (e.g., Narver, Slater 1990; Kumar, Subramanian, Yauger 1998) and they are used more and more to assess network capability/competence (Human and Naudé 2009; Walter, Auer and Ritter 2006; Ritter, Gemünden 2004; Ritter 1999). We decided to use structured face-to-face interviews (on average each lasted 25 minutes), using trained professionals to perform the data collection. The data collection started at the end of November 2009 and finished at the beginning of March 2010. A non-random sample of 304 companies located in Slovenia was completed.

As a result non-random sample selection, 49.7% of interviewed companies generated most of profits from manufacturing (selling their own fabricated material products), 41.1% from distribution (selling material products fabricated by other entities) and 9.2% from services (performing commercially some services/activities). Almost all (97.4%) companies were privately-owned entities; only in the case of 8 companies was the communal or State-property dominant. The vast majority of the sample refers to small companies (79%), which employ less than 50 people, 13% of the sample were medium size companies employing between 50 to 249 companies and 8% companies may be categorized as big companies with employment at the level of 250 people or more.

Most of the respondents were general managers, sales managers or owners of the company. Consequently, 59% of respondents claimed that have a strong or a very strong influence on companies’ activities towards business partners. Only about 12% of all respondents defined themselves as people having weak or very weak influence on these issues. In addition, most of the companies have reported that they generate sales in more than 50% of all cases from stable, long-term customer relationships. In sum, companies in the sample seem to be fostering customer relationship quality and, therefore, may be treated as more relevant for our research.

Research results

When looking at Figure 1, we can see that the interviewees are quite confident that they can deal flexibly with their customers, possess knowledge about their customers, as well as suppliers, while they also claim that on average customers are more satisfied with them as with their competitors. When just simply looking at the average score, the employees of interviewed Slovenian companies report that communication within the company is not without problems. The descriptive analysis of the research results should not be treated as the
basis for dealing with research hypotheses, because we believe that this study like other studies in this area may be affected by social desirability phenomenon (Malhotra, 2004). Thus, we will concentrate on correlation and regression analysis, which show high interconnectedness between internal communication, customer knowledge and customer relationship quality.

**Figure 1:** Descriptive analysis of research constructs, displayed according mean score

<table>
<thead>
<tr>
<th>Construct</th>
<th>Strongly Agree (%)</th>
<th>Agree (%)</th>
<th>Neither Agree nor Disagree (%)</th>
<th>Disagree (%)</th>
<th>Strongly Disagree (%)</th>
<th>Average Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>We are able to cooperate flexibly with our customers</td>
<td>31</td>
<td>53</td>
<td>13</td>
<td>3</td>
<td>1%</td>
<td>4.11</td>
</tr>
<tr>
<td>We have complete knowledge about our key customers</td>
<td>24</td>
<td>54</td>
<td>18</td>
<td>3</td>
<td>1%</td>
<td>3.96</td>
</tr>
<tr>
<td>We have substantial knowledge about activities of our suppliers</td>
<td>18</td>
<td>58</td>
<td>18</td>
<td>3</td>
<td>1%</td>
<td>3.87</td>
</tr>
<tr>
<td>Customers are more satisfied with us than with our competitors</td>
<td>17</td>
<td>48</td>
<td>33</td>
<td>2</td>
<td>1%</td>
<td>3.80</td>
</tr>
<tr>
<td>In practice, customers more frequently stop purchasing from us than from our competitors</td>
<td>23</td>
<td>38</td>
<td>33</td>
<td>2</td>
<td>1%</td>
<td>3.77</td>
</tr>
<tr>
<td>In our company superior and subordinate know exactly their responsibilities</td>
<td>19</td>
<td>51</td>
<td>21</td>
<td>7</td>
<td>3%</td>
<td>3.77</td>
</tr>
<tr>
<td>In our company there are good relations between employees</td>
<td>14</td>
<td>53</td>
<td>28</td>
<td>4</td>
<td>2%</td>
<td>3.74</td>
</tr>
<tr>
<td>We have better relations with customers than our competitors</td>
<td>12</td>
<td>45</td>
<td>40</td>
<td>3</td>
<td>2%</td>
<td>3.66</td>
</tr>
<tr>
<td>We know intentions of persons and organizations which have influence on the success of our company</td>
<td>11</td>
<td>53</td>
<td>29</td>
<td>5</td>
<td>2%</td>
<td>3.65</td>
</tr>
<tr>
<td>In our company communication between employees goes without problems</td>
<td>13</td>
<td>40</td>
<td>34</td>
<td>13</td>
<td>1%</td>
<td>3.49</td>
</tr>
</tbody>
</table>

In order to consider the fit of the data to hypothesized constructs of partner knowledge and internal communication, explorative principal component factor analysis (EFA) with Varimax rotation and Kaiser normalisation was implemented. The KMO measure of sampling adequacy amounted to 0.731 which place it well above the minimal acceptable level of 0.5 at above average level (Norusis 1994, Górniak 2003). Two factors explained 67.17% of total six scales variance. Within the matrix of rotated components 6 scales matched two hypothesized factors with the loadings higher than 0.7. The Cronbach’s alphas’ scores for the scales are presented in Table 1 and suggest that all three variables: KNOW, COMM and QUAL exceed 0.6 which is usually treated as the minimum criterion in reliability analysis (Górniak 2003).

The test of hypothesized casual relationships (look at the hypotheses 1 and 2 above) was conducted through linear regression analysis. Taking into consideration the result of F test (80.39) with p lower than 0.01, the hypothesis, that all regression coefficients equal zero, is not supported. Also t value for KNOW parameter suggests that regression coefficient is statistically significant (p lower or equals 0.01). The $R^2$ equals 0.210 and adjusted $R^2$ equals 0.208. The standardized coefficient amounted to 0.459. Thus, the result of regression analysis supports the first hypothesis (H1). Similar analysis was done to test the second hypothesis. The result of F test (38.89) with p lower than 0.01 does not support the hypothesis, that all regression coefficients equal zero. Also t value for COMM parameter suggests that regression coefficient is statistically significant (p lower or equals 0.01). The $R^2$ equals 0.114 and adjusted $R^2$ equals 0.111. The standardized coefficient amounted to 0.338. Thus, the results of regression analysis support also the second hypothesis (H2).
The analysis was repeated in three subgroups containing of manufacturing, distribution and service businesses. The selected measures of goodness of fit and tests of statistical significance are presented in Table 2 and they do not support hypothesis H3. The proposed casual relationship fits not only with the subgroup of manufacturing companies with all regression coefficients statistically significant, but also with the distribution companies. The worst fit received the model comprising results from companies which specialize in the services, but it was probably affected by the relatively small number of service companies which participate in the research.

Table 2. Measures for regression models in prevailing business activity subgroups

<table>
<thead>
<tr>
<th>Measure</th>
<th>The manufacturing (n=151)</th>
<th>The distribution (n=125)</th>
<th>The service (n=28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F (p)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.006</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.292</td>
<td>0.337</td>
<td>0.278</td>
</tr>
<tr>
<td>t COMM (p)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.045</td>
</tr>
<tr>
<td>t KNOW (p)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.031</td>
</tr>
</tbody>
</table>

Research results interpretation, limitations and further suggestions

The business landscape is dynamic, consisting of two connected processes, taking place within companies (e.g. internal communication, internal relationships) and between the companies (e.g. knowing the network partners, developing relationships with customers) (Håkansson et al. 2009). This research confirmed the positive impact of internal communications and knowledge about network partners on customer relationship quality, which corresponds to the general idea of relatedness between processes within and outside the company, with changes in one impact on the other. The later goes in line with a network view, which sees a company as incomplete and dependent on abilities and resources of others (Ford et al. 2003).

This study supports the vision of IMP and RM as two conceptually interconnected research streams. Networks literally contain relationships with customers which are treated just as the part of greater whole. This study suggests that the ability to develop customer relationships is conditioned by the company’s ability to deal with wider relationship structures. More specifically this study argues that information gathering and sharing within the focal network of the company increases the likelihood of having satisfied, long-term customers. It may be treated as the call for further studies on interrelations between the network approach to Business-to-Business marketing and Relationship Marketing. This call seems to be recently supported also by Pels, Möller and Saren (2009), who provide an overview of research traditions in the context of business marketing.

Our research identified a lack of understanding, when using the word partners, as most of the respondents understood it only as customers, some included also suppliers. This might be the result of a different culture or type of companies interviewed, however it is crucial for researchers doing research in Eastern European markets, to be cautious when using the quite abstract word ‘partners’; this problem has so far not been identified in the literature about doing research in Western economies. Furthermore, the research identified differences in terms of industry type, showing that it was difficult to support the relationship between the hypothesized constructs only in the service industry. The later might be as a result of the small number of service companies in the sample, which presents also the opportunity for further research. Further research might also concentrate more on manufacturing and distribution companies, which have proven a good fit to the model. Other limitations to the study include the method used, sample size and focus on only one country, which might be overcome by further research. There are opportunities to not just look at both sides of the dyad, but also expand the scope of research to the whole network and do interviews with all network members, comparing results and offering the possibility to

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identify the weakest link in terms of network capabilities. In sum, the network capability construct has despite some limitations revealed by this study, the potential to be used in further studies on relationship-based and network-based marketing phenomena.

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