

Factors Determining Managerial Role in Supply Chain Management: Study on Administrative Trait's effects on Production

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Abstract - The elements of latest advancement is in underway and benefit zones has set new desire principles and customary administrative qualities in production network are being modified to enhance company's aggressiveness in this changing business sector condition. Likewise, organizations are currently hoping to grow new techniques in zones, for example, producing, adaptability, transportation and data advancements so as to have a vital predominance in their store network. Directors enter factors in the hierarchical execution and the accomplishment of the supply chains. Along these lines, it is suggested that production network procedures must be considered in the general methodology and furthermore the commitments of inventory network the board cannot be acknowledged except if it is upheld by the administrative board. As needs be, the reason for this examination is to explore the job of administrative properties and its consequences for the production network execution. The information in this examination are gathered from the production network supervisors of substantial assembling firms (employee>50) in Kayseri. The outcomes demonstrate that administrative traits have effect on production network execution.

Key Words: Supply Chain Management, Managerial Role in SCM

1.0 Introduction

In the present profoundly evolving condition, associations are progressively confronting strengthening worldwide rivalry, fast innovative advances, and all the more requesting client desires [5]. In like manner, these distinctions influence the administration theory in the associations. The elements of quicker item advancement set new desire principles and conventional administrative ascribes are being changed to enhance company's aggressiveness in this new condition. It is proposed

in the writing that conventional rivalry of organization versus organization is changing toward a plan of action where supply chains go up against supply chains (Prajogo and Olhager). Hence, supervisors and scholarly specialists have understood that an increasingly coordinated way to deal with directing business is important.

Key administration logic in the store network can be portrayed as a state of mind that is given to finding instruments and strategies that accommodate expanded operational adequacy and productivity all through the conveyance channels that must be made inside and remotely to help and supply existing corporate item and administration contributions to clients [4]. The essential significance of this thought is that if associations deal with the aggregate execution of the inventory network, they will have an enhanced esteem and vital predominance in their market. Thusly, organizations are developing increasingly productive and responsive supply anchors so as to have a reasonable upper hand.

As per the vital administration approach, store network the board has two measurements. The first can be alluded to as the operational store network, and the second as the vital production network [1]. The operational inventory network alludes to the arrangement of essential and bolster supply fastens that must be developed to give the sources of info and yields that convey items and administrations to the clients of any organization. Key inventory network believing is a way that perceives the proficient utilization of intensity properties in the production network for whatever is created for clients. The key store network alludes the operational effectiveness, as well as it is about the entire business technique [5].

So as to have a supportable development and picking up benefit, organizations are continually searching for effectiveness in their supply chains [8]. In this way, inventory network thinking has would in general spotlight on the operational parts of the procedures as opposed to those that are of key significance. In this way, it is the reason of this investigation that production network the executives must be considered deliberately with all divisions and authoritative individuals. In this procedure, chiefs give basic choices, since they have the ability to control assets as prevailing players of supply chains. The vital choices dependent on the advancement of the traits of the store network administrators are critical. Since, production network directors ought to have the information of his own activity, as well as a complete perspective of the entire framework in a vital methodology. In this way, the motivation behind this examination is to research the job of administrative traits and its consequences for the production network execution.

This article is composed in four fundamental areas. Initial, a survey of the writing on key store network the executives, inventory network the executives as an administration theory, and the board points of view for production network the executives, are introduced, trailed by the improvement of theories. Second, the exploration technique members, systems, and measures-is talked about in detail. Third, an investigation of the field examine information is displayed alongside the dialog of the outcomes in connection to the writing. At long last, qualities and shortcoming, investigate suggestions and future research proposals are given.

2.0 Literature Review

In the accompanying areas right off the bat, vital production network the executives is portrayed, at that point administrative job in inventory network execution is given in detail, following the speculations improvement.

2.1. Key Supply Chain Management

An inventory network is a system of offices and appropriation alternatives that plays out the elements of acquirement of materials, change of these materials into halfway and completed items, and the conveyance of these completed items to clients [2]. It is a system of associations engaged

with various procedures and exercises creating an incentive as items and administrations for a definitive shopper.

Inventory network the executives can characterized as the arrangement of methodologies that coordinate providers, producers and distribution centers in the most proficient way and keeping in mind that doing this; it limits the entire framework expenses and meets benefit level needs. The target of the production network the executives is to expand the store network excess [9]. From a modern perspective, store network the board includes an assortment of the executives and specialized issues, beginning from the circulated structure of items and procedures, the decentralized however proficiently organized creation of merchandise through providers contracting and redistributing, the coordination of outsider coordinations and multi-areas inventories [6]. Most recent advancement of store network the executives rehearses incorporates provider organization, re-appropriating, process duration pressure, persistent process stream, and data innovation sharing [10]. To put it plainly, inventory network the executives is a business procedure to enhance investor and client esteem by streamlining the stream of items, benefits, and related data from source to client. It incorporates the procedures of making and satisfying the market's interest for merchandise and ventures [14].

Production network the board is an arrangement of business forms that envelops an exchanging accomplice network occupied with a shared objective of fulfilling the end client. In this way, a production network process can extend from a's provider to a's client. This chain is dealing with the stream of items, benefits and related data over the entire business framework to amplify the incentive to the end client [16]. The initial step of the inventory network choice is to decide production network systems. Store network technique decides an organization's systems while thinking about all means of giving an item or a support of its clients. These systems incorporate; acquisition of crude materials, transportation, generation and transporting to client. The second step of the inventory network choice is the production network arranging. The target of this progression is to augment the production network surplus while thinking about the choices of store network and aggressive techniques. The last advance of the store network choice is the production network activities.

In inventory network activities, associations do the tasks as for the choice. In this progression, techniques are resolved, choices are made, plans are shaped and inventory network is framed. That is the reason this progression manages specifically to clients and their needs [5]

So as to stable the changing condition and wind up focused, numerous makers and specialist organizations teamed up with their key providers to overhaul customary supply and materials the board capacities and incorporate them as a piece of their corporate methodology [4]. Correspondingly, numerous wholesalers and retailers additionally coordinated their coordinations capacities with other useful regions to upgrade upper hand. Inevitably, these two customary supporting elements of corporate system advanced and converged into a comprehensive and key way to deal with materials and coordinations the board, normally known as production network the executives [3]. As indicated by [9] store network is an indispensable administration process that ought to be deliberately incorporated with different capacities inside the firm and over the organizations.

What's more, chiefs and academicians have understood that an increasingly coordinated way to deal with directing business is vital, and production network has risen as a critical administration idea. The Academic Alliance Forum proposes that customary rivalry ways are changing where supply chains go up against supply chains. Accordingly, organizations are building increasingly productive supply chains. Here, the key inventory network the executives thinking must be comprehended regarding operational effectiveness as well as must be comprehended as a business methodology [4].

The 1980s were a time of moving frames of mind toward acquiring job in corporate systems. The investigates center amid the 1990s seems to have moved toward reconciliation and the methods by which the buying capacity perceived as a progressively noteworthy contribution to the company's execution, [13] in his property checking take a shot at the powers that shape the focused idea of industry, recognized purchasers and providers as the two of the five basic powers. Accordingly, the key significance of the provider and the firm as a purchasing substance started accepting acknowledgment in the standard procedure writing.

As per Porter's model, if there are less purchasers in a business advertise, the dealing of purchasers increments. In this manner, the providers need to build quality, and lower the expenses. Then again, if there are less providers, the haggling intensity of providers increments. They can decide the quality and the expenses. Inside this system, any firm in a market chain goes after net revenue with its providers, and purchasers. As indicated by [6] the setting of a coordinated inventory network is a multi-firm relationship the executives inside a structure described by limit impediments, data, center abilities, capital, and human asset imperatives. Inside this specific situation, inventory network structure and technique results endeavors to operationally interface an undertaking with clients and in addition the supporting distributive and provider systems to increase upper hand. Business activities are thusly incorporated from beginning material buy to conveyance of items and administrations to the end clients. [13] expressed that store network is a key weapon in the exceedingly changing aggressive market. With the expanded worldwide rivalry and the higher client desires, inventory network clients could well stand to abuse the acquiring capacity more to increase upper hand through better conveyance, more prominent responsiveness, and lower costs. [14] underlined the significance of deliberately overseen association and they expressed that in the deliberately overseen association, every worker has the capacity not exclusively to comprehend the vital aim of the firm, yet in addition to effectively add to the business.

Vital advancement idea in key administration, which is the reason for our examination display, is made out of five phases in the production network the board; essential monetary arranging figure based arranging; remotely situated arranging, vital administration and learning based business. The subtleties for this idea are as per the following [16] In the principal organize, store network division is viewed as dealing with an utilitarian, movement stream action inside the firm. The idea of the store network system is to deal with an utilitarian accumulation of the exercises, while the idea of the inventory network itself is inside, moving from material administration to outbound transportation. The administration accentuation is on the specialized effectiveness and the board's essential concerns identify with adjusting to standards. Key

individual aptitudes are errand situated in this stage. In the second stage, the office is acknowledged as the merchant that makes conceivable the exchange of products/administrations from the firm to the client. The mentality is still limiting expenses, and in the meantime the office moves practical to make the most effective production network framework conceivable. The idea of production network methodology is framework effectiveness [11]. The administration accentuation is on strategic administrative abilities, for example, anticipating and low-level arranging. Key individual aptitudes are errand related, and group exercises are for the most part intra-departmental in this stage. The third stage is characterized as giving all inbound and outbound stream capacities, moving productivity in its store network, and executes a framework that isn't really founded on least expense, yet on what will make the division focused against others. The inventory network methodology moves from being simply effective to being aggressive, while the idea of the production network has been extraordinarily extended to incorporate moving things from the providers of the association and their providers to the association's clients' last clients. The association anticipates that the office will contribute careful the nature of its tasks, and bolster advancement, limiting expenses, keeping up a high caliber of administration, and consistently enhancing its procedures as estimated by client related results. Solid administrative, relational, and scientific abilities are essential. Additionally, cooperation assumes a critical job, and directors will in general turn in and out much of the time in this stage. The fourth stage is key administration arrange. The division has a genuine inventory network view, and it is responsible for conveying the crude materials from different firms through each phase to their definitive purchasers. The inventory network methodology is to manufacture a framework that is more viable than those of contenders, while the idea of the production network itself has been extended to incorporate a consolidated physical stream and data framework among all organizations in the framework and stretches out to money streams also. This stage requires effectively looking for development to improve and bolster the intensity. The real exercises of the supervisors incorporate long haul introduction and coordination other than the obligations of the past stage. The executives approach in this stage is certain and proactive, recommending changes to enhance advertise

forcefulness. Work force have fitting abilities for critical and noticeable job in the association. The division has its very own set up vocation ways and openings in this stage.

In the last stage, the production network methodology is facilitated with that of the firm overall. The idea of the inventory network is extremely wide, and coordinations assumes a solid job for conveying item/administrations from advancement to conclusive use and air. The exercises and extent of gifted faculty are basically with no cutoff points. The association anticipates from inventory network to create imaginative bundles of administrations for clients. Time and esteem are enter measures in this stage. The administration approach is to envision and distinguish all needs and open doors it identifies through its broad lines of correspondence. Chiefs are stressing on figuring out how to expand individual, group and authoritative preferred standpoint. Group idea is imperative, since a coordinations foundation and abilities are viewed as fundamental components in the group procedure. The vocation way is boundless, and staff are important to all capacities in the association.

2.2. Inventory network Management as a Management Philosophy

As a logic, store network the executives adopt a deliberate strategy to review the inventory network as a solitary substance, as opposed to as an arrangement of divided parts, each playing out its very own capacity [4]. At the end of the day, the logic of inventory network the executives broadens the setting of organizations into a various exertion to deal with the aggregate stream of products from the provider to a definitive client [6]. Accordingly, the production network the executives is an arrangement of the various inventory network individuals [9].

As an administration logic, store network the executives looks for synchronization and union of intra-firm and between firm operational and vital capacities into a brought together, convincing commercial center power [12]. Inventory network the executives as an integrative reasoning, guides production network individuals to concentrate on creating imaginative answers for make one of a kind and individualized wellsprings of client esteem.

Accordingly, inventory network the executives rationality recommends that the limits of store network the board incorporate coordination as well as every single other capacity inside a firm and a production network to make client esteem and fulfillment [15] In this unique circumstance, store network the board logic drives tie individuals to the client introduction.

As per the [4] inventory network the board as an administration rationality has the accompanying qualities. The first is a framework way to deal with review the store network in general, and to dealing with the aggregate stream of merchandise stock from the provider to a definitive client. The second is a vital introduction toward agreeable endeavors to synchronize and inclusion intra-firm and between firm operational and vital abilities into a bound together entirety. The last one is a client center to make remarkable and individualized wellsprings of client esteem, prompting consumer loyalty [12].

In embracing a store network the board rationality, associations need to build up the executives rehearses that allow them to act or carry on reliably with the theory. All things considered, numerous creators have concentrated on the exercises that establish inventory network the executives. As proposed by [10] firms need to grow their coordinated conduct to fuse clients and providers to be completely successful in the present focused condition. In this unique situation, the theory of production network the executives transforms into the usage of inventory network the board, which is the arrangement of exercises that does the reasoning. This arrangement of exercises is an organized exertion overseen by inventory network directors between the store network accomplices and makers, to progressively react to the requirements of the end client.

2.3. The executives Perspectives for Supply Chain Management

The executives points of view have intricate and dynamic structures. Thusly, four administration points of view are considered in this examination. The first is framework point of view. A framework capacities by getting contributions from the outside condition and than changes the sources of info and releases yields back to the earth. This is the framework point of view of associations. As

indicated by a portion of the creators, inventory network the board has concentrated on the executives forms. [9] characterizes these procedures as an organized and estimated set of exercises intended to create explicit yield for specific client or market. [6] characterizes production network forms as the real physical business capacities, establishments, and tasks that describe the manner in which a specific store network moves merchandise and enterprises to advertise through the supply pipeline. These are the reason for framework point of view. As it were, the production network the board is acknowledged as a procedure which is an explicit requesting of work exercises crosswise over time and place, with a starting, an end, plainly recognized data sources and yields, and a structure for activity.

Another view in the store network process is lean methodology. It is a predominant worldview in production network the executives [13] This worldview has eight characterizing attributes [13]. They are; making progress toward flawlessness in conveying an incentive to clients; just creating what is pulled from the client in the nick of time and focus just on those activities that make esteem stream; concentrating on the disposal of waste in every operational procedure, inside and remotely that emerge from overproduction, pausing, transportation, improper preparing, surrenders and superfluous stock; perceiving that all members in the inventory network are partners and we should include an incentive for everybody in the earth; growing close, collective, proportional and trusting (win-win), as opposed to a safe distance and ill-disposed (win-lose) associations with providers; working with providers to make a fit and request driven coordinations; decreasing the quantity of providers and work all the more seriously with those given a favored long haul relationship; making a system of providers to construct a typical comprehension and finding out about waste decrease and operational productivity in the conveyance of existing items/administrations. In delineating these attributes, [4] underscored the significance of lean methodology in the inventory network considering.

The third view is possibility point of view, which underlines the connection between system, structure and execution [6], [11] underscored that "the possibility hypothesis keeps up that authoritative

survival and execution rely upon the degree of fit or arrangement between hierarchical structures and factors, for example, condition, innovation, and procedure". Likewise, [2] expressed that "great execution is dependent upon harmoniousness between auxiliary properties, technique, innovation and the outer condition".

The last view is far reaching view. As indicated by [8] inventory network the board is unmistakably something other than request satisfaction as it has been seen in the framework approach. It includes every one of the procedures from item age through end-of life reusing and transfer. The customary, straight, utilitarian perspective of the store network indicates materials, data, and funds streaming toward the client with the attention on request satisfaction between every player in the inventory network.

2.4. Related Theories

In this day and age, store network the board turn into a key factor for association viability. The time of both globalization of business sectors and redistributing has started and numerous organizations select store network and coordinations

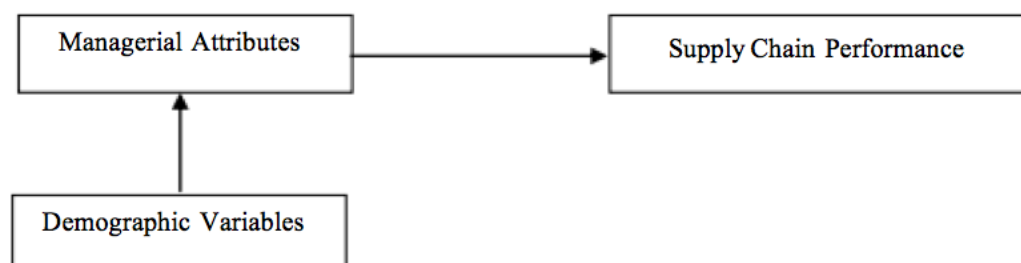


Figure-1

The model for managerial attributes and supply chain performance

to deal with their activities. A large portion of the organizations understood that so as to develop a proficient and compelling store network, production network the board should be evaluated for its execution. In this way, it tends to be said that the execution measures in a production network condition are fundamental contributions for the hierarchical achievement and they affect execution results [13]. Likewise, as talked about above administrative properties are another key factor in the production network the executives. For instance, [8] displayed some explicit traits of production

network the board and examined how they advanced all through the comparing five phases. The things depended on the information got from individual meetings joined with an organized study led at 199 organizations worldwide somewhere in the range of 1992 and 1998. Contingent upon the above given writing and these longitudinal research discoveries, the model is set up as in Figure-1 and it is estimated as pursue.

H1: Managerial qualities positively affect store network execution.

H2: There is a positive connection between key development phases of the store network directors and the production network execution

H3: There is a positive connection between key development of the phases of the production network directors and the age of the store network chiefs.

H4: There is a positive connection between key advancement of the stages and the instruction dimension of the store network supervisors.

H5: There is a positive connection between vital advancement of the stages and the area experience of the store network administrators.

3. Research Methodology

3.1. Research Goal

In this overview, we intended to research the effect of administrative traits on store network execution, as indicated by the key development of inventory network the executive's idea.

3.2. Test and Data Collection

In this examination, the impacts of administrative properties on inventory network execution inside the key advancement stages are tried with study

inspecting. The ideas of the vital advancement of the directors are recently portrayed in five phases. The store network characteristics change as they advance over the phases from miniaturized scale and specialized undertakings of employments in front of an audience 1 to organize 5. Also, key benefit demonstrate is connected to gauge the job of chiefs' properties on the store network execution. The information gathering instrument was an organized poll which was gotten from the writing. The structures incorporate vital advancement dimension of the administrative traits and execution measurements. The poll structures' develop validities were affirmed by academicians who are considering in business the board discipline. At that point pre-test is connected to 30 supervisors. After the pre-test, the instrument has been refined by coordinations administrators from a flying firm.

The information gathered from the store network administrators of expansive assembling firms (employee>50), having a place with Kayseri industry in Turkey. 500 workers were arbitrarily chosen to take an interest in this investigation, and

compare to elevated amounts of the develop of intrigue.

3.3.1 Administrative Attributes Questionnaire

The administrative trait scale is received from [3] research to quantify the administrators' vital development stages. Respondents are requested to rate how much everything clarifies the inventory network/coordinations idea from their very own viewpoint on 5 point Likert Scale (1=not by any stretch of the imagination; 5=definitely). A model thing from essential budgetary arranging is "I need to do my best practical task". The Cronbach's alpha for this scale was 0.87.

3.3.2 Execution Metrics

Vital Profit Model which was created by Bowersax et al. (2002) is utilized to gauge the production network the board execution. The scale is all in proportion scale.

3.4. Investigations and Results

Table 1: Mean, Standard Deviations, and Correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Basic Financial Planning	1.94	.79	-									
2. Forecast Based Planning	2.69	.52	.412**	-								
3. Externally Oriented Planning	3.14	1.05	.397**	.307**	-							
4. Strategic Management	4.08	.71	.313**	.271**	.291**	-						
5. Knowledge Based Business	3.15	.98	.195*	.141*	.213**	.372**	-					
6. Supply Chain Performance	3.47	1.12	.136*	.181*	.206*	.313**	.289**	-				
7. Gender	.28	.07	.009	.032	.045	.112*	.086	.036	-			
8. Age	39.17	9.62	.023	.041	.102*	.129*	.141*	.134*	.021	-		
9. Experience	9.71	3.28	.092	.109*	.117*	.151*	.181*	.120*	.014	.019	-	
10. Education	.71	.18	.081	.132*	.174*	.191*	.169*	.157*	.027	.039	.024	-

Gender: 0=female; 1=male; Education: 0=High School/B.Sc; 1=M.Sc./MBA/Ph.D. *p<0.05, **p<0.01.

an aggregate of 371 responded. For our motivations, members were required to work fulltime supervisors in coordinations. The example comprised of 267 (72%) male and 104 (28%) female members with a normal period of 39.17 years. Members found the middle value of 9.7 years spent in their present place of employment and generally in four year certification (71.04%).

3.3. Measures

Things are arrived at the midpoint of inside the scales to make composite measures for every factor. Things were coded to such an extent that high scores

The connections among and distinct insights for the factors in this examination can be found in Table 1. As can be seen from the above table, key development phases of the production network administrators are emphatically identified with the store network execution. Hence, Hypothesis 2 is upheld. What's more, values for remotely arranged arranging, vital administration and learning based business are noteworthy for age, involvement and instruction dimension of the supervisors (p<0.05). The qualities for figure arranging are huge for experience and training level (p<0.05). In like manner, the outcomes decently bolster Hypotheses

3; 4 and 5. Likewise, it is discovered that there is a huge connection between's vital administration and sexual orientation.

From the examination, free factor (administrative qualities) was relapsed on the needy variable (store network execution). Since industrialized economies have moved from normal assets to scholarly resources, information the executives has turned into a key issue. In the present market, numerous associations began to comprehend the significance of fruitful execution of production network the executives and started to set up important strides for development. Likewise, the vital administration idea has acquire and more in supply chains. In the writing, the looks into stressed a solid connection between store network the board rehearses and hierarchical execution. In like manner, the supervisors and administrative ascribes must be considered in the inventory network forms. In this way, we pointed in this examination to research the effect of administrative characteristics on store network execution. As indicated by the vital development of production network the executives idea, as the experiential learning from worldwide inquires about aggregates, as the dimension of key advancement of firm expands, it at long last impacts the organizations achievement and its feasible vital need in their market. It very well may be said that supply chains have some administrative stages as indicated by the diverse basic administrative properties. This is because of the specific kinds of intensity properties that chiefs have and the manners in which where they possess and control other store network individuals. This makes the advancement of the phases in the inventory network.

Subsequently, it is discovered parallel to the writing [3] that administrative characteristics affect store network execution. Likewise, the outcomes showed that age, involvement and training dimension of the administrators are reasonably identified with the key advancement of the chiefs. The discoveries bolster for the hypothesis and dependent on the discoveries we can infer that our example disseminated from the stage 3 "remotely arranged arranging" stage to the most proactive one of the stage 5 "information based business". Organizations generally showed up in fourth stage. This stage is "vital administration" stage and half of the example is sorted inside this phase as indicated by the aggregate frequencies. Likewise, 15% of the organizations are in the

remotely situated arranging stage and 35% of them are in the information based business organize. By and by, it was not startling that, there was no organization which has been showed up in either arrange 1 designating "essential money related arranging" or stage 2 specifying "estimate based arranging".

This examination adds to the field by giving a portrayal and investigations of the impact of administrative properties, and discoveries work with and expand past hypothetical and observational research endeavors. Moreover, this examination has a few prominent qualities. Initial, an extensive number of full-time workers from inventory network the executives dimensions of the associations are engaged with the overview. Second, the overview is made by vis-à-vis to decrease survey botches. Third, this examination progresses the store network the board writing in a vital view by which administrative properties impacts inventory network execution. Additionally, this investigation has a few restrictions. To start with, the example was not demographically different and information are assembled from Kayseri in Turkey. Second, the accumulation of the autonomous and ward factors in this investigation were assembled in the meantime. The discoveries of this investigation proposed that connections do exist between administrative traits and inventory network execution, yet further research is expected to all the more intently look at the complexities of these connections. Future research can expand this present examination's outcomes by estimating different factors in the production network execution. Likewise, the discoveries of this exploration give helpful experiences to store network supervisors. Administrators need to focus in comprehension of how to oversee supply chains deliberately and so as to have a reasonable vital need in the market, it is likewise basic that experts legitimately comprehend the auxiliary traits that exist in their supply chains. Therefore, store network the executives execution might be seen as a subset of the bigger thought of authoritative execution. Thus, there is an incredible need to the advancement of legitimate measures in the inventory network the executives and the things that are influencing the production network execution must be investigated.

References

- [1] Albino, V., Carbonara, N., and Giannoccaro, I. (2007), "Supply chain cooperation in industrial districts: A simulation analysis", *European Journal of Operational Research*, 177, 261-280
- [2] Bowersax, D.J. and Closs, D.C. (1996), "Logistics Management: The Integrated Supply Chain Process", McGraw Hill Series: New York
- [3] Bowersax, M., Closs, J.D. and Cooper, B. (2002), "Supply Chain Logistics Management", Irwin: McGraw Hill Series
- [4] Chetty, Dr. Valliappan Raju Karuppan, and Dr. Siew Poh Phung. "Economics Behind Education: Elements of Development Outcomes through Political Involvement". *Eurasian Journal of Analytical Chemistry* 13 no. 6 (2018): emSJAC181129
- [5] Cigolini, R., Cozzi, M. and Perona, M. (2004), "A new framework for supply chain management", *International Journal of Operations and Production Management*, 24, 1, 7-41.
- [6] Cox, A. (1999), "A research agenda for supply chain and business management thinking", *Supply Chain Management: An International Journal*, 4, 4, 209-211
- [7] Davenport, T.H. (1993), "Process Innovation: Reengineering Work Through Information Technology", Harvard Business School: Boston
- [8] Donlon, J.P. (1996), Maximizing value in the supply chain. *Chief Executive* 117, 54-63.
- [9] Ellram, L.M. (1998), "The supplier selection decision in strategic partnership", *Journal of Purchasing and Materials Management*, 26, 4, 8-14
- [10] Ellram, L.M. and Carr, A. (1994), "Strategic purchasing: A history and review of the literature", *International Journal of Purchasing and Material Management*, 30, 2, 10-18
- [11] Raju, Dr. Valliappan, and Dr. Amiya Bhaumik. "Understanding the Role of Indian Banks – In Perspective to Staff Engagement & Leadership". *Eurasian Journal of Analytical Chemistry* 13 no. 6 (2018): emEJAC181159 Raju, Dr. Valliappan. "Theory of Lim Law: Leadership Style". *Eurasian Journal of Analytical Chemistry* 13 no. 6 (2018): emEJAC181127
- [12] Tan K.C, Lyman S.B, Wisner J.D. (2002), "Supply chain management: A strategic perspective", *International Journal of Operations and Production Management*, 22, 6, 614-631.
- [13] Villa, A. (2001), "Introducing some supply chain management problems", *International Journal of Production Economics*, 73, 1, 1-4
- [14] Vokurkar, J.R., Zank, G.M., and Lund, C.M. (2002), "Improving competitiveness through supply chain management: A cumulative improving approach", *CR*, 12, 1, 14-25
- [15] Zhu, Q., Sarkis, J. and Lai, K.H. (2013), "Institutional-based antecedents and performance outcomes of internal and external green supply chain management practices", *Journal of Purchasing and Supply Management*, 19, 2, 106-117