University Honors Program Theses

2019

Culture Inside the Firm and Its Effect on Collaboration Within the Supply Chain Industry

James Bailey Morris
Georgia Southern University

Culture Inside the Firm and Its Effect on Collaboration Within the Supply Chain Industry

An Honors Thesis submitted in partial fulfillment of the requirements for Honors in Department of Logistics & Supply Chain Management.

By
James Morris
Under the Mentorship of Dr. Matthew Jenkins

ABSTRACT
Increasing collaboration between suppliers and buyers is a goal of every firm. Researchers have discovered multiple aspects that can affect this level of collaboration including culture. Cultures between firms have been analyzed, however no study has examined how the culture within a firm affects the firm's collaboration. This study aims to research how the cultural dimensions of in-group collectivism and future orientation can affect firm collaboration and performance. After our analysis, the following relationships were discovered: in-group collectivism and future orientation positively affect collaboration, and collaboration positively affects the individual's perception of organizational support.

Thesis Mentor: _____

Dr. Matthew Jenkins

Honors Director: _____

Dr. Steven Engel

April 2019
Department of Logistics & Supply Chain Management
University Honors Program
Georgia Southern University

Acknowledgements

I would like to thank Dr. Matthew Jenkins for all his assistance and guidance in completing this project, my family and friends for their support, and Julia Thomas for her support helping me get through the challenges and stress of completing this project.

INTRODUCTION

Supply chains are experiencing a continuous cycle of improving efficiency as customers steadily increase their demand for shorter shipping times. This has led companies to invest more into their supply chains, and researcher's interest to expand toward methods of increasing supply chain collaboration. A multitude of studies have delved into the realm of what increases a firm's collaboration (Fawcett, Wallin, Allred, Fawcett, & Magnan, 2011; Adams, Richey, Autry, Morgan, & Gabler, 2014; Zacharia, Nix, & Lusch, 2009; Stank, Keller, & Daugherty, 2001; Cao & Zhang, 2011; Zacharia, Nix, & Lusch, 2011; Zhu, Krikke, & Caniëls, 2017; Hofer, Hofer, & Waller, 2014; Richey & Autry, 2009). These studies discover many different forces that shape a firm's collaboration. One important force studied immensely is a firm's culture. Researchers have examined culture mainly from the perspective of the nation where the firm resides (Naor, Linderman, & Schroeder, 2010) or from the firm's internal culture (Cadden, Marshall, & Cao, 2013). The differing culture between the buyer and supplier have been analyzed (Cannon, Doney, Mullen, & Peterson, 2010) and what affect culture has on introducing new technology to the firm (Khazanchi, Lewis, & Boyer, 2007). All this research has aided in defining what culture is, and how it relates to the relationship between firms. There is, however, one area of a cultural relationship these studies have not yet explored: department cultures. Which cultural values within the department affect the level of firm performance? This paper wishes to answer this question by examining whether the cultural dimension of in-group collectivism and future orientation affect the collaboration ability of the firm, and if these dimensions affect the performance of the firm. Data collected from this study can aid firms in determining what cultural values

may increase intra-firm collaborative efficiency and result in performance increases for the firm.

LITERATURE REVIEW

Culture

Culture is not an easily defined term. Many different studies have tried to grasp its definition with most describing it as the values and beliefs shared within a group (Hofstede, 1984). Although this definition encompasses the multiple aspects of culture, it is much too vague for researchers to measure. Many researchers have decided to instead examine culture using a variety of scales to simplify the different dimensions of culture. A well-known example is the four parameters used by Hofstede (1984) in his research of national cultures. His first scale is the degree to which the culture leaned more individualistic or collectivistic. Individualism, Hofstede (1984) says, is where individuals take actions to better either themselves or immediate family members only. On the other hand, the idea that society is expected to take care of each person in return for loyalty to the society is collectivism. Another of Hofstede's (1984) parameters is the size of the society's power distance. Hofstede (1984) writes a larger power distance includes a more centralized organization with few people disputing this organizational structure. Having a smaller power distance means a more decentralized organization where people are always questioning how the power is distributed.

The next scale Hofstede (1984) describes is having either a strong or weak uncertainty avoidance. How one acts in the face of future uncertainty is the primary focus of this parameter. Hofstede (1984) writes that a strong uncertainty avoidance means individuals believe that conforming with society to decrease deviations of the future is

important. Anything outside the set norms is looked down upon. The weaker the uncertainty avoidance, Hofstede (1984) states, the levels of flexibility and tolerance individuals have increases. The fourth and final cultural differentiator is whether the culture is masculine or feminine in nature. This scale is not based on an individual's gender, but on whether the attributes a societal norm exhibits are more feminine or masculine in nature (Hofstede, 1984). A norm contributing to an image of "achievement, heroism, assertiveness, and material success" is more masculine, while the focus on "relationships, modesty, caring for the weak, and quality of life" are more feminine in nature (Hofstede, 1984). Hofstede's cultural parameters have been used in a multitude of studies when examining culture.

When using Hofstede's differentiators, some researchers have considered only one to define different companies. Many of these papers use the label of collectivistic or individualistic as their singular parameter (Cannon et al., 2010; Power, Schoenherr, & Samson, 2010). These studies help lay the ground for comparing how collectivism and individualism affects a firm's performance. However, none examine if different levels of collectivism or individualism a firm has plays a role in the level of performance. They also consider how the national culture applies to the firm rather than looking at the firm's culture itself.

National culture has been an important characteristic when examining culture in many other studies as well. Even if collaboration is not included as a factor, they still use Hofstede's dimensions including power distance, uncertainty avoidance, and collectivism vs individualism (Bockstedt, Druehl, & Mishra, 2015; Kull & Wacker, 2010). Other orientations are used in these studies including future, humane, and performance

orientations. The measure of the assertiveness of a firm is included in Kull and Wacker's article (2010) as well. Even though these studies only included national culture, they aided in shaping a precise description of the dimensions used in my paper.

Although national culture has been thoroughly considered when examining culture, the organizational culture of a firm has also been included in other papers. A model many researchers use is the Competing Values Framework model (Cao, Huo, Li, & Zhao, 2015; Liu, Ke, Wei, Gu, & Chen, 2010; Sambasivan & Yen, 2010). Two parameters are used in this model: internal or external, and flexibility or control. Based on which two parameters the firm falls under, it's culture can be labeled as Group, Developmental, Hierarchical, or Rational (Cao et al., 2015). Different values are embodied under each label: "long- or short-term orientation (development culture), cooperation and team spirit (group culture), reward systems (rational culture) and centralized or decentralized control (hierarchical culture)" (Cao et al., 2015). These parameters will not be used in my paper, however the authors' definition of organizational culture within each study helped in defining it for me.

Many other papers have examined organizational culture in their research, but instead used different classifications. The scales of value congruence, value profiles, and value-practice interactions was used in comparing different cultures in one study (Khazanchi et al., 2007). Another differentiated firms' organizational culture by a questionnaire sent to each firm (Cadden et al., 2013). Some researchers looked at culture from other perspectives. For example, one study examined entrepreneurial culture's effect on whether a firm was more willing to update to cloud operating software (Wu et al., 2013). These studies also further aided in my defining of organizational culture.

Few researchers have inquired on whether both national and organizational culture affect a firm's performance. One study has looked at how each cultural level of analysis influences a firm's performance, and whether one better determines the performance level of the firm (Naor et al., 2010). This study measured culture using some of Hofstede's (1984) scales of uncertainty avoidance, power distance, and collectivism. However, the firm's assertiveness, gender egalitarianism, and different orientations were also examined (Naor et al., 2010). This paper helped me in determining which cultural parameters to choose from in my own research.

Each of these papers provided an abundance of cultural dimensions and definitions for me to use. These dimensions play a key role in defining what culture is, however only a few were used in my analysis. Future orientation used in Kull and Wacker's study (2010) was included in my analysis. The dimension of in-group collectivism was also used for analyzing culture (Naor et al., 2010).

Collaboration

Multiple authors have defined and shared the meaning of collaboration (Olorunniwo & Li, 2010; Simatupang & Sridharan, 2005; Hofer et al, 2014; Adams et al., 2014; Hall, Skipper, Hazen, & Hanna, 2012; Michalski, Montes-Botella, & Piedra, 2017; Richey & Autry, 2009; Sanders & Premus, 2005; Stank et al., 2001; Sanders, 2007). For example, it is defined by Schrage (as cited in Stank et al., 2001), as "an affective, mutually shared process where two or more departments work together, have mutual understanding, have a common vision, share resources, and achieve collective goals". This definition of collaboration is one of many I assessed when determining the dimension of collaboration for my paper.

Other variables have been used as moderators that strengthen collaboration. The relationship/trust of a firm is often one variable (Kahn, Maltz, & Mentzer, 2006; Narayanan, Narasimhan, & Schoenherr, 2015; Power et al., 2010; Singh & Power, 2009; Corsten & Felde, 2005; Hofer et al., 2014), and the information technology (IT) of a firm is another variable used frequently (Fawcett et al., 2011; Kahn et al., 2006; Sanders & Premus, 2005; Sanders, 2007; Power et al., 2010; Hall et al., 2012; Cassivi, É. Lefebvre, L. Lefebvre, & Légar, 2004; Kim & Lee, 2010). These two moderators of collaboration were also examined as possible constructs in my paper because of their rampant usage within other articles.

Just as with culture, there is a plethora of different definitions and methods of analyzing collaboration throughout a multitude of articles. All are important in defining collaboration, however I decided Anthony's definition (as cited in Min et al., 2005) of companies sharing activities such as planning and managing to be the best fit for this paper.

Performance

The successful collaboration of a firm is almost always determined by the performance of the firm in research (Nyaga, Lynch, Marshall, & Ambrose, 2013; Adams et al., 2014; Zacharia et al., 2009; Kahn et al., 2006; Sanders & Premus, 2005; Stank et al., 2001; Cao & Zhang, 2011; Rosenzweig, 2009; Sanders, 2007; Power, Hanna, Singh, & Samson, 2010; Singh & Power, 2009; Simatupang & Sridharan, 2005; Corsten & Felde, 2005; Michalski et al., 2017; Zhu et al., 2017; Richey & Autry, 2009; Cassivi, et al., 2004). Each measures the performance of the firm in their own way. We decided to

use the individual respondent's perception of perceived organizational support (POS) (AlZalabani & Modi, 2014) for our measurement of performance.

All constructs, their definitions, and units of analysis used in this paper can be found in the Table 1.

Table 1: Definition of Constructs

Construct	Definition	Unit of Analysis
Collaboration		
Collaboration	Anthony defines (as cited in Min et al., 2005) to be "two or more companies sharing the responsibility of exchanging common planning, management, execution, and performance measurement information"	All Departments
Culture		
Future Orientation	"The extent to which individuals engage in future-oriented behaviors such as delaying gratification, planning, and investing in the future" (Kull & Wacker, 2010)	My Organization
In-Group Collectivism	"The degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families" (Naor et al., 2010)	Your Department
Performance		
Perceived Organizational Support (POS)	"…the employees' perception about organization values" (AlZalabani & Modi, 2014)	Your Department, Personal Perception, My Organization

All previous research has illuminated new light on understanding culture's effect on collaboration and performance. Different measurement styles and levels of analysis are used when looking at culture. Researchers have used these differing measures and levels to examine culture from multiple viewpoints. This has taught us much on culture, however there are still particular gaps in analysis. Viewing the culture of the firm as a whole has been used countless times and is important when examining culture in supply chains, yet certainly differing cultures existing within the firm affect firm performance as well. No study has examined how intrafirm culture may affect the firm's collaborative

ability and performance. This study wishes to take part in shining light on this subject of research and its importance when examining firm culture.

METHODOLOGY

Our original plan was to find at least one firm willing to take our survey. This included receiving a minimum of 200 responses so statistical significance could be kept. In particular, we were hoping to receive feedback from the supply chain, engineering, and marketing departments. Relationships with firms were to be used from previously established connections from either Dr. Jenkins or myself. We created our survey using *Qualtrics* provided by Georgia Southern University. The expected time for respondents to complete the survey was around 15 minutes. The questions primarily consisted of matrix tables with a Likert scale of 7 points. Questions were obtained through analysis of previous research on the dimensions used in this paper.

During the creation of the survey, we were able to find one company who was willing to distribute the survey to their employees. We distributed the surveys by sending a predetermined email script to the top managers of the firm. From there, they sent a link of the survey to their employees with another email script created by us. It was important for us to have the top managers distribute the survey as we believed it was the best method of having employees fill out the survey. The link within the email could be copied and pasted into any web browser for the respondent to fill out the survey. If the respondent decided to not complete the survey, they were allowed with no penalty. All data was collected anonymously as certain answers may be considered personal.

ANALYSIS

After a couple of weeks of waiting, we decided to begin analysis of the data. We were able to collect 52 samples from the firm. Of the 52, 16 were incomplete and therefore were thrown out of our analysis. This dropped our samples of analysis to 36, well below what we wished to receive. However, due to time constraints we were unable to wait for more data to arrive.

All data analysis was completed using SPSS provided by Georgia Southern University. The analysis was completed on the relationships between in-group collectivism, future orientation, collaboration, and POS. Those four constructs were then examined using exploratory factor analysis. This analysis allowed us to look for any correlations as well as reduce the number of questions for further analysis. The responses were analyzed using the primary components method using eigenvalues to create components. The values were rotated using varimax rotation, and only responses with a correlation above .4 were considered. Any question that shared a high correlation between two components was thrown out of the analysis, and another exploratory factor analysis was completed. If multiple questions shared components, then the question with the highest pair of correlations was thrown out. This process was completed until no question shared a component group, or only two component groups were left.

After the exploratory factor analysis was completed, a confirmatory factor analysis was run to ensure that a relationship between the constructs existed. The confirmatory factor analysis was done using principal axis factoring and setting the number of components based on the amount created in the exploratory factor analysis. If

the confirmatory factor analysis worked, a multiple regression analysis would be completed with the created components representing the constructs.

For the multiple regression, a separate column representing the means of each question was created. Which questions to use was decided based on whether they were leftover from the confirmatory factor analysis. This meant not all of a construct's questions were used in the multiple regression. For example, if a construct was measured using five questions but only three made it through the factor analysis, then those three questions would be averaged together for that construct's mean column.

Once the columns were completed, a multiple linear regression analysis could be run. The dependent variable was chosen based on our hypothesized relationships of culture affecting collaboration and collaboration affecting performance. All multiple regression runs were completed using a bootstrap to compensate for the lack of responses. The coefficients table in the output determined whether the constructs showed any significance. Significance was determined with an alpha below .05 and a confidence interval that did not reach zero.

RESULTS

It is important to note that the lack of responses affects our ability to accurately say a certain relationship is occurring. Rather than saying, for example, this organization has in-group collectivistic culture that affects collaboration, we are only able to say the employees' perceptions of in-group collectivism within the organizational culture affects their perception of the firm's collaboration.

After our analysis, three significant relationships were discovered between our four constructs. They include the following: future orientation affecting collaboration (β

= .349, p < .05), in-group collectivism affecting collaboration (β = .409, p < .05), and

collaboration affecting POS at the department level (β = .550, p < .05). The coefficients

tables containing the significance of these relationships, the standardized coefficients

beta, and confidence intervals at 95% can be found below (Table 2, Table 3). Descriptive

statistics and loadings for each question of each construct can be found in Table 4.

Table 2: Effect of Culture Types on Collaboration

Dependent Variable: Collaboration				
Independent Variable	**β**	**p-value**	**CI***	
Future Orientation	0.349	0.022	0.085	1.027
In-Group Collectivism	0.409	0.008	0.146	0.91
*95% Confidence Interval				

Table 3: Effect of Collaboration on Perceived Organizational Support

Dependent Variable: POS (Department)				
Independent Variable	**β**	**p-value**	**CI***	
Collaboration	0.601	0.000	0.24	0.655
*95% Confidence Interval				

Table 4: Construct Loadings

Construct	Question	Mean	Std. Dev.	Loading
Collaboration	1_1	4.833	1.444	0.741
	1_2	5.222	1.436	0.895
	1_3	4.722	1.542	0.918
	1_4	4.972	1.540	0.833
	1_5	4.972	1.483	0.858
Future Orientation	20_1	4.556	1.340	0.528
	20_3	5.694	0.920	0.605
In-Group Collectivism	23_1	6.417	1.052	0.988
	23_2	6.417	1.052	0.982
	23_3	6.306	1.091	0.899
POS (Department)	31_1	6.056	1.308	0.723
	31_2	5.278	1.365	0.936
	31_3	5.167	1.502	0.677

DISCUSSION

The first relationship between future orientation and collaboration is most likely explained from their shared aspect of planning. Individuals who have the cultural dimension of future orientation "engage in future-oriented behaviors such as…planning…" (Kull & Wacker, 2010). This is a shared concept with collaboration as it involves two or more groups engaging in "common planning" (Min et al., 2005). Therefore, the individuals within the firm most likely perceive their firm as engaging in more planning for the future (future orientation) that involves different departments working together (collaboration). The more the individuals perceive multiple departments planning for the future together, the more collaborative and future-oriented they perceive the firm to be which explains the positive relationship.

The second relationship is a positive relationship where in-group collectivism affects collaboration. In-group collectivism involves individuals having pride within their

work or social groups (Naor et al., 2010). As the employees of this firm perceive an increase of pride and loyalty to their department, they also see an increase in collaboration between departments. How does this relationship make sense? I believe that as the individual employee's perception of pride and loyalty increase, they become more willing to work with other departments and provide assistance with activities. These activities may involve certain aspects of collaboration such as planning and managing problems. Therefore, the employee's increased perception of loyalty to their department makes it more likely they are willing to work with other departments which in turn increases their perception of collaboration between departments.

The positive relationship between collaboration and POS is the final relationship discussed. This construct of POS is classified at the departmental level. The questions pertained to the respondent's perception of how their department supports them with examples such as aiding in their personal growth or keeping them within the information loop. From this study, we see this dimension increases as the respondent's perception of collaboration between departments increases. This relationship can be explained. An employee of the firm may perceive an increase in collaboration as they participate in more meetings between departments. Simultaneously, these meetings allow the employee to feel respected and supported by their department since they are representing their department while taking part in these meetings. In turn, this can increase that employees POS from their department.

FUTURE DIRECTIONS

In the future, researchers interested in this area of analysis should include way more data. This would aid in keeping a valid significance and allow researchers to

analyze all constructs at once rather than two relationships at a time. Setting an ample amount of time for data collection and analysis would also be included. As I had a small window for data analysis and collection, I was unable to obtain a larger, much needed data set or have the ability to analyze all relationships at once. Finally, I would recommend branching this study out to multiple businesses in different industries. Having a diverse data set such as that allows for more interesting conclusions and may lead to certain breakthroughs I was unable to unearth.

CONCLUSION

The purpose of this paper is to examine whether cultures within a firm affects a firm's ability to collaborate. This lack of collaboration would then hurt the performance of the firm. To collect the data for analysis, a survey was sent to a firm asking their employees to answer a few questions. We were unfortunately unable to receive as much data as preferred, however, a significant relationship relating the respondent's perception of culture to performance was discovered. This relationship included the following: in-group collectivism positively affecting collaboration, future orientation positively affecting collaboration, and collaboration positively affecting the perceived organizational support of the respondent's department. If this analysis could be redone, I would recommend collecting more responses and trying to receive responses from firms of multiple sizes and industries.

REFERENCES

Adams, F. G., Richey, R. G., Autry, C. W., Morgan, T. R., & Gabler, C. B. (2014). Supply chain collaboration, integration, and relational technology: How complex operant resources increase performance outcomes. *Journal of Business Logistics, 35*(4), 299-317.

AlZalabani, A., & Modi, R. S. (2014). Impact of human resources management practice and perceived organizational support on job satisfaction: Evidence from Yanbu Industrial City, KSA. IUP Journal of Organizational Behavior, 13(3), 33.

Bockstedt, J., Druehl, C., & Mishra, A. (2015). Problem-solving effort and success in innovation contests: The role of national wealth and national culture. Journal of Operations Management, 36, 187-200.

Cadden, T., Marshall, D., & Cao, G. (2013). Opposites attract: organisational culture and supply chain performance. Supply Chain Management: an international journal, 18(1), 86-103.

Cannon, J. P., Doney, P. M., Mullen, M. R., & Petersen, K. J. (2010). Building long-term orientation in buyer–supplier relationships: The moderating role of culture. Journal of Operations Management, 28(6), 506-521.

Cao, M., & Zhang, Q. (2011). Supply chain collaboration: Impact on collaborative advantage and firm performance. Journal of Operations Management, 29(3), 163-180.

Cao, Z., Huo, B., Li, Y., & Zhao, X. (2015). The impact of organizational culture on supply chain integration: a contingency and configuration approach. Supply Chain Management: an international journal, 20(1), 24-41.

Cassivi, L., Lefebvre, É., Lefebvre, L. A., & Léger, P.-M. (2004). The impact of e-collaboration tools on firms' performance. The International Journal of Logistics Management, 15(1), 91-110.

Corsten, D., & Felde, J. (2005). Exploring the performance effects of key-supplier collaboration: an empirical investigation into Swiss buyer-supplier relationships. International Journal of Physical Distribution & Logistics Management, 35(6), 445-461.

Fawcett, S. E., Magnan, G. M., & McCarter, M. W. (2008). A three-stage implementation model for supply chain collaboration. Journal of Business Logistics, 29(1), 93-112.

Fawcett, S. E., Wallin, C., Allred, C., Fawcett, A. M., & Magnan, G. M. (2011). Information technology as an enabler of supply chain collaboration: a dynamic-capabilities perspective. Journal of Supply Chain Management, 47(1), 38-59.

Glenn Richey Jr, R., & Autry, C. W. (2009). Assessing interfirm collaboration/technology investment tradeoffs: the effects of technological

readiness and organizational learning. The International Journal of Logistics Management, 20(1), 30-56.

Hall, D. J., Skipper, J. B., Hazen, B. T., & Hanna, J. B. (2012). Inter-organizational IT use, cooperative attitude, and inter-organizational collaboration as antecedents to contingency planning effectiveness. The International Journal of Logistics Management, 23(1), 50-76.

Hofstede, G. (1984). Cultural dimensions in management and planning. Asia Pacific journal of management, 1(2), 81-99.

Kahn, K. B., Maltz, E. N., & Mentzer, J. T. (2006). Demand collaboration: effects on knowledge creation, relationships, and supply chain performance. Journal of Business Logistics, 27(2), 191-221.

Khazanchi, S., Lewis, M. W., & Boyer, K. K. (2007). Innovation-supportive culture: The impact of organizational values on process innovation. Journal of Operations Management, 25(4), 871-884.

Kim, D., & Lee, R. P. (2010). Systems collaboration and strategic collaboration: Their impacts on supply chain responsiveness and market performance. Decision Sciences, 41(4), 955-981.

Kull, T. J., & Wacker, J. G. (2010). Quality management effectiveness in Asia: The influence of culture. Journal of Operations Management, 28(3), 223-239.

Liu, H., Ke, W., Wei, K. K., Gu, J., & Chen, H. (2010). The role of institutional pressures and organizational culture in the firm's intention to adopt internet-enabled supply chain management systems. Journal of Operations Management, 28(5), 372-384.

Michalski, M., Montes-Botella, J. L., & Guevara Piedra, W. (2017). Can asymmetry impact performance, collaboration and integration? An empirical study. The International Journal of Logistics Management, 28(4), 939-963.

Min, S., Roath, A. S., Daugherty, P. J., Genchev, S. E., Chen, H., Arndt, A. D., & Glenn Richey, R. (2005). Supply chain collaboration: what's happening? The International Journal of Logistics Management, 16(2), 237-256.

Naor, M., Linderman, K., & Schroeder, R. (2010). The globalization of operations in Eastern and Western countries: Unpacking the relationship between national and organizational culture and its impact on manufacturing performance. Journal of Operations Management, 28(3), 194-205.

Narayanan, S., Narasimhan, R., & Schoenherr, T. (2015). Assessing the contingent effects of collaboration on agility performance in buyer–supplier relationships. Journal of Operations Management, 33, 140-154.

Nyaga, G. N., Lynch, D. F., Marshall, D., & Ambrose, E. (2013). Power asymmetry, adaptation and collaboration in dyadic relationships involving a powerful partner. Journal of Supply Chain Management, 49(3), 42-65.

Olorunniwo, F. O., & Li, X. (2010). Information sharing and collaboration practices in reverse logistics. Supply Chain Management: an international journal, 15(6), 454-462.

Power, D., Hanna, V., Singh, P. J., & Samson, D. (2010). Electronic markets, data access and collaboration: relative value to performance in firm operations. Supply Chain Management: an international journal, 15(3), 238-251.

Power, D., Schoenherr, T., & Samson, D. (2010). The cultural characteristic of individualism/collectivism: A comparative study of implications for investment in operations between emerging Asian and industrialized Western countries. Journal of Operations Management, 28(3), 206-222.

Rosenzweig, E. D. (2009). A contingent view of e-collaboration and performance in manufacturing. Journal of Operations Management, 27(6), 462-478.

Rossiter Hofer, A., Hofer, C., & A. Waller, M. (2014). What gets suppliers to play and who gets the pay? On the antecedents and outcomes of collaboration in retailer-supplier dyads. The International Journal of Logistics Management, 25(2), 226-244.

Sambasivan, M., & Nget Yen, C. (2010). Strategic alliances in a manufacturing supply chain: Influence of organizational culture from the manufacturer's perspective. International Journal of Physical Distribution & Logistics Management, 40(6), 456-474.

Sanders, N. R. (2007). An empirical study of the impact of e-business technologies on organizational collaboration and performance. Journal of Operations Management, 25(6), 1332-1347.

Sanders, N. R., & Premus, R. (2005). Modeling the relationship between firm IT capability, collaboration, and performance. Journal of Business Logistics, 26(1), 1-23.

Simatupang, T. M., & Sridharan, R. (2002). The collaborative supply chain. The International Journal of Logistics Management, 13(1), 15-30.

Simatupang, T. M., & Sridharan, R. (2005). The collaboration index: a measure for supply chain collaboration. International Journal of Physical Distribution & Logistics Management, 35(1), 44-62.

Singh, P. J., & Power, D. (2009). The nature and effectiveness of collaboration between firms, their customers and suppliers: a supply chain perspective. Supply Chain Management: an international journal, 14(3), 189-200.

Stank, T. P., Keller, S. B., & Daugherty, P. J. (2001). Supply chain collaboration and logistical service performance. Journal of Business Logistics, 22(1), 29-48.

Wu, Y., Cegielski, C. G., Hazen, B. T., & Hall, D. J. (2013). Cloud computing in support of supply chain information system infrastructure: understanding when to go to the cloud. Journal of Supply Chain Management, 49(3), 25-41.

Zacharia, Z. G., Nix, N. W., & Lusch, R. F. (2009). An analysis of supply chain collaborations and their effect on performance outcomes. Journal of Business Logistics, 30(2), 101-123.

Zacharia, Z. G., Nix, N. W., & Lusch, R. F. (2011). Capabilities that enhance outcomes of an episodic supply chain collaboration. Journal of Operations Management, 29(6), 591-603.

Zhu, Q., Krikke, H., Caniëls, M. C., & Wang, Y. (2017). Twin-objective supply chain collaboration to cope with rare but high impact disruptions whilst improving performance. The International Journal of Logistics Management, 28(2), 488-507.