Impact of Incentives Alignment on Operational Effectiveness in Food and Beverages Industry in Nigeria

Elvis Ihunwo
Supply Chain and Logistics Management Studies,
Department of Marketing,
Faculty of Management Sciences,
Rivers State University
elvisihunwo@gmail.com

Abstract

The impact of incentives alignment on operational effectiveness was the focal point of this study. It examined the influence of incentives alignment on quality, delivery speed and operational cost. From extant literature, the concept of incentives alignment and operational effectiveness was critically examined. Incentives alignment is a mechanism for realigning benefits and costs when there is a process change in the supply chain. The target population for this study was fourteen (14) food and beverages firms in Nigeria domiciled in Rivers State, and a sample of 70 respondents were drawn from the managements of the selected firms under our study. A self-administered structured questionnaire was used to collect primary data and data obtained through the survey instrument were analyzed. The testing of hypotheses was done using Spearman Rank Order Correlation Coefficient Statistical Tool and Least Squares Regression Tool and the reliability of the research instrument was tested using the Cronbach's Alpha which revealed that all the scores of the variables satisfied the standard Cronbach's Alpha threshold of 0.7. By means of the SPSS version 20.0, frequencies were computed to show the sample characteristics. The study finds that; incentives alignment positively influences operational effectiveness and its measures; quality, delivery speed and operational cost. Based on the findings of this study, the paper concludes that incentives alignment has a positive and significant influence on operational effectiveness. The paper therefore recommends that the emerging partners should continue to inspire an unwavering incentives alignment techniques, workers understanding and commitment will be enhanced leading to increase quality in operations. A happy workforce with well package incentives will perhaps be the answer to boosting employee's morale and subsequently grow into increased operational effectiveness.

Keyword: Information Sharing, Operational Effectiveness, Quality, Deliver speed and Operational Cost

1. Introduction

Supply chain management (SCM) has evolved to a point where collaborating is common practice for firms to achieve shared objectives. Managing the flow of goods, information, and money from one part of the supply chain to the other requires a smooth interplay between and among the stakeholders of the supply chain in the food and beverages firms. Food and beverages are considered to be the engine for economic growth and development in developing countries. Due to series of reforms and restructuring of key sectors over the last few years that the Nigerian economy has experienced. Food and beverages firms are striving to design performance measures that would help to ensure the desirable level of success in the business world. One of the most vital characteristics for the success of a supply chain in the food and beverages firms is a high level of dedication by the participating chain members. However, persuading participating members to increase both customer and shareholder values is a persistent exertion. Incentive alignment seek to provide a mechanism for repositioning of the benefits and encumbrances that are incurred when activity changes occur within the supply chain. Incentives as described by Banjoko (2006) are awards given out when predetermined objectives have been attained within an organization. It can also be regarded as unpredictable disbursements made to employees on the basis of the amount of output or results achieved. Incentive alignment is one of the elements utilized to improve the performance or increase productivity. In fact, there is a noteworthy association between incentive alignment and outstanding performance, productivity as well as in achieving an agreement

between parties. Incentive alignment indirectly increases or enhances appropriate service delivery, improve performance, increase productivity and assist in achieving goals as required (Rahman and Kumaraswamy, 2008). The importance of incentives alignment is arising due to certainty of most organizations on its capacity of improving organizational efficiency (Brandt and Svendsen, 2009). Thus, this study will examine the impact of incentives alignment and operational effectiveness in food and beverages firms in Nigeria. In the next section, we describe the theoretical background of the current study.

2. Literature Review

2.1. Theoretical Foundation

This study is anchored on Agency Theory. The 1976 article-Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure by Jensen and Meckling helped establish agency theory (Daily et al. 2003; Lan and Heracleous, 2010). As any theory, agency theory is based in a number of assumptions about man, which have a significant impact on the formation of the theory (Davis et al. 1997). As shareholders have a willingness to bear risk but do not necessarily possess the interest and time to actively manage the company (Brealey et al. 2008), a contractual relationship is created wherein an agent (manager) will manage the risk and control the company on behalf of the principal (shareholder), who is the residual claimant, risk bearer and owner of the company. As such, the modern corporation is reduced to a nexus of contracts between principals and agents and the separation of ownership and control is created (Brealey et al. 2008). The more effective the organization is in obtaining information about agent behavior, the more likely the manager will be to act in the interest of the shareholder, and therefore fewer resources need to be spent on aligning the interests through incentives. Besides the organization, incentives can be similarly employed to limit risk on the part of the manager. This often leads to contrasting tendencies, where the manager will make less risky investments than preferred by the shareholders (Shapiro 2005). This engagement can be mitigated by introducing a compensation scheme, in the form of a risk premium, where rewards are based on outcome, commonly stock price (Hendrikse 2003). By tying part of managerial wealth to shareholder wealth, the incentive system can be utilized to create alignment between management and shareholders (Stroh et al. 1996, Aulakh & Gencturk, 2000; Lan & Heracleous, 2010). In this way, the wage becomes a bribe and a condition from the principal to the agent in order to induce certain behavior aligned with the principal's interest. As such, just as the principal may learn which incentives work the best, the agent learns which aspects of performance the principal is interested in and primarily seeks to optimize these exact aspects (Brickley et al. 1994, Shapiro 2005).

2.2. Conceptualization of Incentives Alignment and Operational Effectiveness.

Individual enterprises no longer compete with themselves in modern day business, but rather collaborate as a series of chains (Lambert, 2008; Fantazy et al. 2010). Thus, the supply chain since it involves the coordination of all processes that will assist in attaining competitive advantage over contending companies is considered to be very important to an organization's effectiveness (Pamela & Pietro, 2011). American Production and Inventory Control Society (APICS, 1990) cited in Lee (2012) define the supply chain as the processes from the initial raw materials to final consumption of the finished products linking across supplier-user industries. The chain constitutes all functions within and outside an industry, which enable the value chain to

make products and provide services to customers. Some researchers suggested a clearer supply chain management definition by adding the information system necessary to monitor all of the activities (Lee, 2012).

2.2.1. Incentives Alignment

Incentives alignment is a mechanism for realigning benefits and costs when there is a process change in the supply chain (Simatupang & Sridharan 2005). The theory underlying incentives alignment assumes that an individual chain member tends to act in a certain way based on the expectation that the act will result in a mutual benefit and on the attractiveness of that benefit to individual chain members (Simatupang et al., 2002). Incentives alignment refers to the process of sharing costs, risks, and benefits among the participating members (Simatupang and Sridharan, 2005; Nyaga *et al.,* 2010). An appropriate incentive scheme can be devised in a number of ways (Simatupang and Sridharan, 2005). First, Pay-for-effort is a scheme that links payment and effort. This assumes that rewarding effort would motivate the individual member to exert a given amount of effort which relates to a certain level of performance. Incentives alignment can be designed based on productive behaviour (Simatupang and Sridharan, 2005). This means rewarding the steps of observable actions that lead to a specific mutual objective, rather than the attainment of the objective itself. Rewarding the partners for paces rather than end results will allow improve in performance and also motivate them, since it recognizes them for their performance and also for their effort. Regular incentives to progress toward the joint objective bring together the attention and efforts of the chain members on joint problem solving.

Second, there is pay-for-performance - which means setting performance metrics to evaluate the partners and rewarding them based on outcomes of the most important activities. Pay-for-performance allows the participating parties to recognize each other for a job well done, to motivate desired performance, and to control costs. Pay-for-performance is a scheme that links payment and performance. This scheme assumes that rewarding performance will motivate the individual chain member to achieve a particular level of performance. The third type of incentives alignment is equitable compensation. Equitable incentive is sharing the equitable load and benefits which result from exerting a certain amount of collaborative effort. The chain members accept the importance of the potential rewards that can be obtained from collaboration although costs need to be shared. The participating parties jointly agree on a single set of performance measures and on a gain sharing formula universally perceived as equitable. They carry out open book practice that consists of both the overall costs and benefits and the individual costs and benefits. They share risks and fairly assess the actual performance in determining the fair distribution of gains.

2.2.2. Operational Effectiveness

An increasing number of factors prompt organizations to operate more efficiently and to enable them carry out effective operational processes (Hill, 2000; Slack et al., 2004). This encompasses, the need to deliver value adding products or services of unique quality, on time, at a competitive price. Thus, organizations attempting to meet these objectives need to pay attention to their operational effectiveness as this is a primary driver of business performance in order to remain competitive (Wheelwright & Bowen, 1996; Ben-Rajeb et al., 2008; Slack et al., 2010). Operational effectiveness refers to the ability to establish processes, based on core capabilities within the organizations that encourage them to exceed customer's expectations (Porter, 1996; Evans and

Lindsay, 2011). Operational effectiveness involves improving process performance by leading and controlling the processes within the firm as well as measuring and improving the processes. A better use of resources through these core processes enables the organization to eliminate waste, adapt more appropriate technology and therefore perform better than competitors (Porter, 1996).

2.2.3. Quality

Quality has emerged as strategic entity making supply chain collaboration a necessity for overall operational effectiveness and global competence (Desai, 2008). Although the term quality is quite widely used by practitioners and academics, there is no generally agreed definition of it, since different definitions of quality are appropriate under different circumstances. There are different definitions of quality portrayed by authors to fit different circumstances (Reeves and Bednar, 1994; Corbett, 2008). A widely used definition of quality was introduced by Juran (1951) and Juran and Godfrey (1999) which meets all the previous conditions, where quality is defined as fitness for use.

2.2.4. Delivery Speed

It is important for businesses in the current competitive environment to understand the value of their customers, as they are important to the business future growth. This should motivate organizations to find ways to capture, attract and maintain their customer's loyalty. Organizations should understand the wants and needs of their target market and make sure that the delivery of these wants and needs is in an efficient and effective manner so as to satisfy the customer in the target market (Maxhand and Plowman, 2012). Improving on speed boosts an organization to be able to shorten the time between the service request and delivery of the service, with the frequency and at the times requested by customers (Hill, 2005).

2.2.5. Operational Cost

Creating competitive advantage is not achieved instantaneously; hence an organization becomes advantageous in the market by outshining on some of the objectives and being competitive (Wheelwright & Bowen 1996). Organizations need to identify the inadequacies and waste in practices such as procurement, product or service design, and the performance of staff to enhancing cost performance (Russell and Taylor, 2008). An appropriate disaggregation of the cost components impacting on the total cost performance of an organization gives the opportunity to identify the areas for improvement (Slack et al., 2004).

2.3. Conceptual Framework

This study conceptual framework consists of incentives alignment (independent variable). While dependent variable is operational effectiveness, which is made up of quality, delivery speed and operational cost as the measure.

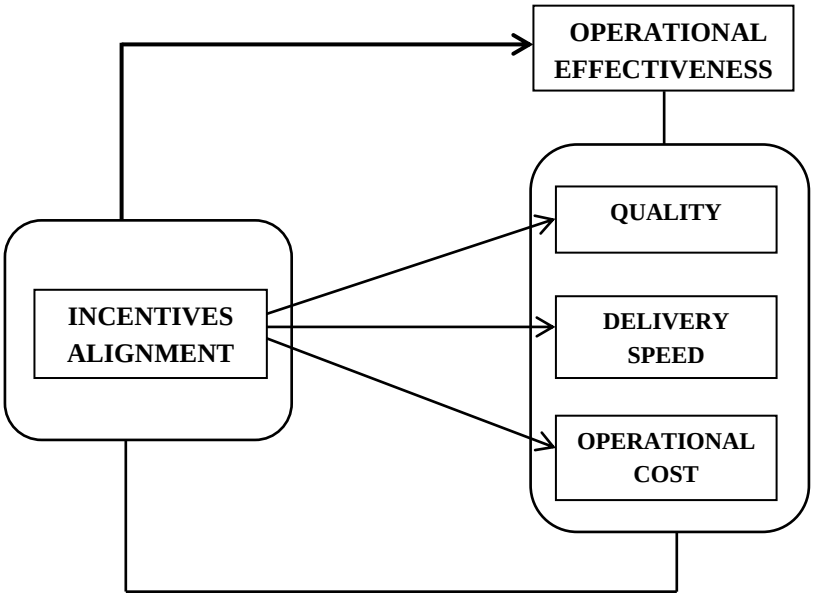

Figure 1: Conceptual Framework of Information Sharing (a dimension of supply chain collaboration) and Operational Effectiveness

2.4. Incentive Alignment and Operational Effectiveness

The concept of incentive alignment deals with sharing of risks, costs, losses and benefits (Krishnapriya & Baral, 2014). Incentive alignment involves the mutual or collective deliberations on how actual and perceived incentives are to be harmonized and shared in line with channel objectives).Incentive alignment as a construct of collaboration is measured by sharing costs, risks and benefits and designing incentive programs such as share savings on reduced inventory cost, effectiveness reward, reward for effort, penalties, making provisions for defective products and retail price-cut to sell at higher profit and agreement on order changes (Simatupang & Sridharan, 2002 ; Mathuramaytha, 2011). In regards to the food and beverages industry in Nigeria, the incentives that could be shared among supply chain members beside profit are; pay-for-performance: fee-for-service arrangements, functional allowances and promotional items i.e. free gifts and prizes that are meant to improve operational effectiveness. The food and beverages firms share risk with distributors by engaging them to commit their investments in the relationship. For instance the warehouses provided by brewery manufacturers to distributors are mostly done by counterpart funding, but the manufacturer brings large chunk of the investments which payments are spread over a long period of time for distributors. However, despite these incentives given to distributors, a critical issue in incentive alignment is the optimum way to share and collect these benefit and risk (Simatupang & Sridharan, 2002). Therefore, effective brainstorming, implementation and close monitory are required by trading partners. It is obvious that incentive misalignments are the remote causes of excess inventory, stock-out, in-accurate forecast, poor sales, and dissatisfied customers (Narayanan & Raman, 2004 as cited in Sunny et al., 2016). In the light of the above discussion, by examining the impact of incentive alignment on operational effectiveness, we therefore hypothesize the following:

Ho_1: Incentives alignment has no significant relationship with quality.

Ho_2: Incentives alignment has no significant relationship with delivery speed.

Ho_3: Incentives alignment has no significant relationship with operational cost

3. Methodology

This study adopted a cross-sectional survey and this hypothesis testing study adopted a correlation investigation to establish relationship between incentives alignment and operational effectiveness in the food and beverages industry in a non-contrived setting. The target population for this study was fourteen (14) food and beverages firms in Nigeria domiciled in Rivers State, and a sample of 70 respondents were drawn from the managements of the selected firms under our study. A structured questionnaire was used to collect primary data; and the questionnaire was designed in Likert scale five point form- ranging from Strongly Disagree (SD) to Strongly Agree (SA). The testing of hypotheses was done using Spearman Rank Order Correlation Coefficient Statistical Tool and Least Squares Regression Tool. By means of the SPSS version 20.0, frequencies were computed to show the sample characteristics.

3.1 Reliability

The study tested for reliability at the verge of validating the factors in the context proposed. The reliability of the research instrument was tested using the Cronbach's Alpha threshold of 0.7.

Table 1: Result of Reliability Analysis

Variable	Cronbach's Alpha	Items	Acceptability
Incentives Alignment	0.720	5	Accepted
Quality	0.733	5	Accepted
Delivery Speed	0.757	5	Accepted
Operational Cost	0.766	5	Accepted

Source: SPSS 20.0 Output (based on 2019 field survey data)

As can be seen in Table 1; the result of the reliability test revealed that all the scores of the variables satisfied the standard Cronbach's Alpha threshold of 0.7.

3.2. Descriptive Statistics

The descriptive analysis of sales integration is expressed in five items questions.

Table 2: Descriptive Statistics on Items of Incentives Alignment

Descriptive Statistics

Questionnaire Items	N	Sum	Mean	Std. Deviation
Our firm haveagreement on the goals of the supply chain with collaborating partners	62	239	3.85	1.412
Our firm havecompensation, incentive, and reward systems thatencourage integration	62	238	3.84	1.333
Our firm compensatecollaborating partner on information provided for improvements and benefit the firm	62	184	2.97	1.578
We have a long-term relationship with our collaborating partners and operate under principles of shared rewards and risks.	62	256	4.13	.713
Our firm is willing to have continuous alignment with our collaborating partner	62	277	4.47	.620
Valid N (listwise)	62			

Source: SPSS 20.0 Output (based on 2019 field survey data)

The information in table 4.10 shows the descriptive statistics on items of incentives alignment. Specifically, the table revealed that: Our firm have agreement on the goals of the supply chain with collaborating partners had a mean of 3.85 and a standard deviation of 1.412. Our firm have compensation, incentive and reward systems that encourage integration had a mean of 3.84 and a standard deviation of 1.333. Our firm compensate collaborating partner on information provided for improvements and the benefit of the firm had a mean of 2.97 and a standard deviation of 1.578. We have a long-term relationship with our collaborating partners and operate under principles of shared rewards and risks had a mean of 4.13 and standard deviation of 0.713. Our firm is willing to have continuous alignment with our collaborating partner had a mean of 4.47 and standard deviation of 0.620. The mean values of all the variables are greater than (>) 3 (the required average of a five point likert scale), except the mean of our firm compensate collaborating partner on information provided for improvements and the benefit of the firm which had a mean of 2.97 and a standard deviation of 1.578. This implied that, incentives alignment in compensation of partners on information provided for improvements and the benefit of the firm are low to some extent.

4. Test of Hypotheses

This section of the work shows a summary of the result of the test of hypotheses. The test statistics used in testing the hypotheses is the Spearman Rank Order Correlation Coefficient (rho). All the analyses were carried out using the Statistical Package for Social Sciences (SPSS) version 20.0.

Ho_1: Incentives alignment has no significant relationship with quality**.**

Table 3: Correlation Analysis showing the Relationship between Incentives Alignment and Quality

Correlations

Type	Variables1	Statistics	Incentives Alignment	Quality
Spearman's rho	Incentives Alignment	Correlation Coefficient	1.000	.662**
		Sig. (2-tailed)	.	.000
		N	62	62
	Quality	Correlation Coefficient	.662**	1.000
		Sig. (2-tailed)	.000	.
		N	62	62

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

Source: SPSS 20.0 Output (based on 2019 field survey data)

Table 3 above shows the SPSS output result of the Spearman Rank Order Correlation Coefficient for the relationship between incentives alignment and quality. The coefficient r = 0.662** and p = 0.000 this value is less than 0.05 level of significance. Based on the categorisation in Table 3, the value is high indicating that a strong relationship exists between incentives alignment and quality. The correlation coefficient is positive implying that a positive relationship exists between them, i.e. increase in incentives alignment is associated with increase in quality. The probability/significant value is 0.000, hence the researcher rejects the null hypothesis and the alternate is accepted.

Ho_2: Incentives alignment has no significant relationship with delivery speed

Table 4: Correlation Analysis showing the Relationship between Incentives Alignment and Delivery Speed

Correlations

Type	Variables1	Statistics	Incentives Alignment	Delivery Speed
Spearman's rho	Incentives Alignment	Correlation Coefficient	1.000	.769**
		Sig. (2-tailed)	.	.000
		N	62	62
	Delivery Speed	Correlation Coefficient	.769**	1.000
		Sig. (2-tailed)	.000	.
		N	62	62

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

Source: SPSS 20.0 Output (based on 2019 field survey data)

Table 4 above shows the SPSS output result of the Spearman Rank Order Correlation Coefficient for the relationship between incentives alignment and delivery speed. The coefficient r = 0.769** and p = 0.000 this value is less than 0.05 level of significance. Based on the categorisation in Table 4, the value is high indicating that a strong relationship exists between incentives alignment and delivery speed. The correlation coefficient is positive implying that a positive relationship exists between them, i.e. increase in incentives alignment is associated with increase in delivery speed. The probability/significant value is 0.000, hence the researcher rejects the null hypothesis and the alternate is accepted.

Ho_3: Incentives alignment has no significant relationship with operational cost

Table 5: Correlation Analysis showing the Relationship between Incentives Alignment and Operational Cost

Correlations

Type	Variables1	Statistics	Incentives Alignment	Operational Cost
Spearman's rho	Incentives Alignment	Correlation Coefficient	1.000	.567**
		Sig. (2-tailed)	.	.000
		N	62	62
	Operational Cost	Correlation Coefficient	.567**	1.000
		Sig. (2-tailed)	.000	.
		N	62	62

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

Source: SPSS 20.0 Output (based on 2019 field survey data)

Table 5 above shows the SPSS output result of the Spearman Rank Order Correlation Coefficient for the relationship between incentives alignment and operational cost. The coefficient r = 0.567** and p = 0.000 this value is less than 0.05 level of significance. Table 5, reveals that a moderate relationship exists between incentives alignment and operational cost. The correlation coefficient

is positive implying that a positive relationship exists between them. The probability/significant value is 0.000, hence the researcher rejects the null hypothesis and the alternate is accepted.

5. Discussion

This study examined the impact of incentives alignment on operational effectiveness in the Nigerian food and beverages firms. It specifically investigated the impact of incentives alignment on quality, delivery speed and operational cost. It was hypothesized that there is no relationship between information sharing and measures of operational effectiveness which include quality, delivery speed and operational cost. As can be seen, the result from Spearman Rank Order analysis shows that a significant relationship exist between them. A majority of the respondents are of the opinion that a strong and positive relationship exists between incentives alignment and measures of operational effectiveness. Based on that, the null hypotheses (Ho) was rejected and the alternate hypotheses (HA) was accepted. The findings of this study is in line with the views of Nelson, (2003) that incentives such as profit sharing, cash bonus, commissions and retirement income scheme are among incentives deployed by organizations to retain and maintain their best hand. The theory underlying incentives alignment assumes that an individual chain member tends to act in a certain way based on the expectation that the act will result in a mutual benefit and on the attractiveness of that benefit to individual chain members (Simatupang et al., 2002). Coordinating actions across firms is tough because organizations have different philosophies and firms can't count on loyalty to motivate their partners. To persuade supply chain partners to act in ways that are best for every organization, it must have to create or modify motivating incentives. Organizations must continually seek ways to keep their employees and work groups engaged in their work, motivated, efficient and productive. Incentives as described by Banjoko (2006) are awards given out when predetermined objectives have been attained within an organization. An organization's success can depend on its ability to create the conditions and systems (formal and informal) that entice the best people to work there. Also, a good incentive system encourages employees to be productive and creative, fosters loyalty among those who are most productive, and stimulates innovation.

A supply chain works well if its company's incentives are aligned-that is, if the risks, cost and rewards of doing business are distributed fairly across the network. Misaligned incentives often the causes excess inventories, stock outs, incorrect forecast, inadequate sales effort and even poor customer service. Organizations can increase their competitive advantage by aligning partners' incentives. If organizations work together to efficiently deliver goods and services to customers' they will succeed. If they don't they will lose. The basic challenge in supply chain is to engage firms to work efficiently to enable them achieve goals and this challenges can be surmounted through incentives alignment.

6. Conclusion

This study has ascertained that incentives alignment impact on operational effectiveness and its measures – quality, delivery speed and operational cost. Hence, the success of food and beverages future effectiveness in operation will to a large extent be contingent on the application and implementation of effective incentives alignment in the food and beverages firms, and the firm's management ability to maintain and motivate employees on incentives for business survival and growth. Additionally, the emerging partners should continue to inspire an unwavering incentives

alignment techniques, workers understanding and commitment will be enhanced leading to increase quality in operations. A happy workforce with well package incentives will perhaps be the answer to boosting employee's morale and subsequently grow into increased operational effectiveness. Hence it is noted that food and beverages firms will have better competitive advantage when all relevant managers appreciate and demonstrate these incentives strategies with a view of achieving the desired corporate objectives.

This research provides a greater insight on the impact of incentives alignment on operational effectiveness to scholars, practitioners, students, employees and other stockholders. Finally it will inspire more methodical undertakings to carry out theory driven empirical research and help in advancement of our understanding of information sharing in supply chains.

References

Aulakh, P. & Gencturk, E. (2000). International principal agent relationships, *Industrial Marketing Management*, 29 (6), 521-538.

Banjoko, S. (2006) *Managing Corporate Reward Systems*, Lagos: Pumark Nigeria Limited

Ben-Rajeb, H., Morel-Guimaraes, L., Boly, V. & Assielou, N. G. (2008). Measuring innovation best practices: Improvement of an innovation index integrating threshold and synergy effects, *Technovation*, 28 (12), 839-854.

Brandt, U.S., Svendsen, G.T. (2009), Trawling for subsidies: The alignment of incentives between fishermen and marine biologist. *Journal of European Public Policy*, 16, 1012-1029.

Brealey, R., Myers, S. & Allen, F. (2008). *Principles of Corporate Finance*, (9th ed.), Boston, USA; McGraw-Hill/Irwin,

Brickley, J., Smith, C. & Zimmerman, J. (1994). Ethics, incentives, & organizational design, *Journal of Applied Corporate Finance*, 7 (2), 20-30

Corbett, L. M. (2008). Quality management in operations, in Samson, D. and Singh, P. J. (eds), *Operations Management: An Integrated Approach*, Cambridge, Melbourne, 78-89.

Daily, C., Dalton, D. & Cannella Jr., A. (2003). Corporate governance: Decades of dialogue & data, *Academy of Management Review*, 28, (3) 371-382

Davis, J., Schoorman, F. & Donaldson, L. (1997). Toward a stewardship theory of management, *The Academy of Management Review*, 22 (1), 20-47

Desai, D. A. (2008). Cost of quality in small- and medium-sized enterprises: Case of an Indian engineering company, *Production Planning & Control*, 19 (1), 25-34.

Evans, J. & Lindsay, W. (2011). *The Management and Control of Quality*, South- Western New Jersey; Cengage Learning.

Fantazy, K. A., Vinod, K. & Uma, K. (2010). Supply management practices and performance in the Canadian hospitality industry, *International Journal of Hospitality Management*, 29 (4), 685-693.

Hill, T. (2000). *Strategic Context and Managerial Analysis*. Operations Management.

Hill, T. (2005). *Operations management*, New York, NY; Palgrave Macmillan.

Juran, J. & Godfrey, M. (1999). *Quality Control Handbook*. New York: McGraw-Hill.

Lan, L. & Heracleous, L. (2010). Rethinking agency theory: The view from law, *Academy of Management Review*, 35 (2), 294-314

Lee C. B. (2012). *Demand Chain Optimization – Pitfalls and Key Principles*, USA; Nonstop Solution

Maxhand, N. & Plowman, B. (2012). *Quality Management Handbook*, USA; Quality Press.

Nyaga, G. N., Whipple, J. M. & Lynch, D. F. (2010). Examining supply chain relationships: Do buyer and supplier perspectives on collaborative relationships differ? *Journal of Operations Management*, 28 (2), 101-114.

Pamela, D. & Pietro, R. (2011). Supply chain integration and efficiency performance: a study on the interactions between customer and supplier integration, *Supply chain Management: An International Journal*, 16, 220-230.

Porter, M. (1996). What is Strategy? *Harvard Business Review*.

Rahman, M. M., Kumaraswamy, M. M. (2008), Relational contracting and teambuilding: Assessing potential contractual and non-contractual incentives. *Journal of Management in Engineering*, 1(48), 48-63.

Reeves, C. & Bednar, D. (1994). Defining quality: alternatives and implications. *Academy of Management Review*, 19 (3), 419-445.

Russell, R. S. & Taylor, B. W. (2008). *Operations Management*; Quality and competitiveness in a global environment, (5th ed), London; John Wiley & Sons, Inc.

Shapiro, S. (2005). Agency Theory *Annual Review of Sociology*, 31 (1), 263-284

Simatupang, T. M. & Sridharan, R. (2005). An integrative framework for supply chain collaboration, *The International Journal of Logistics Management* 16 (2), 257–274.

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

Slack, N., Chambers, S. & Johnston, R. (2004). *Operations Management*. (4th ed), New York; Pearson Education Limited.

Slack, N., Chambers, S. & Johnston, R. (2010). *Operations Management*. (6th ed), United Kingdom; Pearson Education Limited.

Stroh, L., Brett, J., Baumann, J. & Reilly, A. (1996). Agency Theory & Variable Pay Compensation Strategies, *Academy of Management Journal*, 39 (3), 751-767

Sunny, R. I., Coker, P. R. & Chukwu, G. C. (2016), Improving on-time delivery through supply chain collaboration: the experience of brewery firms in south-south, Nigeria. *Journal of Asian Business Strategy* 6 (7), 136-149

Wheelwright, S. C. & Bowen, H. (1996). The Challenge of Manufacturing Advantage. *Production and Operations Management*, 5 (1), 59-77.