

# Manufacturer's Help to Supplier for the Elimination of Losses- A study of relationship between Manufacturer and Supplier

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**Abstract**— Globally there are many industries which are working on the supplier's development programs to enhance the relationship between manufacturers and supplier. With the strong relationships they are winning the market shares because of good collaborations not only this but their businesses are also flourishing speedily. Industries of Pakistan are growing with faster pace now a days than before. But to keep them growing with more pace, there is also a need to work on the supplier's development pro-grams. On the contrary of it, we analyses the relationship of Pakistan's manufacturers with their suppliers. For which we conducted a research, in which a survey was conducted by covering most of the major industries in Karachi (an industrial hub of Pakistan) and tried to figure out manufacturer and supplier relationship.

**Index Terms**— Supplier, Manufacturer, Relationship, Development, Industry, Frequency distribution, Loss elimination

## 1 INTRODUCTION

In today's modest professional, ordering companies trust progressively taking place upon their suppliers to deliver technically innovative, quality compliance goods in a suitable and profitable way. In case the supplier fails approximately in these zones, ordering companies look the verdict of, if there is a need to look for another basis of supply or for continuing with the same supplier and to settle those inadequacies. This is the reason that doubt of finding a healthier basis, and the higher cost of finding and assessing innovative suppliers, buyer companies can be involved in supplier growth. Manufacturers more or less devote approx. 50 percent from their incomes for acquiring participations. Through manufacturers who are having potential for rising capacity of subcontracted effort among companies, this proportion have chance to increase. Therefore, suppliers having a superior impression over superiority, price, expertise, and distribution on ordering manufacturer's private goods, amenities and consequently over productivity. Conventionally, greatest suppliers achieved industrial procedures through some consumer contribution if the goods meet the buyer stipulations. Consumers deliver practical support when suppliers have most important complications with superiority or distribution issues. At the present time, greatest of the affluence 500 manufacturers work meticulously through suppliers to teach superior values, for not only bringing items to homeland and not only for price rewards but similarly for exporting apparatuses for developing business internationally. Manufacturers complete this by diverse supplier growth, ingenuities together by generating partnership with global supplier incorporating home-grown suppliers, providing monetary help, moving expertise and acquaintance, or receiving into combined projects that is helping in drop down quantity of conventional suppliers, it also started for having further professional association in spite of confrontational association with suppliers. They agreed upon continuing agreements, for making their growth a striking proposal for both forms of companies. Supplier growth needs mutually the consumer along with supplying firms to promise

monetary wealth, employees funds for working and for sharing subtle statistics; for making real resources of gauging routine acts. Therefore, it is the tactic which is stimulating all revelries. Consumer administrators with staffs essentially persuaded for capitalizing organizational funds for a supplier should be counted as valuable risk. Supplier administrators should accept that our excellent concentration must be in line of client's demand, need or requirements. When organizations mutually decide about supplier growth that its significant achievements are not an unavoidable belief. Though it is hard, supplier growth can be a significant "foundation" in a combined logistics system. Straight result regarding consumer's outcome highpoints based on supplier's outcomes are major points for enhancing process of logistics system. Supplier's work will not be better understood if consumers know procurement and supply chain management (SCM) as bases of modest benefit and bring into line their supply chain management (SCM) strategy with their overall business strategy. However, it is best to view supplier development as a long-term business strategy and that is the basis for an integrated supply chain. The first step is therefore to implement successfully the supplier development programs. To improve the supplier capabilities the buying organizations, must consider various supplier growth issues for example supplier contract, agreed statements, straight participation by them, etc. The type issues will be touching supplier growth procedure and will also be affecting both parties. Though, practices adopted for their growth works examine a lot of issues self-sufficiently. In the corresponding research we are overwhelming all which has stated earlier, by examining connection among supplier growth aspects. For this we adopted a procedure of frequency distribution which is being identified as the suitable method for evaluating this research in order to get the desired results from the industries of Karachi. This helped us a lot in gathering the data and then analysing about the relationship among manufacturers and suppliers of Pakistan's local industry and we will be using this for to grow even better relationship for

industrial and economic growth.

## 2 LITERATURE REVIEW

Established collective affiliation with supplier in system of Supplier Development (SD) has increased enough acceptance between manufacturing organizations because of important paybacks in merchandise growth period, volume exploitation, merchandise superiority and manufacturing rate. Sometime, lean supply chain is an outcome of extensive supplier development program at numerous phases of a value chain. The leaner the supply chain slighter the period to reply the market modification and additional vagueness. The cumulative vagueness because of market changing aspects generates the new scene of conspicuousness matters where the presence of good conspicuousness brings a continuous process in supply chain performance, nevertheless its absence generate destruction in whole value chain. In existence of supplier development where the supply chain is leaner, the conspicuousness is an important leading matter which can produce all the drawbacks of supplier development, if not dispensed appropriately.

Companies make usage of market services to grow viable pressure by means of numerous bases (Dyer and Ouchi, 1993; Tezuka, 1997). Through usage by numerous suppliers for delivering a thing, a company can allot the capacity of enterprise in a way of contracting top executional suppliers having high capacity of business. other suppliers attract with this to recover superiority, through continuing burden over prime supplier for not letting presentation declined. Suppliers representing better-quality act might please from bigger organization with the passage of period (Tezuka, 1997).2.

The insights of the Company along with the suppliers concerning present with probable presentation move that possible presentation belongs to logistics system (Harland, 1996). Repetitive appraisal of supplier by commenting guarantees about them, those are conscious for presentation of their own along with buyer firm's expectancy for presentation. They practice official supplier appraisal structures and supplier qualification plans for transferring hopes, additionally inspire them for expanding presentation (Carr and Pearson, 1999; Krause et al.,2000).

The significance of the circumstance for discussing critical basics in OKTA concept. Developing assessment on built in information for organization (Kogut and Zander, 1992; Nonaka, 1994; Udo and Kogut, 1995; Grant, 1996a, b, 1997; Spender, 1996) proposes about main part from organization through generating, holding and spreading over information, if organizations are foundation of information incorporation. Information's are eminent part from some kinds: (a) obvious data, that is able to be simply arranged in a systematic manner, for example realities or implied information, which is hard to codify, for example operation information The emphasis of Knowledge Based Views are over implied information, subsequently from experience based services and hands-on information by legislative affiliates, implicit information's are meticulously related by operational responsibilities, then increases further stimulating or multifaceted matters about its allocation both inside and among companies" (Grant, 1996a, p. 377).

Allocation through implicit information and experience-based work makes this enormously not only hard but more intense since they exist inside entities, this might be detected from practical information, attained over exercise (Grant, 1996a, b). Implicit information might transport from firms' procedures. "Where organization's own properties can accumulate with joined groups with a leg on each side of entities and clusters in a way of enabling distinguish happenings for achievement, those actions which establish legislative procedures along with different systems" (Teece et al.,1997, p. 516). for stepping forward, OKTA signifies firm's repetitive procedures in which an organization packages organized their staffs, hereafter information exists among the entities of supplier's staff. For gathering the entities by obtaining organization with supplier permits selective development actions to be completed, enabling the flow of non-codifiable tacit operations information to flow transversely through organizational restrictions of the involved organization. Instances of OKTA comprise, straight "on-site" help to suppliers or carrying suppliers to the organization to perceive the information as pragmatic in exercise. Let's say, the Toyota Supplier Support Centre (TSSC) delivers local help for supporting supplier for implementing the Toyota Production System (TPS) for fitting value badly-handled from combined issues unravelling (Dyer and Nobeoka, 2000); Honda from USA's engineered support dealers for recovering procedures over happenings for instance root cause analysis. Otis Elevators supports suppliers by executing procedural reviews and supporting suppliers with procedure re-engineering efforts.

The above studies are showing how firms work for the development of supplier in different parts of the world. To check the same in Pakistan industry specially of Karachi because it's the industrial hub of Pakistan and all the company norms are mainly transforms here, following hypothesis are developed:

H1: Manufacturers in Pakistan help suppliers in the elimination of their losses. (+)

Ho: Manufacturers in Pakistan are not helping suppliers in the elimination of their losses. (-)

H2: Manufacturers and suppliers are building strong relationships through exchanging ideas for the elimination of each other's loses. (+)

Ho: Manufacturers and suppliers are unable build strong relationships because of not exchanging ideas for the elimination of each other's loses. (-).

## 3 METHODOLOGY

### 3.1 Method

A frequency distribution research method is being used to for the investigation of this research. Examined the relationship between manufacturers and its suppliers for the supplier's development work in industries of Karachi. A quantitative research method is being used here to analyse the numerical data and its interpretation helps to understand phenomenon of different variables. The use of statistical analysis and hard numbers originate in quantitative research has diverse advantages in the research procedure. Quantitative research involves vigilant investigational design and the capability for

anybody to imitate mutually the test and the results. This makes the data you pleat more steadfast and a reduced amount of open argument. When you gather quantitative data, the kind of outcomes will communicate you which numerical tests are suitable to use. As a result, construing your data and giving those findings is candid and less open to error and partiality. Research that involves multifaceted statistics and data analysis is well-thought-out as valued and impressive, for the reason that several people don't realize the mathematics involved. Quantitative research is related with methodological advancements like computer modelling, stock assortment, portfolio assessment, and additional data-based business conclusions. The connotation of stature and value with quantitative research can imitate well on your minor business. This research method also helps to collect data without any biasness, because personal involvement of any person is not necessary for the collection of data. The point of view of the people can be taken from different peoples without even going towards them, which completely allows to collect data from any biasness and this is the main reason of getting correct and accurate data regarding the research, on the basis of which the correct analysis can be drawn out of this research. The collection of data for quantitative research can be done through various methods like probability sampling (random data gathering from targeted audience), interviews (standard method of research of asking from a set of questionnaire), surveys/ questionnaire (online method of data collection through software's), observations (taking of systematic data like counting) , and document review( data collection from available documents). In this research, the method of survey is adopted because of its feasibility and authenticity of data collection. It's the world of IT and everyone is having internet access now very easily so online data filling is convenient for all which was used to collect the data for this research. Its cost effective as well because of not spending any money on it as its available free which also gives the result in graphical representations which helps the researcher and analysing the research without much intervention and utilization of time in entering the data in computer and then run its data for data analyzation.

### 3.2 Participants and Procedures

A data was collected from the sample of 75 participants, the approached participants were the ones who are having industrial experience. No single industry was specified because this research is to get the data from all industries of Karachi to check how they work for the development of their suppliers. The online google form was sent to all who filled that according to their industrial practice. The form was divided in three parts, firstly they were asked to fill the data regarding the industry in which they work and years of experience in that industry. Secondly, they were asked about losses which they face due to supplier issues. Lastly, they were asked if they support their supplier in the elimination of his losses through their company's experienced professionals. From the sample of 75 participants, FMCG industry participants were 33, pharmaceuticals industry participants were 10, Automobile industry participants were 9, Textile industry par-

ticipants were 9, and other participants were from industries of glass, IT, piping, energy, training and development, logistics, courier services, fabrication and manufacturing of industrial products, health while 3 participants did not mention their industry.

## 4 RESULTS

After data collection, all collected data was analysed through SPSS statistically. The function of frequency distribution data analysis was acquired to understand the relationship between supplier losses and approach of manufacturers for the resolution of those losses.

For this persistence, Frequency distribution was used to get the results as its ergs to provide a frequency distribution between variables. For the reason of which, it is centred on the distribution method, it is regarded as the most suitable method to measure which variable is having higher frequency to dig out the result which is needed for this research.

Out of 75 participants, 38.7% of the participants face losses because of supplier once in a month, the time duration of loss faced because of supplier for the 68% of the participants were 1-5hrs, 60% of the participants contact supplier after every issue which they face from them, 41.3% of the suppliers often resolve their issue, 40% of the participants sometimes help supplier in elimination of losses which they are unable to resolve, 41.3% of the participants ask supplier regarding what issue he is facing, sometimes 42.7% of the participants ask their experts to assess the loss which supplier is facing, sometimes 45.3% of the participants send their experts too towards supplier for resolving his issue, 68.5% of the participants get their issues resolved after the involvement of their experts, downtime duration of 65.3% reduced after the involvement of their experts, product quality of 63.5% of the participants also increased after issues resolution.

4.1 Tables

TABLE 1.  
INDUSTRY OF WORK

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	FMCG	34	45.3	47.2	47.2
	PHARMACEUTICALS	9	12.0	12.5	59.7
	Automobile	10	13.3	13.9	73.6
	Health	1	1.3	1.4	75.0
	Textile	9	12.0	12.5	87.5
	Other	9	12.0	12.5	100.0
	Total	72	96.0	100.0	
Missing	System	3	4.0		
Total		75	100.0		

TABLE 4.  
COMPANY FACES DOWNTIME DUE TO ISSUE IN RAW/ PACK MATERIALS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	8	10.7	10.7	10.7
	Once a week	18	24.0	24.0	34.7
	Twice a week	13	17.3	17.3	52.0
	Once a month	27	36.0	36.0	88.0
	Twice a month	9	12.0	12.0	100.0
	Total	75	100.0	100.0	

TABLE 2.  
YEARS OF EXPERIENCE IN SPECIFIED INDUSTRY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5 years	38	50.7	50.7	50.7
	5-10 years	24	32.0	32.0	82.7
	10-15 years	7	9.3	9.3	92.0
	15-20 years	3	4.0	4.0	96.0
	20 or above years	3	4.0	4.0	100.0
	Total	75	100.0	100.0	

TABLE 5.  
CONNECT WITH SUPPLIERS TO INFORM THEM ABOUT THE ISSUES RELATED TO THEM

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	once a week	14	18.7	18.7	18.7
	once a month	14	18.7	18.7	37.3
	once a year	2	2.7	2.7	40.0
	after every issue faced	45	60.0	60.0	100.0
	Total	75	100.0	100.0	

TABLE 3.  
POSITION OF WORK

		Frequency	Percent	Valid Percent	Cumulative Percent
Owner		3	4.0	4.0	4.0
Higher management		12	16.0	16.0	20.0
Middle management		47	62.7	62.7	82.7
Lower management		13	17.3	17.3	100.0
Total		75	100.0	100.0	

TABLE 6.  
SUPPLIER ABILITY TO RESOLVE ALL ISSUES TIMELY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	19	25.3	25.3	25.3
	often	31	41.3	41.3	66.7
	Sometimes	21	28.0	28.0	94.7
	Rarely	2	2.7	2.7	97.3
	Never	2	2.7	2.7	100.0
	Total	75	100.0	100.0	

TABLE 7.

COMPANY'S HELP TO SUPPLIER FOR ELIMINATING HIS LOSSES

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	always	25	33.3	33.3	33.3
	Sometimes	30	40.0	40.0	73.3
	never	20	26.7	26.7	100.0
	Total	75	100.0	100.0	

TABLE 8.

ASKING SUPPLIER ABOUT SPECIFIC LOSS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Al-ways	28	37.3	37.3	37.3
	Some-times	29	38.7	38.7	76.0
	never	18	24.0	24.0	100.0
	Total	75	100.0	100.0	

TABLE 9.

ASKING EXPERTS TO ASSIST SUPPLIER IN ELIMINATION OF SPECIFIC LOSS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	26	34.7	34.7	34.7
	Sometimes	32	42.7	42.7	77.3
	Never	17	22.7	22.7	100.0
	Total	75	100.0	100.0	

TABLE 10.

SENDING EXPERTS TO SUPPLIER FOR ELIMINATING LOSS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Always	17	22.7	22.7	22.7
	Sometimes	35	46.7	46.7	69.3
	Never	23	30.7	30.7	100.0
	Total	75	100.0	100.0	

TABLE 11.

EXPERTS INVOLVEMENT, SOURCE OF RESULTS IMPROVEMENT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1	1.3	1.4	1.4
	yes	49	65.3	66.2	67.6
	No	4	5.3	5.4	73.0
	Maybe	20	26.7	27.0	100.0
	Total	74	98.7	100.0	
Missing	System	1	1.3		
Total		75	100.0		

TABLE 12.

EXPERTS INVOLVEMENT, SOURCE OF DOWNTIME REDUCTION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	48	64.0	64.0	64.0
	No	4	5.3	5.3	69.3
	Maybe	23	30.7	30.7	100.0
	Total	75	100.0	100.0	

TABLE 13.

EXPERTS INVOLVEMENT, SOURCE OF PRODUCT QUALITY IMPROVEMENT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	46	61.3	62.2	62.2
	No	4	5.3	5.4	67.6
	Maybe	24	32.0	32.4	100.0
	Total	74	98.7	100.0	
Missing	System	1	1.3		
Total		75	100.0		

As per the SPSS findings about the survey results, 60% of the people connects with supplier after every issue which they faced, 41% said their supplier able to resolve issues quite often, 40% said they sometime help supplier for resolving his issue, approx. 39% said they sometimes ask supplier about the losses which is causing that particular issue, approx. 43% said they sometimes involve their experts for resolving issue of supplier, approx.. 47% said they sometimes send their experts in the facility of supplier to resolve that re-occurrent issue, 65% agreed with the comment that yes their results improved whenever they involve their experts with supplier for the resolution of his issue, 64% agreed that Yes their downtime reduced after the involvement of experts, and 61% agreed with that too that their quality of the product also improved after resolving the repeated issue from the supplier end after the experts interference.

## 5 DISCUSSION

After the detailed analysis of the study it was identified that most of the results are towards negative side that sometimes or never. If we see the trend of the replies, it goes on the side where people are saying that either they help or send experts to help sometimes or either they do not send anyone for the help. This study also shows that manufacturers connect more right after the issue which they face from supplier side but there are some as well who meet or connect with supplier after a frequency of time may be which is aligned frequency.

In first part of the survey the information which we tried to get was regarding the industry of the respondent in which they work, years of experience in that industry, and in which position they are now. As per the results most of our respondents belong to FMCG sector, while some of them are from pharmaceuticals and automobiles as well. Majority of our respondents are having experience of work from 1-10 years, while majority is on the positions of middle management in their organization. This all shows that the responses which we get are from the ones who are having fine experience in their fields and their responses are according to what is the general practice of their respective industries

In second part we asked for the responses regarding the downtime of manufacturers which they face because of issues in their materials which they are procuring from suppliers. In which we asked for the frequency of losses, duration of losses, connect of manufacturer with supplier regarding occurred losses and also asked about the ability of supplier in resolving losses. After the responses we got we find that most of the manufacturers faced losses on monthly or weekly basis because of suppliers, the duration of those losses is mostly from 1-10 hours, manufacturers mostly connect with suppliers after every issue and often or sometimes their suppliers able to resolve issue. This shows that every respondent irrespective of the industry faces downtime because of supplier. For smooth supply chain is necessary for the companies that their pipeline should be smooth from supplier to final consumer, that is why every manufacturer want to have supplier which tackles all losses immediately with a mindset that those losses should not repeat again. That is why every manufacturer sets the expectations with suppliers while asking for the bidding and most importantly while signing of a contract to avoid any miss communication or excuse from supplier regarding nonawareness about what the manufacturer wants. This is the reason because of which some of the manufacturers also ask about the 2nd tier supplier or 3rd tier supplier to in the supply chain of his supplier to know whether his supplier is capable

of fulfilling his need or he will be stuck in resolving the issues of 2nd or 3rd tier suppliers.

Now the third and last part of the survey was to know what manufacturers do if their supplier is having a loss repeatedly and that loss is also affecting manufacturers production somehow. For this we asked about whether they help supplier in loss elimination through asking them about loss, by sending own experts towards supplier for identifying probable cause of the supplier, and also asked if they sent so how beneficial it is in terms of loss elimination, down time reduction, product quality improvement and regarding the improvement in the overall results. With the responses which we got through the survey of this study we find that, most of the manufacturers are those which may or may not help supplier in loss elimination, similarly mostly they do not ask supplier about the loss which he is facing, when they do not do the above mentioned things they mostly do not ask their experts to assess loss of supplier and also do not send experts for loss elimination at suppliers end. But most of them accepts that whenever they do above mention all things their losses decreased, their product quality and overall results increased. Which shows that involving experts is always beneficial for the company itself, instead of only relying on supplier and penalize them for the losses which a company face due to issues in materials from supplier

### 5.1 Limitations

The biggest limitation of this study was the approach to all markets of Pakistan, as we based in Karachi, so this is the study specifically related to industries which are situated in Karachi only. But with this we can have a flavour of what is the practice in Pakistan's industries in general.

Another limitation is that the companies of the same industry in Pakistan follow mutual processes and mostly all are having common practices which are aligned between them. They align all the process in the meeting from what and when to produce to which variants which company will produce and also the salaries of that particular industry are being given after the mutual understanding of all the companies of that sector.

Thirdly, the major limitation of this study was the major part of the respondents belongs to same industries which means same practices are being followed in each company because of the points which mentioned above. This is the reason, which is making this study Karachi specific, because other industries especially small industries are situated in Punjab and they might follow different practices than the industries of Karachi.

## 5.2 Recommendations

It is highly recommended to approach all sectors of Pakistan business for future studies in order to get the complete knowledge regarding the practices of Pakistan. It is also recommended to approach different levels of management specially the higher levels because they are more experienced, and they can understand the perspective of study very well along with the asked questions which will be very beneficial in getting the real and exact outcome of the study. In this study a flavour of what practices are being followed in industries of Pakistan have got but not complete understanding because of limited time and resources.

Another recommendation for future studies is to have greater number of responses from larger audience in ample time frame. This will help in analysing the market situation quite well and will have more points of action on which actions can be taken to enhance the processes of industries in Pakistan.

## 6 CONCLUSIONS

Industries of every country plays a vital role in its development. Same is like Pakistan, according to stats since the change of Government in 2018 the measures which are being taken for industrial sector are quite helpful in growing this sector speedily. With keeping this in mind we gone through the study of knowing relationship between manufacturing companies of Pakistan with their suppliers. As mentioned earlier stronger relation between companies and their supplier, gives more strength to its supply chain. That is why in Europe there are a lot of researches related to supplier's development and the relationship between them.

With this study we came to know that, like European industries Pakistani industries do not spend their much time in building relation with supplier. The phenomenon of Pakistani industries that they only pressurized suppliers for delivering the right product to them but do not ask for the reoccurring issues until or unless they must suffer a lot. This is the thing which reflected from our survey as well. That most of the respondents select to approach supplier sometimes or never. There are only few that they always ask supplier about the losses. Similarly, most of them did not agree that they utilize their experts for the resolution of supplier's issues. There is a need to focus more on building the relationship between suppliers and manufacturers to help the industries build more strongly, because collaborative working is always beneficial for all types of works which is a must need of the industries like Pakistan which is still a developing economy and it needs businesses to flourish.

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