

A Research to Innovation and Implementation in Supply Chain Management

MD. Zakir Al Mamun, Professor Lv Yongwei

College of Economics and Management, Taiyuan university of technology. Taiyuan

Abstract— *The interest to find an inexorably beneficial and convincing technique for supervising structures, while keeping up the trustworthiness of research and gathering works out. It has driven pharmaceutical firms, and various performers of the restored pharmaceutical item and store network arrange, This paper attempt to recognize what occurs along the inventory network (SC) when item and procedure advancement rehearses is executed. The examination analyzes the SC approach and scope of SC capacities and connections. This examination will think about the usage of procedure and item development rehearses as logical elements, whose impact on the configuration and execution will be explored too. This paper gave little consideration to the procedure advancement measurement in SC writing. This give investigations control new scientist on better administration of development execution along the store network the board.*

Keywords— *Plans of action, Value Networks, inventory network Innovation, production network usage, Pharmaceutical Industry, Contract Manufacturing Organizations.*

I. INTRODUCTION

At present, supply chains should bargain a normal quick dissemination of technological advancement. The ongoing innovative dissemination may change the condition of the inventory network and its setups.

Advancement is tended to vague. In any case further consideration is yet expected to inspect the difficulties that range the entire store network when firms actualize development rehearses. That is to research the whole inventory network configuration. The connections among the production network individuals. There are a lot of activities that advances a viable administration of provider association, satisfying client needs, development of merchandise and data sharing all through the stock system of an industry. Key SCM and coordination's rehearses are identified with the overseeing client needs, viable conveyance of products, joining, and sharing data over the store network. The previous writing reports that most organizations do not change the configuration of their stock chains when they begin to actualize advancement rehearse. A superior connection of the effect of development usage, from a comprehensive point of view is required. Therefore it will be conceivable to moderate any dangers that may spread alongside the store network. Additionally such a

comprehensive point of view will provide an increasingly sensible investigation of the unmistakable effect of advancement execution. That may prompt better administration of development along the various periods of the inventory network.

The procedure of advancement is developing as an intriguing exploration way because of the expanded disseminations of digitalization and a normal flood in process advancement. There are uncountable number of insightful distributions on the transaction between the different parts of advancement and the inventory network subjects. The exploration addresses that the item measurement. Up until now, the procedure advancement technique and its suggestions for the store network have been under research.

The connection between development execution and inventory network configuration can be better deciphered by grasping the thoughts of possibility hypothesis. That recommend the characteristics of an organizations inside and outer relevant conditions should be considered in its structure, in order to improve its exhibition. This exploration will considers the usage of item and procedure advancement rehearses as logical elements, who's away on the configuration and execution will be examined too. The research examines what occurs along the store network when

a firm chooses to actualize advancement through exploring the interaction between development practices' usage and inventory network configuration. (Examining the angles identified with activities, provider determination, supply and dissemination arrange plan, transportation mode, office globalization/restriction, sourcing choices, and cooperation and data sharing).

II. LITERATURE REVIEW

Definitions of innovations

Innovation is a "complex and multi-dimensional marvel" and its writing includes different research workforce and definitions to a great extent dependent. Technological involves growing new items and new types of authoritative structure, opening up new markets, making new creation capacities and finding new wellsprings of crude material. Innovation contends that innovation is the primary capacity of business enterprise regardless of whether by utilizing new assets or creating existing information assets to make what he depicts as riches at the modern or global levels. Characterizes development as the exercises and changes performed to deliver new or improved items or procedures inside a firm to improve its activities. The idea of advancement connected with touching off development and making new markets. The considering advancement is explored in various investigations the advancement typology created in further order can be performed relying upon the range or impact of development exercises. Traditional development method identified with the application setting and process advancement depend on the curiosity of the development radical versus gradual, specialized versus authoritative. Development may likewise be considered as specialty, standard, progressive or as continuing, transformative and problematic. The tale conversation uncovers that the development field of study is multifaceted and includes numerous measurements. This examination is thinking about the usage period of the development procedure. Our advantage is the effect of advancement practices' usage inside the limits of the inventory network district.

Innovation polices in developing countries

Determined settled organization advancement arrangements have clear targets and a coordinating institutional set-up have demonstrated a key element for accomplishment in creating organization.

A brought together organization or administering body can offer the joint effort and initiative required for powerful sending of development supporting strategies. Diverse key advancement strategies across various administrator and the minor formation of a "development execution". High-performing advancement offices or chambers have announced legitimately to or been led by top-level government authorities. For example, the head of office.

A solid coordination of scholarly development arrangements with execution approach targets is likewise attractive, as it can cultivate gainful imagination, for example, perceived brands and solid physical or elusive resources.

Supply chain outline

Production network the executives have a lot of approaches used to proficiently incorporate providers, makers, Stockrooms and stores. So stock is delivered and dispersed at the correct amounts to the correct areas, and at the opportune time, so as to limit framework wide expenses while fulfilling administration level prerequisites. In the store network town, configuration are overwhelmingly conceptualized as far as auxiliary components, for example, the size of organizations, where these hubs are found geologically, how crude material is conveyance and how the last item arrives at the last clients.

This definition requires some insights. Initially, the inventory network that the board considers each office affects costs and takes on a job to tailor the item to customer needs from supplier and assembler offices through warehouses and dispersal centers for resellers and stores. Without a doubt, in some surveys in the store network, it is important to represent suppliers and customers, since they influence the execution of the inventory network.

Second, the goal of the managers' inventory network is to be competent and practical across the entire framework: the absolute framework overhead, from transportation and transportation to raw material inventories, from work in progress to the completion of the goods. , must be limited. Consequently, the emphasis is not only on limiting transport costs or reducing inventories, as it could rather adopt a framework strategy for the production network of managers.

Finally, since the executive production network revolves around a precise reconciliation of suppliers, producers, distribution centers and stores. It incorporates the exercises of the association on numerous levels, from the key level to the strategic level to the level operational.

The core plan for a network of stores accurately and effectively addresses item administration fund and data

progressions from source to end customer, with the ultimate goal of making value understood and increasing consumer loyalty. Then the design is emphasized with the incorporation of the tasks and the system of a solitary company with those of the other individuals in the inventory network.

Contextualization of supply chain management

Possibility hypothesis recommends that for firms to accomplish more prominent execution, they should build up a fit between their structures and their interior and outside conditions. To stretch out this idea to the production network level an exhaustive examination of the conceivable logical components that speak to inner and outside store network conditions is required. Production network possibility contemplates explore the job of logical variables and their effect on execution. Apply an unexpected asset based view in concentrating how associations create inventory network versatility and vigor, thinking about geological scattering, deals multifaceted nature, separation and conveyance unpredictability as the primary relevant components. The significant job of logical factors in production network coordination contemplates, considering store network multifaceted nature a relevant factor. Possibility hypothesis causes to notice the fit between inventory network structures and their surroundings.

III. METHODOLOGY

Research Scope and Limitations

Considering the above hypothetical contention, this investigation will concentrate on the connection between innovation practices' execution and production network configuration. In particular, the thought is that the development stages are arranged inside the nonexclusive store network periods of plan, source, make, convey and return.

For this exploration, item and procedure advancement rehearses execution is considered as far as logical elements, inspected in more noteworthy detail in the following segment.

Supply chain configuration (structure):

1. Localization/globalization
2. Provider choice and supply arrange plan
3. Actions the board instruments and creation rehearses
4. Carrying mode and conveyance arrange structure

5. Supply chain policy (strategy):
6. Group technique
7. Assessment-production
8. Innovation exercises' implementation (environment):
9. Connected to items: declaring new items (for example new item improvement), item extend reestablishment, item transforming and item overhaul
10. Related to advancement: ceaseless improvement follows, process re-building, improvement ventures for existing procedures, and expanding creation line skills. These laid out components coordinated the exploration group in recognizing the case choice criteria and the information assortment process, just as in characterizing the examination confinements and tending to the concentration in the information investigation stage.

Research design

A contextual analysis philosophy is viewed as reasonable for this examination. A contextual investigation system helps to find and portray genuine marvels, as it is a perfect procedure for replying 'how' and 'why' questions and considering the related factor.

This exploration follows a contextual analysis approach as the most suitable research system to give a top to bottom explanation of the connection between development practices' usage and inventory network configuration settings and choices a theme not thoroughly examined so far, utilizing case-based research presents a possibility to broaden the writing and participate in principle age. In addition, the contextual analysis philosophy permits the exploration group access to the real chiefs behind the current inventory network configuration up to a more profound comprehension of the inspirations hidden a significant number of the configuration settings, which test a quantitative methodology been actualized. This exploration may be found on a simultaneously preformed contextual analysis in china and Bangladesh.

Case selection

Given the system reliance of supply chains, we need to consider firms with various inventory network configuration settings, with worldwide stock, creation and conveyance systems. In light of these criteria, and considering geological

closeness to the exploration group, the scientist distinguishes two corporate gatherings including ten auxiliaries with central command in China and Bangladesh, having diverse administration styles and business standards.

Data collection and analysis

Information was gathered through immediate, online meetings (unstructured and semi-organized) with key store network administrators from the two corporate gatherings. Each meeting was directed totally in English. The scientist characterized dependent on their profound contribution in the store network area for all items in corporate gatherings and their broad expert involvement with production network the executives. This exploration focused on the whole production network along these lines, the essential paradigm for recognizing respondents concentrated on distinguishing key sources who was administer the full scope of capacities and connections in the inventory network. Consequently, each key source partakes in the arranging and execution of development rehearses at the gathering level and all data about the store network of the diverse item connections ought to be imparted to this key witness. Considering the two key witnesses was perceived in bunches A and B. In corporate gathering B, the exploration group was lead an underlying meeting to clarify the reasons for the examination with the gathering's Director General for R&D, whose reason for existing was set up key innovative work activities for the gathering. In view of this gathering, the key witness was recognized as the VP of the inventory network the executives gathering. The key witness for bunch A was distinguished after email correspondences with their supervisory crew as answerable for the gathering's store network arranging and CRM. To affirm a total dataset, the analyst was ask open-finished inquiries about advancement, usage, item and procedure qualities, execution markers, and store network arrangement modifications (for instance, Number of organizations in the production network, size and physical area, and provider and structure of the seller arrange). A pre-characterized starter poll was sent to respondents preceding

the main meeting, enhanced by more inquiries explored during consequent meeting cycles. Altogether, the meetings was roughly 11 hours of each meeting was recorded 45-75 minutes.

The agent was making four field visits to the Group A and B offices during which field perceptions was archived in the examination notes. Email and phone correspondence was utilized for some explanation, mostly at a later stage to approve the examination. All contextual analysis practice was accessible upon demand. The essential information was joined by rich optional information from inside organization archives. It was useful to confirm the information recovered from the meetings.

IV. FINDINGS AND CASE DESCRIPTION

Companies under Study

The researcher have broken down the instance of four Bangladeshi firms, situated in the pharmaceutical area around Dhaka and dynamic at various phases of the pharmaceutical inventory network. The researcher directed semi-organized meetings for the most part identified with the idea of their total their future purposes and how this collection would have the option to deliberately revive their plans of action and their zone while confronting the undeniably worldwide rivalry. The researcher went through top to bottom in attempting to prompt how they accept their new serious model, their system, could step from an operational level to grasp progressively key objectives, while pooling assets and sharing basic tasks. To triangulate our outcomes, we at that point gathered quantitative information got from auxiliary hotspots for these four organizations then focused on a top to bottom investigation of the bits of knowledge that came out from our meetings and along these lines from our subjective strategy. Moreover, we supplemented the discoveries created from the meetings with the four firms by leading three master interviews.

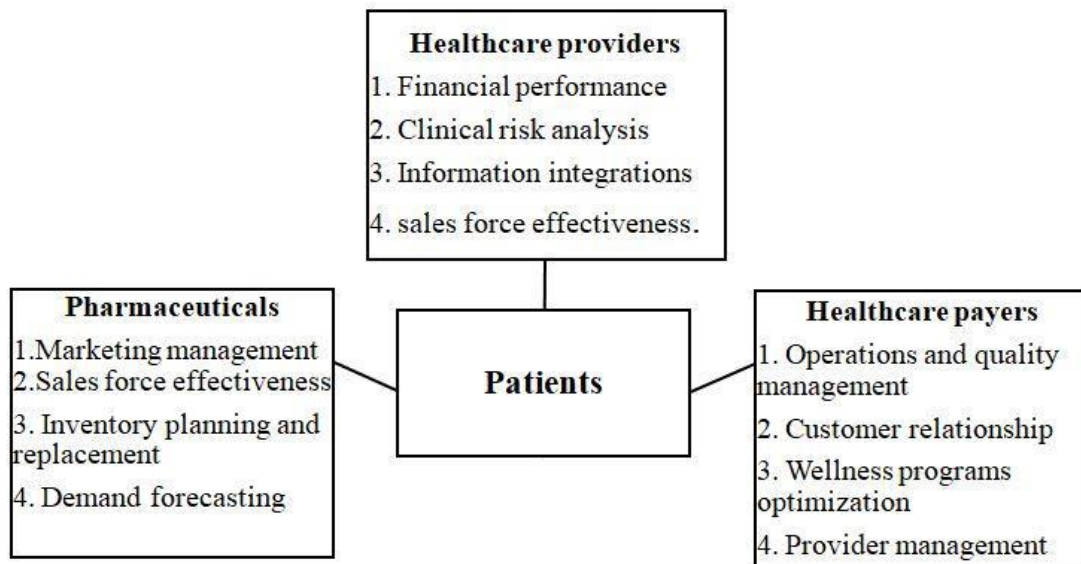


Fig.1: Basic Model of Pharmaceutical SCM

When the information was gathered, we coded the meetings and sorted ideas that allude to a similar wonder at that point. In a requesting approach of our coding procedure, the researcher utilized the system assembling an information plan that involved first request ideas on one hand. Which are "at the degree of the source terms and codes" and on the other second request ideas that are "at an increasingly conceptual level". At last, building up a grounded hypothesis model. The researcher at that point progressed by taking an example of different organizations (that are not yet part of the system) inside the pharmaceutical area, which are all delegate of various phases of the inventory network. To give a total review of the business, we encased all the related exercises, from the creation of crude materials for the synthetic and pharmaceutical industry to the medication disclosure and research administrations from the dissemination and deal to firms that give counseling administrations identified with mechanical development. The researcher included both SME and enormous firms in the example so as to give a heterogeneity of points of view identified with the issues examined. Therefore, the researcher had the option to feature both the differentials in their plans of action towards their way to deal with emergencies and their readiness to take a functioning part in a system as a response to the emergency that they encountered as a major aspect of the area. For these organizations, the researcher directed semi-institutionalized meetings organized with open-finished inquiries in regards to their plans of action, the future mechanical directions of the particular phase of the

production network, and their points of view about the inclusion inside a system that could rejuvenate their region and that could give a motivation to the business all in all. Concerning different meetings, the researcher coded them by utilizing the system again and afterward we pooled these experiences with the ones increased through the meetings with the four firms inside the system to reveal more brilliant insight into our grounded hypothesis. Discoveries of the meetings permitted the researcher to follow what follows: the four Bangladeshi firms situated in the pharmaceutical locale around have chosen to build up a system dependent on the "Business arrange contracts" perceived banding together on explicit key objectives and shared exercises with full legitimate impact. The objective of this particular sort of agreement was to increment inventive limit and seriousness available for the organizations that choose to accomplice. It turned into a key component to help the development of key systems, giving a premise to the formalization of relations, rights, obligations and administration of the system. The presence of an agreement likewise distinguished the system as a group yet characterized subject, with impacts on the dealing force and notoriety of the accomplices, taking into account the recuperation of seriousness.

The four organizations considered incorporate a Square Pharmaceuticals Ltd, Beximco Pharmaceuticals Ltd, Globe Pharma and Beacon Pharma. Conceived because of going into a system contract between these organizations so as to cultivate the seriousness of firms in the business and to

encourage the monetary and innovative improvement, the system 'Beximco Pharmaceuticals Ltd' plans to sufficiently react to the advancement that the market was encountered. That was need to share assets, substantial and immaterial, to assemble the information and legacy of the key resources for establish an association ready to meet the developing needs of the interest, the immersion of the inventory, just as the breaks that the emergency has opened up, by noting the difficulties that the market presents with one voice. The system, through the foundation of profoundly synergistic activities planned for expanding the seriousness of the taking an interest firms, which likewise produces a positive effect on different organizations in the region, targets making the whole region of the division of Dhaka, previous lead of greatness in the field, the Prime Contract Manufacturing Excellence focus in Bangladesh.

As indicated by Square Pharmaceuticals Ltd, changed the territory in the Prime Contract manufacturing excellence focus in Bangladesh was permit firms to make extra an incentive for the district of Dhaka, moving the concentration from the customary client provider relationship to an open arrangement of associations, a bunch that may adapt adequately to the difficulties that the market postures to the business. Teaming up with the plan to create items and administrations other than those as of now in power, so as to offer greatness in quality principles, was an objective of indispensable significance for organizations who need to guarantee an elevated level of intensity.

Notwithstanding a national scene that needs strong interests in particular information, the system Beximco Pharmaceuticals Ltd, through the joint effort understanding, was became the proprietor of a mutual skill. All things considered, it was a primary player in inventive procedures and in the production of extra upper hand. Inside the business, Beximco Pharmaceuticals Ltd. recognized today as a group however characterized substance, was a crucial player in an economy where information was a key driver of development.

The system model permits firms to grasp open markets other than the national market, depending on accomplices that was not part of the Bangladeshi setting, yet was a piece of the more extensive worldwide setting; the system Beximco Pharmaceuticals Ltd permits its organizations to confront the global market in the pharmaceutical business, holding onto openings and defeating difficulties together. Its goals are: (a) sharing of obtainment procedures and formation of a stage to purchase certain item classes (b) upgrade, sharing,

transformation of the current establishment legacy (c) streamlining of coordination (d) decreasing natural effect and waste administration (e) streamlining of vitality (f) advancement of skill and ability of the accomplices and the production (g) dispatch of modern research ventures (h) improvement of undertakings that target characterizing process developments (I) bolster change on account of apparatuses of progress the executives.

As perceptible the system Pharma Beximco, in its lifecycle, is relied upon to experience three phases of advancement (specifically guarded, far reaching and hostile). Until this point in time, the system is arranged to be in a protective stage. it is in reality primarily centered around making stages that empower the sharing of coordination, buying and waste administration, so as to support the productivity of procedures and the advancement not just of the pharmaceutical firms that are now part of the system, however of the considerable number of ones situated in the Center of Bangladesh. Right now, the system to incorporate different on-screen characters, whose coordinates effort is streamline forms once concede access to a pool of shared assets that address the issues of guaranteeing an appropriate finishing of all exercises anticipated by the chain, would permit firms to climb the lifecycle of the system and go to its next stage. Such firms are subsequently ready to make this change with critical assets, which empower them to understand their desires and formative objectives. That is the reason it is critical to consider fortifying the guarded situation by opening up to join different accomplices, for example, those associated with the waste removal business to free assets and force security to manage the subsequent stage, that of development. In the broad stage different understandings become possibly the most important factor, this season of advancement: which is when CRO accomplices and ventures that are occupied with biotech would permit firms inside the system react to the more extensive and increasingly articulate information that the market requires so as to permit, using new innovations and the full sending of abilities from various pieces of the system, the improvement of progressively viable treatments. These treatments are expected to totally address the issues of patients, and to give that lift to the development framework that, right now specific, should be continually upgraded. By then, the hostile stage gets feasible for the system. This is the phase where organizations come out of the corporate limits to move to developing markets and to draw in the consideration of outside speculators, destroying rivalry and

proceeding to seek after the exclusive requirements of greatness that have so far permitted the system to make and support upper hand. Right now, assembling will subsequently speak to an incredible open door particularly in

developing markets, with Asian nations to comprise the primary concentration for huge pharmaceutical organizations who wish to concentrate their creation on redistributing.

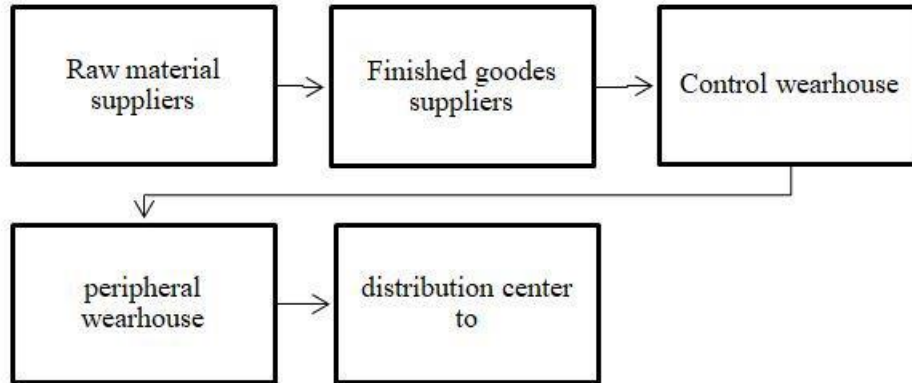


Fig.2: Group a products supply chain footprint

Supply chain configuration

Regardless of the unique attributes of their procedures and items, here and there the two gatherings show comparable store network design settings. The setup settings of the considered stock chains in the two gatherings. The two gatherings have providers, creation units, deals branches and distribution centers for the most part amassed in Asia, however with a solid nearness in Bangladesh and China. Their joint effort exercises contrast as the gatherings store network approaches. Present the strides of the gatherings supply chains, including supply, creation, conveyance, focal warehousing and deals. Gathering a spotlights on Pharmaceuticals material stockpile and new item advancement and execution. Its deals follow B2C procedures, which are overseen by inspecting provider execution at regular intervals and haggling until understandings are reached. Gathering B centers around limited inventory from Asia and different conveyance places; its business methodology is for the most part B2C.

Significance of research

How advancement execution will impact their procedures and introduction. Procedure and item advancement practices' execution will be a significant effect on tasks because of a convergence of persistent improvement ventures and new item advancement exercises in the creation zone. A comparative effect may be found on inventory network system and dynamic. In addition, it will empowers and improves joint effort and data sharing between store network individuals. There are no critical proof that advancement

usage influences office limitation or globalization choices, which will essentially base on quality confirmation and cost-effectiveness contemplations. The fruitful system and item advancement practice execution organizations initially will be upgrade inside coordination and their cross-utilitarian business group models. At the production network level coordinate effort and data sharing will be key components for the effective execution of advancement. Organizations will be show a consciousness of the requirement for better joint effort, yet no strong plans will be create to upgrade inventory network coordinated effort. The papers will discover accord with the previous contention that provider choice inner coordination, joint effort and data sharing practices ought to be adjusted so as to accomplish better and more noteworthy intensity.

Inventory network individuals need to anticipate the additional estimation of such coordinated effort and how it will improve their presentation before they start working together in development ventures. Subsequently, to amplify the unmistakable effect of advancement execution the business motivating forces of all the production network individuals ought to be adjusted and the store network ought to be in a condition of fit. On the off chance that the production network will in misalignment (rebel) of executing development will be concentrated intra-authoritatively. It may over the long haul misuse the commitments of upstream and downstream individuals. Better financial execution and more noteworthy responsiveness along the store network will accordingly be difficult to keep up.

Dyadic connections comprise a key region for additional improvement, as they challenge inventory network reconfiguration before actualizing advancement rehearses. Vital understandings assume a significant job in overseeing crude material providers, extraordinarily fortifying the dyadic connections. Another significant factor impacting dyadic relationship is provider criticality, which originates from the center innovative ability of certain providers.

On the hypothetical headway, this examination will profit by researching the size of the relevant components not just their inclination. For instance, item advancements are as often as possible presented bringing about the test of overseeing high uncertainty of item request. The impact of item advancement execution proliferates along the store network to make difficulties in stock administration because of incessant item futility. The impact of relevant elements is thusly critical in light of their inclination. Because of their recurrence of occurrence and the extent and scope of their consequences for supply chains on the loose.

The point of this exploration practice development and execute on SCM works concentrating on the assembling segment in Bangladesh and looking at china. The outcomes suggests that inward activities deferment key advancement practice just as connection has critical and positive with firm and specialist. Advancement and store network the board relationship data quality and data sharing were found to have a huge relationship with firms.

V. CONCLUSION

The Significance of this research comes from the shortage of inter penalizing exploration. In spite of the theoretical and practical need for pertinent inter penalizing investigations, supply chain and innovation management the two significant streams of research with little correspondence. Ongoing research offer advantageous bits of knowledge into the arrangement between role of innovation and production network design. Nevertheless, to combine the dimension of both product and process innovation. Most of the perceptual scholarly publications availability while ignoring the level of process innovation centered on its impact on several activities of new product development and supply chain. The research will be contributes in examining the inventory network from an all-encompassing point of view rather than the functional approach currently pursued.

The examinations help researchers and new researchers better understanding the real impact of investment

implementation across the chain. The innovation will be presuming that fruitful execution of advancement rehearses that guarantees streamline esteem creation alongside the whole production network. An adjustment mentality and plan of reasonable development technique that will be convey here to all the production network individuals. The innovation practice to be a long-haul process and transformative development, occur after various preliminaries and having a cross-practical and between authoritative natures. The examination result will be advantage bits of knowledge to production network and advancement professionals for their dynamic while actualizing development. It suggest them to use on coordinated effort to beat the potential inadequacies of store network rebel. This will help improve the advancement the executives and will help accomplish and continue an improved inventory network execution. The authors acknowledge the potential limitations of this study. Why they are not easy to disassemble, mainly because of their inner similarity. Research focus their efforts at the data analysis stage by conducting multiple coding rounds to ensure good quality of their research. Considering the case base research are not allow statistical generalizations, the corporate groups and the tested product families will not be considers as representatives of their country or industrial sector. The cases present the chances to build up a learning stage to propel our knowledge on the events studies. The researcher have endeavor/ensure to guarantee contextual investigation legitimacy and information examination unwavering quality, as exhibit prior in the methodology section. Although a case base trail is not limited to specific methods, the authors argue that current data and findings are a satisfactory quality for scientific research. In the future, the research would be benefit by thoroughly integrating the configuration settings as for extra relevant components relating to authoritative structures or to industry segment accuracies. The research of this exploration will be utilizing as a system for execution development in the broke down commercial gatherings. Thus, collaborating agreements and partnership between members of the supply chain emerge as an interesting topic for future research.

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