

# Collaboration within a Supply Chain and Corporate Wellness of Digital TV Firms in Rivers State

Oladapo Taiwo & Kalu, Sylva Ezema

*Department of Marketing, University of Port Harcourt, Nigeria*

**Abstract:** Surviving and building an advantage in the digital T.V industry depends on how well firms are able to collaborate with other members of their complex supply chain network. This study examined the relationship between collaborative supply chain strategies such as decision synchronization and incentive alignment and Corporate wellness metric, customer patronage. A cross-sectional survey research design was adopted for this study. A population of 36 was adopted, comprising of sales representative, dealer supports and customer care representatives. 36 copies of structured questionnaire was issued out and retrieved. Analysis of the data was done through the use of descriptive tables, charts, and Kendall-Tau-b correlation coefficient of the SPSS version 22.0 package. The study concluded that decision synchronization and incentive alignment significantly influence customer patronage. This study recommends that digital T.V firms should imbibe decision synchronization and incentive alignment in order to achieve increased customer patronage.

**Keywords:** Collaboration, Supply chain, corporate wellness, Digital TV, Patronage

## I. INTRODUCTION

The approval of digital switch over in Nigeria, from analogue TV to digital T.V holds a lot of benefits to viewers, citizens, associated firms, government, etc (Maduka, 2014). Digital T.V industry comprises of the upstream and downstream players. The upstream players include multiple system operators (M.S.O), content providers, set-up box producers, signal distributors, etc., while the downstream involves Local cable operators, major dealers and vendors (Maduka, 2014).

The collection of different processes, resources and institutions, needed in customer value creation forms a supply chain (Rajgopal, 2016). When two or more independent firms corporates, by planning and executing supply chain processes to achieve joint objectives, based on some predetermined rules and regulations, we refer to such a supply chain as collaborative (Cao and Zhang, 2011; Ramanathan, 2012). Softwares (ERP, Oracle E-business suite SCM, Epicor SCM) and social media applications (Whatsapp, facebook, twitter, instagram, etc) can be used to foster collaboration among members of a supply chain (Asad, 2013).

Studies (Vanthi and Swamynathan, 2014) examined the relationship between supply chain collaboration and competitive advantage among textile supply chain partners in the Indian textile industry. The research showed that there is a positive relationship between supply chain collaboration (i.e.

top management commitment, information sharing, trust among supply chain partners, risk and reward system) and competitive advantage. Other studies examined the relationship between collaborative tendencies on organizational performance, they all concluded that incentive alignment and decision synchronization have positive influence on customer patronage and satisfaction (Sheeth and Parvatyar, 2002; Gauray, 2008).

This study adopted decision synchronization and incentive alignment as measures of collaboration within a supply chain, considering its continuous validation by various scholars (Simaptung and Sridharan, 2008; Mathuramaytha, 2011; Zacharia et al., 2009; Cao and Zhang, 2011 and Hudnukar et al., 2014) and the peculiarities of digital TV industry in Nigeria, with various players in and out of the country. Customer patronage was used as measure of Corporate wellness because of its measurability and validity in literature (Sheeth and Parvatyar, 2002; Gauray, 2008). This study also examined the moderating effect of the technological environment on the relationship between decision synchronization, incentive alignments and customer patronage.

Decision synchronization can be said to be harmonizing decisions made by members of a supply chain. It enhances decision making which maximizes supply chain performance, through joint demand forecasting, inventory management, and product assortment (Cao and zang, 2011). Incentive alignment involves developing joint procedures to evaluate and make known each other's performance, sharing costs, risk and benefits amongst members of a supply chain and this will encourage members to act in a manner consistent with the overall objective of the supply chain (Scholten and Schlinder, 2015).

Customer patronage is the rate at which customers are willing to make purchases from an organization, are retained and are willing to repeat purchase (Kotler, 2013).

Technological environment can be seen as the use of technology enabled devices in achieving more efficient and effective results. The internet, SCC software's, applications, etc., are important enablers that support in the successful achievement of effective supply chain collaboration (Asad, 2013).

The struggle for survival by many digital TV firms in Nigeria, which transcends into fluctuation in prices charged to final

customers and also the exit of TSTV a promising digital TV firm (Ayoola, 2018), has been a source of worry to the current researcher, perhaps this might be as a result of not properly adopting information sharing, incentive alignment and decision synchronization.

Earlier studies on supply chain collaboration (Simatupang and Sridharan, 2004; Asad, 2013; Marcos et al, 2011; Fawcett and Magnan, 2008; kulp et al., 2004; mentzer et al. 2000; monczka et al., 1998; Vanathi and swamynathan, 2014, etc.), related information sharing, incentive alignment, and decision synchronization to competitive advantage (Simatupang and Sridharan, 2004;mentzer et al. 2000), Customer satisfaction (Vanathi and swamynathan, 2014; Marcos et al, 2011) none has examined the relationship between incentive alignment, decision synchronization on customer patronage in the digital TV industry. This study adopted lewin's force field theory, which has been used by few researchers (Fawcett and Magnan, 2008) in the study of supply chain collaboration. Force field theory, is concerned with change adoption in a system. It sees change as a battle of forces (driving forces and restraining forces)(Lewin, 1951).This theory is considered appropriate for this study since the adoption of the sale of digital T.V is a shift from the conventional analogue TV.

It is on this backdrop that the current researcher wants to go into this study, to fill the knowledge gap that exists.

## II. LITERATURE REVIEW

### *Decision synchronization and Customer patronage*

Supply chain collaboration can serve as a vehicle for redesigning the decision making, workflow and resources assigned to individual entities to improve the overall performance of the supply chain, through higher profit margins, improved customer service and faster response times (Lee, 2000; Simatupang and sridharan, 2002; Xu and Beamon, 2006).

The benefits of collaboration among supply chain partners can be seen from increased responsiveness toward customer requirement, competitiveness in the market and also the reduction of waste in the supply chain (Nyaga et al., 2010).

When supply chain members are forced to collaborate, desire more participation in the decision-making or disagree on certain issues; and ultimately find they are not in a position to lead any change after all, this may encourage exit behavior if the opportunity exists (Mentzer et al. (2001).

Misuse of power by those in authority can lead to dissension, underperformance from supply chain entities and poor

customer patronage (Maloni and Benton, 2000). Based on the above review, the hypothesis below was conceptualized:

*H<sub>09</sub>: There is no significant relationship between decision synchronization and Customer patronage of Digital TV firms in Rivers State.*

### *Incentive Alignment and Customer patronage*

In order to develop successful partnership, profits and losses should be equally distributed among the partners. Hence, the supply chain partners need to act in rational ways to achieve the mutually agreed objectives as a collective responsibility (Salmela et al., 2011). The retailers can motivate their suppliers to become involved in quick response by sharing point of sales data, and in return, the suppliers can share their delivery schedules. Furthermore, the retailer regularly notifies the sales performance of suppliers' important products and keeps records of the suppliers' delivery performances. The suppliers can keep track of their points by accessing their scorecard online. The retailer can translate these points into monetary rewards or penalties that will pass to the suppliers at the end of a specific pay period. Both parties commit themselves to maintaining high customer service with low inventory costs under this arrangement (Simatupang and Sindhnan, 2005).

For an effective incentive sharing scheme to be developed, there are three basic questions that supply chain partners need to consider, they include 1) how the incentive can be linked with overall performance, 2) how the incentive is to be paid and 3) What level of incentive is to be paid (Scholten, 2015). Fairness is particularly essential in the allocation of collaboration's outcomes in order to maintain the relationship between supply chain members (Jap, 2001).

There are two basic processes to introduce behaviour-based incentive: design and delivery. Firstly, participating members need to agree with the strategic objectives and how to motivate the partners to achieve each of these objectives. The schemes include determining which types of activities that need to be measured to improve the objective attainment. Identifying these activities and their associated rewards is useful in giving immediate recognition to the partner's efforts (Simatupang and Sindhnan, 2005). Based on the above review the hypothesis below was conceptualized

*H<sub>06</sub>: There is no significant relationship between incentive alignment and customer patronage of Digital TV firms in Rivers State.*

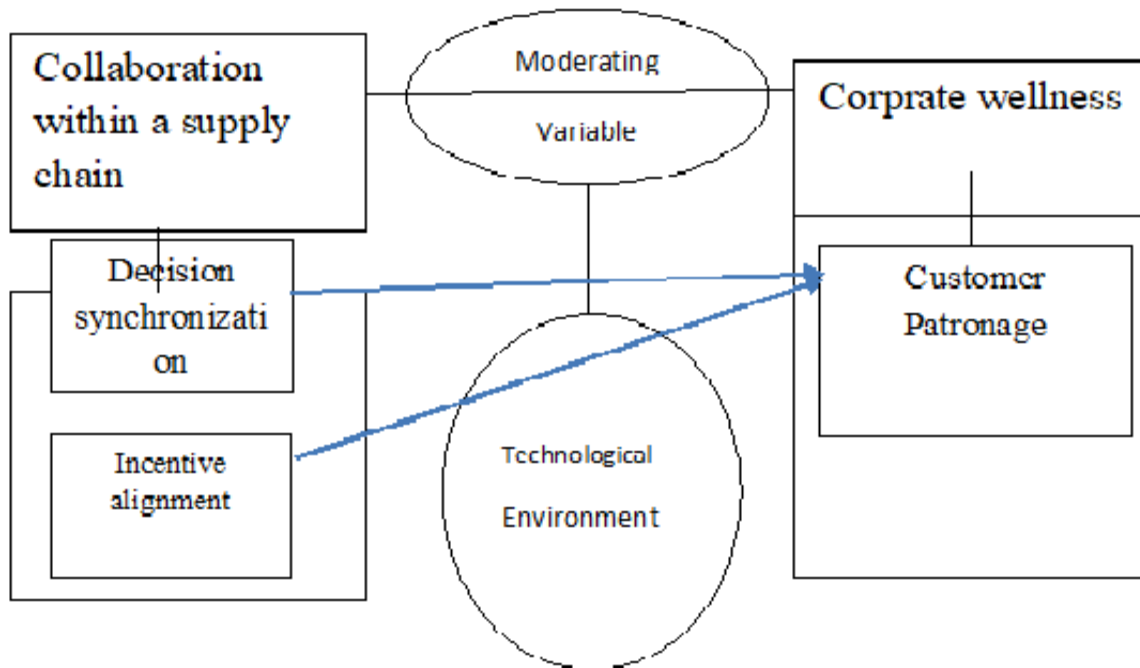


Figure 1: Operational Framework on Collaboration within a Supply Chain and Corporate wellness of Digital TV firms in Port Harcourt.

### III. RESEARCH METHODOLOGY

This study adopted the explanatory and cross-sectional survey approach. The explanatory survey measures the antecedent factors that cause Corporate wellness (cause-and-effect); thereby leading to building and /or validating theories as predicting and controlling the phenomena of interest. On the other hand cross sectional survey measures the opinions of staff’s digital T.V firms, with different cadres and sex.

#### Population for the Study

Population of the study is the entire set of cases, from where sample units are drawn. In this study our population of the study comprises of the sales representative, dealer support units and customer care managers of Digital TV firms who have offices in Rivers state. Preliminary investigation on digital T.V firms showed that most Digital T.V firms have offices in Rivers state. This study focuses on sales managers, dealer support and customer care managers because of their direct involvement with dealers and customer issues.

Table 3.1: Number of respondents in the accessible Population

	Digital T.V firm	Sales representative	Dealer support	Customer care representative	Population
1	Multichoice	2	6	3	11
2	CAN T.V	1	2	2	5
3	Startimes	3	5	2	10
4	CTL	1	2	2	5
5	Metro digital	1	3	1	5
	Total	8	18	10	36

Source: Field Survey.

The total number of sales representatives, dealer support and customer representative are 36. Therefore since a population of 36 (see table 3.1) is not too large for this kind of study, and in order to increase the power of prediction we targeted all.

A structured questionnaire will be used to get primary data from managers and sales representatives of Digital TV firms in Port Harcourt. To seek further clarifications amidst the subjective man’s opinion, documentary instrument will be used to observe and record events first hand.

#### Method of Data collection/Instrumentation

The method of data collection will be basically a structured questionnaire, which was designed based on the review of related literature, which also informed our research hypotheses and research questions. The instrument will be designed in three segments respectively. Section A: will focus on demographic data, Section B: will generate data on the scopes of supply chain collaboration, and Section C: is designed to illicit responses on Corporate Wellness. The 5 point Likert-scale question approach was adopted, with five rating scale from end points ‘very great extent to very low extent.

#### Operational measures of Variables

The constructs used in this study were operationalized based on previously validated instruments. Incentive alignment was measured using six (6) items adopted from Siminatupang and Sridharan, (2004). Decision synchronization was also measured using the nine (9) scales by Siminatupang and

Sridharan, (2004) and Customer patronage was measured using six (6) items adopted from Ndubuisi (2006).

All items were measured using a five point likert scale which ranges from “very low extent to very great extent”. The measurement item for each construct are presented in the table below(see appendix).

For incentive alignment out of the 5items entered in the communality analysis, 4items shared more than 0.5 of their consistency while only 1item shared less than 0.5. The implication is that item in B11 (share savings on reduced inventory cost) was not consistent and was dropped. For decision synchronization, among the 9items entered in the communality analysis, 7items shared more than 0.5 of their consistency while only 1item shared less than 0.5. The implication is that items in B23 (joint decision on optimal order quantity) and B24 (joint resolution on order exceptions) were not consistent and so they were dropped. For customer patronage, among the 7items entered in the communality analysis, 6items shared more than 0.5 of their consistency while only 1item shared less than 0.5.The implication is that item in C18 (insensitivity to price) was not consistent and hence dropped.

IV. METHOD OF DATA ANALYSIS

The analysis was made up of descriptive and inferential statistics with the aid of statistical package for social sciences (SPSS version 22). In the area of descriptive statistics, this study will employ the use of frequency and percentages, pie and bar chart in answering research questions and demographic data of the respondents.

For the inferential statistics, the Kendall’s Tau-b correlation co-efficient will be used in testing the hypotheses formulated for the study, at 0.05 level of significance. This technique (Kendall- Tau-b) will be utilized because it is more effective in determining whether two non-parametric data samples with ties are correlated. Also, it is used in analyzing ordinal data, such as this. The moderating variable will be analyzed using partial correlation. The SPSS (version 22) will be used in computing the data.

Validity/ Reliability of instrument

Validity deals with the accuracy of measurement power of instruments or the extent to which conclusions are true. The validity of this study measurement scales has already been confirmed by previous studies (see Ndubuisi, 2004; Simatupang and Sridharan, 2004; Marcos et al, 2011; Gauray, 2008;Mathuramaytha, 2011) but due to change and differences in application of variables, will be reconfirmed in two-fold. First the instruments were subjected to face validity involving the scrutiny of supervisor(s), colleagues, and other informed persons in order to ensure that the batteries of statement raised properly represented the phenomenon under review. Secondly a pilot survey to pre-test the scale measurement on selected sample units in order to permit

corrections of inconsistencies and/or ambiguities before the actual survey.

Reliability on the other hand, measures empiricism of results. In other words, it measures the extent to which the same set of items to be measured generates same results when replicated in similar setting. Scientifically, Crobach Alpha was used to measure reliability of instruments described the factors/constructs.

The measurement was tested with respect to internal consistency and discriminant validity. Table 3.2 reports the item loadings and  $\alpha$  value for the measurement of the two dimensions of supply chain collaboration (SCC) – incentive alignment(IA) and decision synchronization(DS), as well as the dimensions of corporate wellness- Customer patronage(CP).

Our AVE result ranged from 0.529 to 0.685 (see appendix ii), which are above the recommended threshold of 0.5. Moreover for reliability all  $\alpha$  values are above 0.809 (see table 3.2) which are also above acceptable value of 0.7 (Nunnally, 1978). Thus, confirming the convergent. We verified the discriminant validity by checking the square roots of the AVE as shown in appendix ii, the square root of the AVE of each construct is larger than the inter construct correlations and thus discriminant validity is confirmed.

V. DATA ANALYSIS AND INTERPRETATION

Table 1: Kendall Correction between Decision Synchronization and customer patronage of Digital TV firms in Rivers State

		Correlations		
		DecisionSynchronization	Customer Patronage	
Kendall's tau_b	DecisionSynchronization	Correlation Coefficient	1.000	.672**
		Sig. (2-tailed)	.	.000
		N	36	36
	CustomerPatronage	Correlation Coefficient	.672**	1.000
		Sig. (2-tailed)	.000	.
		N	36	36

\*\* . Correlation is significant at the 0.01 level (2-tailed).

From the result of the above table, the correlation coefficient ( $r = 0.672$ ) between decision synchronization and customer patronage of Digital TV firms is strong and positive. The coefficient of determination ( $r^2 = 0.45$ ) indicates that 45% change in customer patronage of Digital TV firms can be explained by decision synchronization. The significant value of 0.000 ( $p < 0.01$ ) reveals a significant relationship. Based on that, the null hypothesis was rejected and the alternate hypothesis accepted. Therefore, there is a significant relationship between decision synchronization and customer patronage of Digital TV firms in Rivers State.

Table 2: Kendall Correction between incentive alignment and operational flexibility of Digital TV firms in Rivers State

Correlations				
			Incentive Alignment	Operational Flexibility
Kendall's tau_b	Incentive Alignment	Correlation Coefficient	1.000	.616**
		Sig. (2-tailed)	.	.000
		N	36	36
	Operational Flexibility	Correlation Coefficient	.616**	1.000
		Sig. (2-tailed)	.000	.
		N	36	36
**. Correlation is significant at the 0.01 level (2-tailed).				

From the result of the above table, the correlation coefficient ( $r = 0.616$ ) between incentive alignment and operational flexibility of Digital TV firms is strong and positive. The coefficient of determination ( $r^2 = 0.38$ ) indicates that 38% change in operational flexibility of Digital TV firms can be explained by incentive alignment. The significant value of 0.000 ( $p < 0.01$ ) reveals a significant relationship. Based on that, the null hypothesis was rejected and the alternate hypothesis accepted. Therefore, there is a significant relationship between incentive alignment and operational flexibility of Digital TV firms in Rivers State.

#### VI. DISCUSSION OF FINDINGS AND IMPLICATIONS

The findings of this study shows that there is a significant relationship between incentive alignment and Customer patronage of digital TV firms in Rivers State. Therefore sharing of risks and rewards amongst digital TV supply chain members enhances the level of customer retention, frequency of purchase, and willingness to delay purchase. This revalidates findings from previous studies (Salmela et al. 2011; Simatupang and Sridharan, 2005)

The findings of this study also reveals that there is a significant relationship between decision synchronization and Customer Patronage of digital TV firms in Rivers state. Hence digital TV supply chain partners who jointly plan on product assortment, promotional event, demand forecast, resolution of forecast exceptions, pricing policy, availability level, etc, enhances the level of customer retention, frequency of purchase, willingness to delay purchase etc (Maloni & Benton, 2000; Xu and Beamon, 2006; Simatupang and Sridharan, 2002).

#### Research Limitations and suggestions for further studies

There are a few limitations to the interpretation of the current results and implications of this study. The study population were all from Rivers State, though from different organizations and with different designations, we believe that a selection of sample from two or more states or countries

might lead to a better representation. Secondly the scope of this study is limited decision synchronization, incentive alignment and customer patronage, we believe that if other variables like information sharing, etc were added, interpretation might be different. Thirdly in order to further examine the effect of collaboration within a supply chain and corporate wellness, it might be fruitful to replicate the study in other cultural setting i.e the Western or Northern part of Nigeria or other parts of Africa and Europe. Finally, it might be productive to further apply the research to other product categories such as banking, oil sector, etc.

Further research should be designed in this area, such that the limitations highlighted will be eliminated.

#### VII. CONCLUSION

This current study highlights the importance of collaboration within a supply chain and corporate wellness. Decision synchronization and incentive alignment were identified to have a positive impact on customer patronage though in varying degrees. Digital TV firms are advised to pay rapt attention to decision synchronization and incentive alignment strategies in order to optimize customer patronage.

#### VIII. RECOMMENDATIONS

- i. TV stations should always contact superior firms for ideas and suggestions in ways of moving their firms forward
- ii. Management of TV stations should ensure that employees are trained and retrained by experts in the field to enable them become more competent
- iii. Employees should be motivated to bring out their best
- iv. Employees should be incorporated during decision making, this could save the firm a lot of Naira

#### REFERENCES

- [1] Adams, C.L. and Goldsmith, P. D. (1999). *Conditions for successful strategic alliances in the food industry*. International Food and Agribusiness M
- [2] Adams FG, Richey, RG, Autry, CW, Morgan, TR, and Gabler, CB (2014). Supply chain collaboration, Integration, and relational technology: how complex operant resources increase performance outcomes. *Journal of Business Logistics* 35 pp 299-317
- [3] Anderson, P. (1999). *Complexity theory and organization science*. Organization Science. 10(3), 216–232. doi:10.1287/orsc.10.3.216
- [4] Anscombe, J. and Kearney, A.T. (1994). Partnership or Power Play? *Logistics Focus* 2 (6): pp. 18-21.
- [5] Bahinipati, B.k., Kanda, A., and Deshmukh., (2009). Horizontal collaboration in semiconductor industry supply chain: An evaluation of collaboration intensity index. *Comput. Ind. Eng.*, 57:880-895
- [6] Barratt, M. (2004). Understanding the Meaning of Collaboration in the Supply Chain. *Supply Chain Management: An International Journal*. 9 (1), 30–42.
- [7] Bunduchi, R. (2008). *Trust, Power and Transaction Costs in B2B Exchanges—A Socioeconomic Approach*. *Industrial Marketing Management*, 37 (5), 610–622.
- [8] Bechtel, C. and Jayaram, J. (1997) Supply Chain Management: A Strategic Perspective. *The International Journal of Logistics Management* 8 (1):pp. 15-34.

- [9] Braithwaite, A. (1998). The Nine Maxims of Supply Chain Management. *Proceedings of the Logistics Research Network Conference*. 10/11 Sep 98. 456-471.
- [10] Brudan, A. (2010). Rediscovering performance management: systems, learning and integration, *Measuring Business Excellence*. 14 (1). 109-123.
- [11] Bowersox, Donald J., (1990). The Strategic Benefits of Logistics Alliances. *Harvard Business Review*. 68( 4) 36-43.
- [12] Cao, M. & Zhang, Q. (2011). Supply Chain Collaboration: Impact on Collaborative Advantage and Firm Performance. *Journal of Operations Management*, 29 (3), 163–180.
- [13] Choi, T. Y., Dooley, K. J., & Rungtusanatham, M. (2001). Supply networks and complex adaptive systems: Control versus emergence. *Journal of Operations Management*, 19, 351–366. doi:10.1016/S0272-6963(00)00068-1.
- [14] Christopher, M. (1992). *Logistics & Supply Chain Management: Strategies for Reducing Costs & Improving Services*. London: Pitman.
- [15] Christopher, M. (2005) *Logistics and Supply Chain Management: Creating Value-Adding Networks*. UK: Pearson Education Ltd.
- [16] Crook, TR, Giunipero, L, Reus, TH, Handfield, R, and Williams, SK (2008) Antecedents and outcomes of supply chain effectiveness: an exploratory investigation *Journal of Managerial Issues* 20 161-177
- [17] Cooper, M.C. and Ellram, L.M. (1993) Characteristics of Supply Chain Management & the Implications for Purchasing & Logistics Strategy. *The International Journal of Logistics Management* 4 (2).13-24.
- [18] Cooper, M.C., Lambert, D.M. and Pagh, J.D. (1997). Supply Chain Management: More than a New Name for Logistics. *The International Journal of Logistics Management* 8 (1):pp.1-14.
- [19] Cooper, M.C., Ellram, L.M., Gardner, J.T. and Hanks, A.M. (1997b). Meshing multiple Alliances. *International Journal of Business Logistics*. 18( 1). 67-89.
- [20] Cox, A. and Lamming, R. (1997) Managing supply in the firm of the future. *European Journal of Purchasing & Supply Management* 3. 53-62.
- [21] Daugherty, P. J., Ellinger, A. E., & Gustin, C. M. (1996). Integrated logistics: Achieving logistics Performance improvements. *Supply Chain Management*, 1(3), 25–33. doi:10.1108/13598549610155297
- [22] David, R. J., & Han, S.-K. (2004). A systematic assessment of the empirical support for transaction cost economics. *Strategic Management Journal*, 25, 39–58. doi:10.1002/smj.359
- [23] Dyer, J. H. (1997). Effective Interfirm Collaboration: How Firms Minimize Transaction Costs and Maximize Transaction Value. *Strategic Management Journal*, 18 (7), 535–556.
- [24] Didonet, R. S., Frega, R. J., Toaldo, M. M. A., & Diaz, G. (2014). The Role of Supply Chain Integration in The Relationship Between Market Orientation and Performance in SMEs. *International Journal of Business Science and Applied Management*, 9 (2). 16–29.
- [25] Ding, H, Guo, B, and Liu, Z (2011). Information sharing and profit allotment based on supply chain cooperation. *International Journal of Production Economics*. 133.70-79
- [26] Eyaa, S, Ntayi, JM, and Namagembe, S (2010). Collaborative relationships and SME supply chain performance. *World Journal of Entrepreneurship, Management and Sustainable Development* 6. 233-245.
- [27] Ellram, L.M and M.C. Cooper, (1990). Supply chain management, partnership, and the shipper-third Party relationship. *International journal of logistic management*. 1:1-10
- [28] Faulkner, DO and de Rond, M. (2000). *Cooperative Strategy: Economic, Business and Organizational Issues Oxford University Press. New York*.7-32.
- [29] Fisher, Marshall L., Janice H. Hammond, Walter R. Obermeyer and Ananth Raman (1994). Making Supply Meet Demand in An Uncertain World. *Harvard Business Review*. 72(3). 83-93.
- [30] Flynn, BB, Huo, B and Zhao, X (2010). The impact of supply chain integration on performance: a contingency and configuration approach *Journal of Operations Management* 28. 58-71
- [31] Forrester, J. W. (1961). *Industrial dynamics*. Cambridge, MA: MIT Press
- [32] Frohlich, M.T. and R. Westbrook, (2001). Arcs of integration: An international study of supply strategies. *Journal of operations. Management*. 19. 185-200.
- [33] Grant, K, Hackey, R and Edgar, D (2010). *Strategic Information Systems Management Singapore. Seng Lee Press*
- [34] Gupta, S. and Zeithaml, V. (2006). Customer Metrics and Their Impact on Financial Performance. *Marketing Science*. 25(6).718-739
- [35] Hammond, Janice H., (1993). *Quick Response in Retail/Manufacturing Channels*. Harvard Business School Press. 185-214.
- [36] Lee, H.L (2002). Aligning supply chsin strategies with product uncertainties. *Califonia management Review*. 44(3), 105-19.
- [37] Premus, R. & Sanders, N. (2008). Information sharing in global supply chain alliances. *Journal of Asia-Pacific Business*, 9(2),174-192.
- [38] Scholten, K. & Schilder, S. (2015). The role of collaboration in supply chain resilience, *Supply Chain Management: An International Journal*, 20(4). 471-484.
- [39] Maduka, C. (2014) Demands and Resources Management in the Era of Digitization, at an NBC organized seminar, Lagos
- [40] Hudnurkar, M, Jakhar, S, and Rathod, U (2014). Factors affecting collaboration in supply chain: a literature review. *Procedia-Social and Behavioral Sciences*. 133. 189-202.
- [41] Horvath, L., (2001). Collaboration: The key to value creation in supply management. *Supply chain management International Journal*. 6. 205-207.
- [42] Haji-Pakir, MI, and Alina, S (2010). Level of supply chain collaboration of Malaysian SME manufacturers In Management of Innovation and Technology (ICMIT), 2010 *IEEE International Conference* on pp 169-174.
- [43] Harland, C. (1996a). The case of health supplies. *European Journal of Purchasing & Supply Management* 2.183-192.
- [44] Hofstede, G. & Hofstede, G.J. (2005). *Culture and Organizations: Software of the Mind*. New York. NY: McGraw-Hill.
- [45] Hines, P. and Jones, O. (1996) *Achieving Mutual Trust. Purchasing & Supply Management* (Jan): p 4. Hobbs,
- [46] Holland, J. H., & Miller, J. H. (1991). Artificial adaptive agents in economic theory. *The American Economic Review*. 81(2), 365–370.
- [47] Hui, Z, He-Cheng, W, and Min-Fei, Z (2015). Partnership management, supply chain collaboration, and Firm innovation performance: an empirical examination *International Journal of Innovation Science*. 7.127-138.
- [48] Hunt, S. D., & Morgan, R. M. (1995). The comparative advantage theory of competition. *Journal of Marketing*, 59(2), 1–15. doi:10.2307/1252069.
- [49] Jonsson, P., & Mattsson, S.-A. (2012). The value of sharing information in supply chains. *International Journal of Physical Distribution and Logistics Management*, 43(4), 282–299.
- [50] Kohli, AS, and Jensen, JB (2010) Assessing effectiveness of supply chain collaboration: an empirical study In *Supply Chain Forum: An International Journal* 11. 2-16.
- [51] Kampstra, R.P, Ashayeri, J., Gattorna, J.L. (2006). Realities of supply chain collaboration. *The International Journal of Logistics Management*. 17 (3) 312 – 330.
- [52] Kanter, R. M. (1994). Collaborative Advantage: The Art of Alliances. *Harvard Business Review*, July August, 96–108.
- [53] Kaplan, R.S. and Norton, D.P. (2001). *The strategy-focused organization*, Harvard Business School Press, Boston
- [54] Katunzi, TM, and Zheng, Q (2010). Tanzanian SMEs' perceptions towards adoption of supply chain management (SCM) strategy. *International Journal of Business and Management* 5 p. 42.
- [55] Kempainen, K and Vepsalainen, APJ. (2003). Trends in industrial supply chains and networks. *Internal Journal of Physical Distribution & Logistics Management* 33 (8). 701-719.
- [56] Kern, T and Willcocks, L. (2002). Exploring relationships in information technology outsourcing: the Interaction approach. *European Journal of Information Systems* 11. 3-19.

- [58] Kotler, P., Keller, K.L., Brady, M., Goodman, M. and Hansens, T. (2009). *Marketing Management*, Pearson Education Limited, London.
- [59] Kumar, K., (2001). Technology for supporting supply chain management. Introduction. *Commun. ACM.*, 44: 58-61.
- [60] Lamberti, L. and Noci, G. (2010). Marketing strategy and marketing performance measurement system: Exploring the relationship. *European Management Journal.* 28(2). 139-152
- [61] Lambert, D.M., Emmelhainz, P. and Gardner, J. (1996), "Classifying relationships", *Marketing Management* 5 (2). 28.
- [62] Lambert, D. M., Margaret A. E. and John T. G., (1999). Building Successful Partnerships. *Journal of Business Logistics.* 20( 1). 165-181.
- [63] Lambert, Douglas M., James R. Stock and Lisa M. Ellram (1998). *Fundamentals of Logistics Management*, Burr Ridge, IL: Irwin/McGraw-Hill.
- [64] Lamming, R. (1993). *Beyond Partnership: Strategies for Innovation & Lean Supply.* Prentice Hall, London.
- [65] Lee, H.L. and Whang, S (2000). Information sharing in a supply chain. *International Journal of Manufacturing Technology and Management* (1) 79-93.
- [66] Lee, H.L., (2000). Creating value through supply chain integration. *supply chain management.* Rev., (4) 30- 36.
- [67] Lee, H.L., Padmanabhan, V. and Whang, S. (1997a). The bullwhip effect in supply chains I. *Sloan Manage.*
- [68] Rev., (38) 93- 102 Lee, H. L., Padmanabhan, V., & Whang, S. (1997b). *Information distortion in a supply chain: The bullwhip effect.* *Management Science*, 43(4), 546-558. doi:10.1287/mnsc.43.4.546
- [69] Leiblein, M. J. (2003). The choice of organizational governance form and performance: Predictions from transaction cost, resource-based, and realoptions theories. *Journal of Management*, 29(6), 937-961.
- [70] Leavitt, W. (2000). Data, Data Everywhere. *Fleet Owner.* 95( 8). 95-103.
- [71] Lummus, R. R., & Vokurka, R. J. (1999). Managing the demand chain through managing the information flow: Capturing 'moments of information. *Production and Inventory Management Journal.* 40(1), 16-20.
- [72] Lynch, D. F. & Nyaga, G. N. (2010). A Buyer's Perspective on Collaborative Versus Transactional Relationships. *Industrial Marketing Management*, 39 (3). 507-518.
- [73] Macbeth, D.K. and Ferguson, N. (1994). *Partnership Sourcing: An Integrated Supply Chain Management Approach.* London: Pitman.
- [74] Matthyssens, P. and Van den Bulte, C. (1994). *Getting Closer and Nicer: Partnerships in the Supply Chain.* *Long Range Planning* 27 (1). 72-83.
- [75] Maloni, M. and Benton, W.C. (2000). Power influences in the supply chain. *Journal of Business Logistics.* 21 (1). 49-73.
- [76] Mackelprang, AW, and Malhotra, MK (2015) The impact of bullwhip on supply chains: Performance pathways, control mechanisms, and managerial levers. *Journal of Operations Management* 36. 15-32
- [77] Manthou, V, Vlachopoulou, M, and Folinas, D 2004 Virtual e-Chain (VeC) model for supply chain collaboration. *International Journal of Production Economics* 87. 241-250.
- [78] Mena, C., Humphries, A., & Choi, T. Y. (2013). Toward a theory of multi-tier supply chain management. *Journal of Supply Chain Management*, 49(2), 58-77. doi:10.1111/jscm.12003.
- [79] Mentzer, J.T., DeWitt, W., Keebler, J.S., Min, S., Nix, N.W., Smith, C.D. and Zacharia, Z.G. (2001). Defining supply chain management. *Journal of Business Logistics.* 22 (2). 1-25.
- [80] McIntyre, N (2000) Rewards in the E-business World. *Workspan.* 43(7) 31-33.
- [81] Min, S, Roath, AS, Daugherty, PJ, Genchev, SE, Chen, H, Arndt, AD, and Glenn Richey, R (2005). Supply chain collaboration: what's happening? *The international journal of logistics management* 16.23 -256.
- [82] Mitra, A. & Bhardwaj, S. (2010). Alignment of Supply Chain Strategy with Business Strategy. *Journal of Supply Chain Management*, 7 (3), 49-65.
- [83] Muckstadt, J. A., Murray, D. H., Rappold, J. A. & Collins, D. E. (2001). Guidelines for Collaborative Supply Chain System Design and Operation. *Information System Frontiers*, 3 (4), 427-453.
- [84] Naor, M., Goldstein, S.M., Linderman, K.W. & Schroeder, R.G. (2008). The Role of Culture as Driver of Quality Management and Performance: Infrastructure Versus Core Quality Practices. *Decision Sciences*, 39 (4), 671-702.
- [85] Narus, James A. and James C. Anderson (1996). Rethinking Distribution: Adaptive Channels. *Harvard Business Review.* 74 (4), 112-120.
- [86] Nunnally, J (1978). *Psychometric theory.* New York: McGraw-Hill.
- [87] Nyaga, G.N., Whipple, J.M. and Lynch, D.F., (2010). Examining supply chain relationships: Do buyer and supplier perspective on collaborative relationships differ? *Journal of operations management.* (28). 101-114.
- [88] Pagell, M., Katz, J.P. & Sheu, C. (2005). The importance of national culture in operations management Research. *International Journal of Operations & Production Management.* 25(4), 371-94.
- [89] Peck, H. and Jüttner, U. (2000) Strategy and Relationships: Defining the Interface in Supply Chain Contexts. *The International Journal of Logistics Management* 11 (2): 33-44
- [90] Pfohl, H. C. & Buse, H. P. (2000). Interorganizational Logistics Systems in Flexible Production Networks: An Organizational Capabilities Perspective. *International Journal of Physical Distribution and Logistics Management.* 30 (5), 388-406.
- [91] Piercy, N.F. (1996), "The effects of customer satisfaction measurement: the internal market versus the external market", *Marketing Intelligence and Planning.* 14(4). 9-15
- [92] Pilbeam, C., Alvarez, G., & Wilson, H. (2012). The governance of supply networks: A systematic literature review. *Supply Chain Management: An International Journal*, 17(4), 358-376. doi:10.1108/13598541211246512.
- [93] Ramanathan, U (2012) Supply chain collaboration for improved forecast accuracy of promotional sales. *International Journal of Operations & Production Management* 32 pp 676-695.
- [94] Rindfleisch, A., & Heide, J. B. (1997). Transaction cost analysis: past, present, and future applications. *Journal of Marketing*, 61(4), 30-54. doi:10.2307/1252085.
- [95] Ring, P. S. & Van de Ven, A. H. (1994). Developmental Processes of Cooperative Inter-organizational Relationships. *Academy of Management Review*, 19 (1), 90-118.
- [96] Ryals, L. (2008). Determining the indirect value of a customer. *Journal of Marketing Management*, 24(7-8), 847-864.
- [97] Salmela, E, Happonen, A, and Huiskonen, J (2011). Best collaboration practices in supply chain of Technical wholesale items. *International Journal of Collaborative Enterprise.* 2. 16-38.
- [98] Schoenherr, T., Modib, S. B., Bentoney, W. C., Carter, C. R., Choi, T. Y., & Larson, P. D. (2011). Research opportunities in purchasing and supply management. *International Journal of Production Research*, 50(6), 4556-4579.
- [99] Sandes, N.R. and Premus, R. (2005). Modeling the relationship between firm IT capability, collaboration and performance. *Journal of Business Logistics.* (26) 1-23.
- [100] Seggie, S.H., Cavusgil, E., Phelan, S.E. (2007). Measurement of return on marketing investment: a conceptual framework and the future of marketing metrics. *Industrial Marketing Management*, 36(6), 834-841.
- [101] Stank, T. P., Keller, S. B., & Closs, D. J. (2001). Performance benefits of supply chain logistical integration. *Transportation Journal*, 41(2-3), 32-46.
- [102] Stuart, FI, and McCutcheon, D (1996). Sustaining strategic supplier alliances: profiling the dynamic requirements for continued development. *International Journal of Operations & Production Management* 16. 5-22.
- [103] Simatupang, T. M. and Sridharan, R. (2005). The Collaboration Index: A Measure for Supply Chain Collaboration. *International*

- Journal of Physical Distribution & Logistics Management*, 35 (1), 44–62.
- [104] Simatupang, T. M. and Sridharan, R. (2002). The Collaborative Supply Chain. *International Journal of Logistics Management*. (13), 15–30.
- [105] Surana, A., Kumara, S., Greaves, M., & Raghavan, U. N. (2005). Supply-chain networks: A complex Adaptive systems perspective. *International Journal of Production Research*, 43(20), 4235–4265. doi:10.1080/00207540500142274
- [106] Swink, M, Narasimhan, R, and Wang, C (2007). Managing beyond the factory walls: effects of four types of strategic integration on manufacturing plant performance. *Journal of Operations Management* 25 pp 148-164.
- [107] Sheu, C, Rebecca Yen, H, and Chae, B (2006). Determinants of supplier-retailer collaboration: evidence from an international study. *International Journal of Operations & Production Management* 2(6), 24-49.
- [108] Simchi-Levi, David, Philip Kaminsky and Edith Simchi-Levi(1999). Designing and Managing the Supply Chain. London: McGraw-Hill, 103-107.
- [109] Surana, A., Kumara, S., Greaves, M., & Raghavan, U. N. (2005). Supply-chain networks: A complex Adaptive systems perspective. *International Journal of Production Research*, 43(20), 4235–4265. doi:10.1080/00207540500142274
- [110] Tan, K. C., Kannan, V. R., & Handfield, R. B. (1998). Supply chain management: Supplier performance and firm performance. *International Journal of Purchasing and Materials Management*, 34(3), 2–9.
- [111] Tan K. C., Kannan V.R., and Hsu C.C. (2010). Supply Chain Information and Relational Alignments: Mediators of EDI on Firm Performance. *International Journal of Physical Distribution & Logistics*. 40,(56). 377– 394.
- [112] Van der Vaart, T. & van Donk, D.P. (2008). A Critical Review of Survey-Based Research in Supply Chain Integration. *International Journal of Production Economics*, 111 (1), 42–55.
- [113] Vanathi R, & Swamynathan R (2014). Competitive advantage through supply chain collaboration: An empirical study on the indian industry. *FIBRES&TEXTILES in eastern Europe* 4(106) 8-13
- [114] Vargo, S. L., & Lusch, R. F. (2004a). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1–17. doi:10.1509/jmkg.68.1.1.24036.
- [115] Vieira, J. G. V., Yoshizaki, H.T.Y., & Ho, L.L. (2009). Collaboration Intensity in the Brazilian Supermarket Retail Chain. *Supply Chain Management: An International Journal*, 14 (1), 11–21.
- [116] Wilding, R, Humpheries, S. A. (2006). Understanding Collaborative Supply Chain relationship through the application of Williamson organizational failure Network. *International Journal of physical distribution and Logistics management*. 36(4). 309-329.
- [117] Williamson, OE. (1975). *Markets & Hierarchies: Analysis & Anti-trust Implications*. pp. 3940. The Free Press, New York.
- [118] Williamson, O. E. (2008). Outsourcing: Transaction cost economics and supply chain management. *Journal of Supply Chain Management*, 44(2), 5–16. doi:10.1111/j.1745-493X.2008.00051.x
- [119] Xu, L. and Beamon, B.M. (2006). supply chain coordination and cooperation mechanisms: An attribute based approach. *Journal of supply management*. (42) 4-12.
- [120] Zacharia, ZG, Nix, NW, and Lusch, RF 2009 An analysis of supply chain collaborations and their effect on performance outcomes. *Journal of Business Logistics* 30 pp 101–123.
- [121] Zaheer, A. & Venkatraman, N. (1995). Relational Governance as Interorganizational Strategy: An Empirical Test of the Role of Trust in Economic Exchange. *Strategic Management Journal*, 16 (2), 373–392.
- [122] Zaheer, A., McEvily, B. & Perrone, V. (1998). Does Trust Matter? Exploring the Effects of Interorganizational and Interpersonal Trust on Performance. *Organization Science*, 9 (2), 141–159.
- [123] Zeng, WJ, and Ma, SH, (2010) The Impact of Supply Chain Relationship Dynamics on Collaboration .*Journal of Industrial Engineering and Management* 2.
- [124] Zhao, X., Huo, B., Flynn, B.B. and Yeung, J.H.Y. (2008) . The impact of power and relationship commitment on the integration between Manufacturers and customers in a chain. *Journal of operational management*. (26) 368-388.