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Measuring Customer Satisfaction-Approaches for Getting Reliable Information for Textile and Garment Industries

By:
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Introduction:

It is a known fact that any business can survive only if their customers are satisfied. The achievement of customer satisfaction is not a one time job. The level of satisfaction cannot remain same all the time; it may either increase or decrease. The business depends on the level of satisfaction at the time of transaction and not on the history. Therefore one should be able to assess the level of customer satisfaction on a continuous basis and take actions to make the customer happy and then approach for a business. This is not an exception for Textile and Garment Industry.

Concept of measuring customer satisfaction

The concept of measuring customer satisfaction was propagated by the business excellence awards criteria like Malcolm Baldrige National Quality Awards and European Foundation for Quality Management way back in 1987 - 1990. Some companies, who were trying to achieve excellence developed there own methods for keeping a track on changing customer needs and their perceptions. Different agencies started the business of conducting surveys, giving weightage for different criteria and arriving at an index in order to track whether the company is showing a positive improvement or not. As the award criteria insisted on the overall results and restricted on the number of pages in the applications, the concept of presenting data of the customer satisfaction index in graphical form became popular. However, these indexes alone are unable to help the organization to take actions for improvements. For taking actions, we need the data of individual customers and the specific events or requirements. The index can help in formulating policies.

Table-1 is an illustration of the results obtained in a survey conducted during the years 2004 - 2006. There were 12 customers responding to the survey questionnaire out of 100 customers for whom the questionnaire was sent. There were 10 parameters selected by the supplier. The customer satisfaction index shows an increase from 56.33 to 56.83

Table-1 Rating given by customer for various services and product quality in a survey for customer satisfaction (0 is lowest - 9 is highest)

Period - 2004-05												
Customer	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Average**
Quality of products	8	7	6	5	7	8	7	4	8	8	8	7	6.92
Quality of packing	9	6	2	9	5	8	5	5	6	4	8	5	6.00
Quality of Documentation	8	7	7	4	9	8	6	6	4	9	5	4	6.42
Delivery in time	6	8	9	7	4	6	7	7	7	7	9	8	7.08
Price offered	2	5	2	8	8	4	8	8	9	9	4	7	6.17
Service provided	5	9	4	6	6	4	2	4	1	8	9	8	5.50
Complaint resolution	2	2	6	9	1	5	4	9	5	6	7	6	5.17
Response time	4	2	7	6	3	2	2	4	8	4	5	9	4.67
Hospitality	5	1	8	2	5	4	3	8	6	6	8	4	5.00
Product development	1	2	2	2	4	1	4	4	4	4	5	8	3.42
Total	**50**	**49**	**53**	**58**	**52**	**50**	**48**	**59**	**58**	**65**	**68**	**66**	**56.33**

Period - 2005-06												
Customer	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**Average**
Quality of products	9	7	9	6	7	7	7	5	8	9	8	8	7.50
Quality of packing	8	6	7	2	5	9	6	3	8	6	7	5	6.00
Quality of Documentation	7	6	7	4	7	8	8	6	5	9	6	4	6.42
Delivery in time	7	6	7	7	5	6	9	7	4	7	6	6	6.42
Price offered	5	6	6	4	8	4	9	7	6	6	6	8	6.25
Service provided	5	7	7	5	6	9	4	4	4	8	9	2	5.83
Complaint resolution	1	5	6	1	8	5	4	8	5	6	6	4	4.92
Response time	4	5	7	3	3	5	4	4	8	6	5	9	5.25
Hospitality	6	2	7	3	4	3	3	9	7	6	8	4	5.17
Product development	2	2	3	2	4	5	4	2	4	4	2	3	3.08
Total	**54**	**52**	**66**	**37**	**57**	**61**	**58**	**55**	**59**	**67**	**63**	**53**	**56.83**

By referring to the data in the table 1, can the company come to any conclusion? The customers have given different opinion for the same parameters. Some customers say that there is an improvement, where as some others say it as a deterioration.

We can make graphs to understand the trend. Figure 1 gives parameter wise trend. One can conclude that in parameters relating to quality, service provided, response time etc, there is some improvement. If customer wise graph is made, we can see some other trend. Figure 2 gives customer wise trend

Fig - 1 Parameter wise satisfaction

Fig - 2 Customer wise analysis
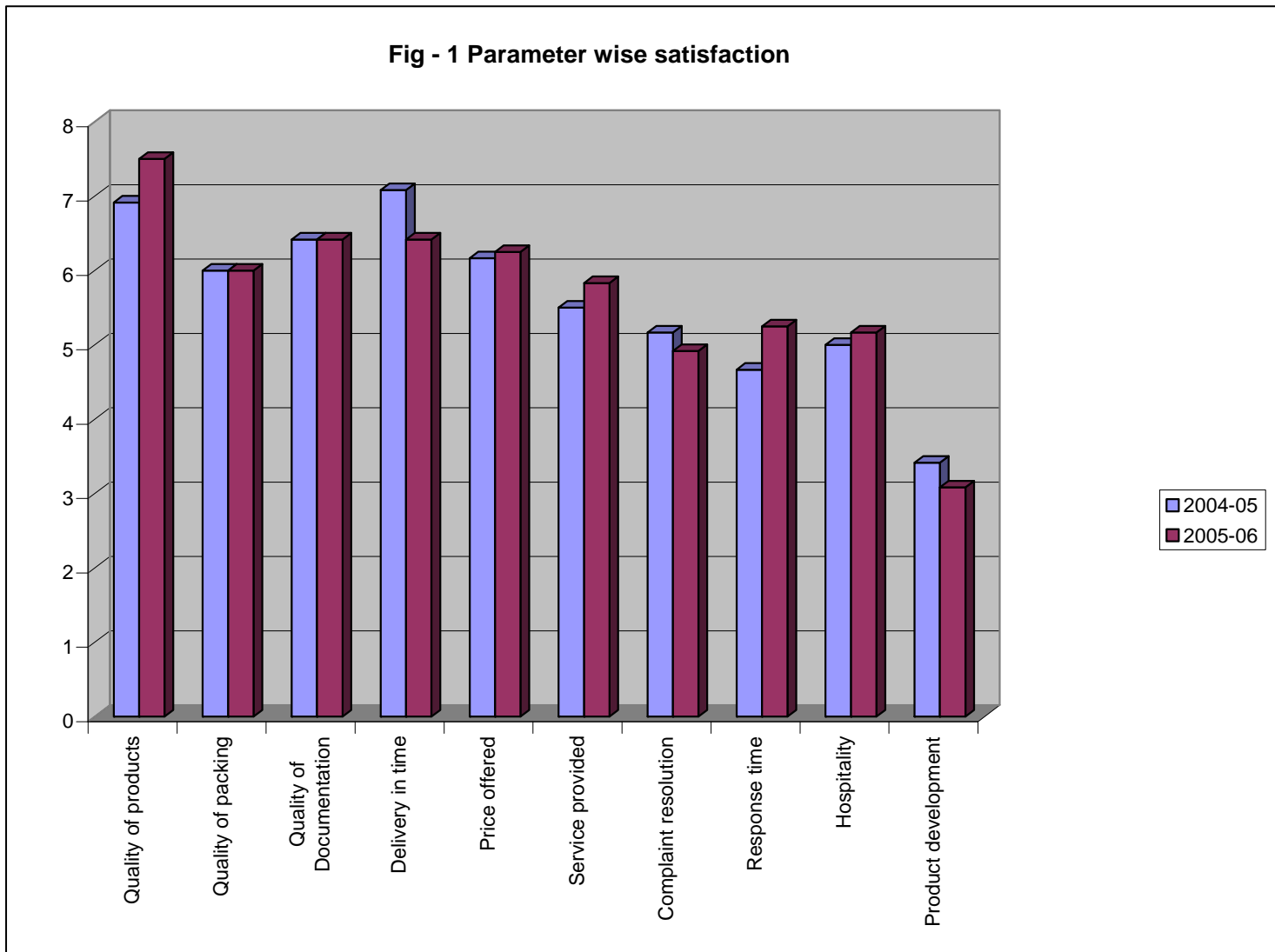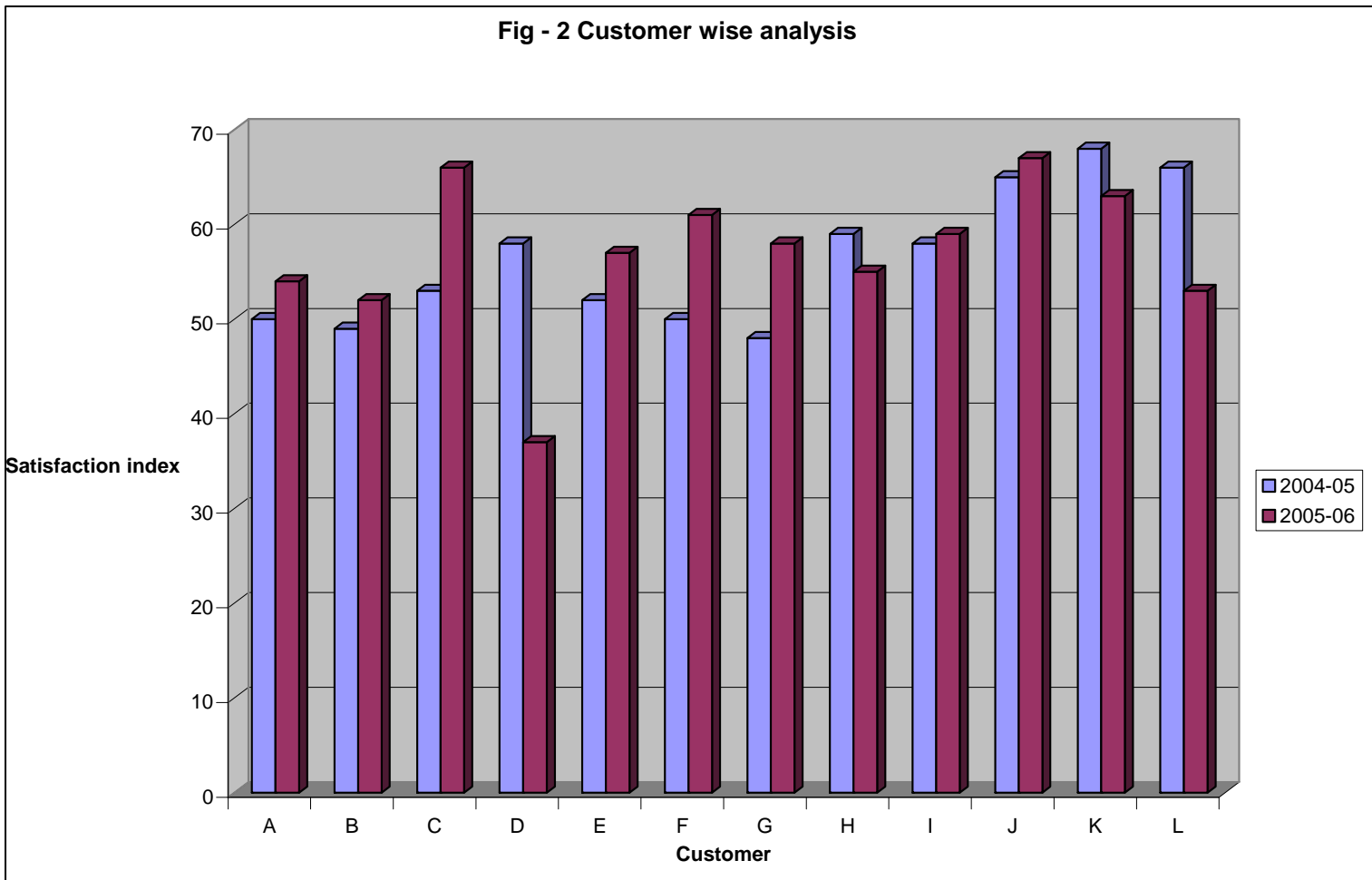
In the customer wise trend, we see that customer D and L have become more dissatisfied where as C and F have got more satisfaction. The company is likely to lose customer D if they do not act immediately.

Why it happens like this? The survey by an external service provider cannot give the complete information on which action can be taken. There is a need to understand the customer perception as to why he/she is satisfied or dissatisfied.

In the year 2000, the ISO 9001 guidelines incorporated monitoring and measuring of customer satisfaction as a sub clause. The purpose of ISO 9000 was not to identify and award the excellent performers, but to guide everyone to sustain their business. It views customer satisfaction measurement as one of the measurements of the quality management system monitoring the information relating to customer perception as to

whether the organization has met the customers requirements or not. In the ISO 9001 guidelines some clues are given as to what approach can be used. It suggests that monitoring customer perception could include obtaining input from sources such as satisfaction surveys, customer data on delivered product quality, user opinion surveys, lost business analysis, compliments, warranty claims and dealer reports. However, the organization should decide on the method to be adopted depending on the type of product, the type of market, the type of customers, and impact of each parameter on the performance of company as well as at customer end. The studies by the authour show that expectations of customers are different for the same parameters.

The Textile and Garment Industry

The Textile and Garment industry have their own specific features compared to Engineering industries. The industry has various sections; some are catering their products and services to other manufacturers for adding value, where as some are catering directly to end customers. Where, one supply his products to another manufacturer, the concepts of assessing customer satisfaction shall more or less be similar to an Engineering industry. However, depending on the precession needed in the products and their properties, the perception changes. Where the materials are being used for industrial applications and for specified functions, the customer requirements shall be more or less clear to the supplier.

The textile units that supply material for further processes in other textile related units are Sliver making for Spinning, Inter bobbin suppliers for Khadi spinners, Spun single yarns for weaving, knitting or doubling factories, Doubled and cable yarns for Tyre cords, Yarns for industrial fabrics, Woven grey fabrics, Knitted fabrics etc. These products need to be processed or converted further to make it suitable for use by the final customer. The processed fabrics either Woven or Knitted can be sold directly to the end users so that they can get the garments stitched as per their will. These fabrics can also be sold to garment factories for producing readymade garments.

Where the materials are procured for further conversion activities, the main requirements will be the smooth trouble free working, on time delivery, affordable price and the specified quality. The product parameters shall be directly measurable with internationally accepted test methods. The customer can clearly specify the reasons for his dissatisfaction and the supplier is in a position to correct it. In case of materials sold in retail market for the end user, it is very difficult to understand the real reason. Following are some examples:

- ➢ A particular saree was rejected by a lady because her neighbour was having a similar saree.
- ➢ A shirt was rejected because it looked more traditional
- ➢ A good dress was rejected by a girl as she already had one set similar to that.
- ➢ A particular style of jeans could not be sold in the market because a movie hero changed his style.

> A boy rejected a suit because his girl friend had made a comment on that type of suit worn by somebody.

There are number of such reasons, where a technician cannot take an action for improving the customer satisfaction. In case of materials going for specific end use, a technician can work and improve the consistency in the supply. The technicians should understand the impact of various technical parameters of the product on the performance at customer's end.

Understanding the customer requirement specific to a parameter

Studies conducted by the authour regarding the customer expectation in yarn quality parameters indicated several debatable issues. Normally people perceive that a lower count CV%, lower CV% of twist, higher RKM, lower U%, lower imperfections are required by all customers. Let us discuss some cases.

> **Case -1: High Twist double yarn for crepe**
> A customer with a good brand image was regularly purchasing 20000 Kgs of a particular count yarn in both SS and ZZ twists every moth from a renowned yarn manufacturer. The spinner was producing slightly excess in order to ensure that full quantity of yarn is delivered. There used to be some excess of 200 to 300 Kgs. This surplus yarn was being purchased from a small customer. There were no complaint relating to quality from the large customer, where as the small customer was complaining every now and then. He was also bringing the complaint samples. The Quality in-charge could not understand as to why this small man has so many problems and not the large customer. He went to the factory of small customer and got convinced that the yarn quality was really not good to work on the looms. With curiosity he asked the customer as to why the large buyer has not made any complaint. The reply given was "Sir, that customer is very big and his earnings are from the final product he is making that is having a good brand image. Even though he is losing production, his losses are less as he has the final processing and value addition. I have to sell the grey fabric, and my customer will not give the money. But for that large customer, the selling is not at all a problem as people simply take his product because of his brand image. I need good workable yarn if I need to compete and build my brand image."

> **Case -2: Carded dyed yarn for socks**
> One socks manufacturer was purchasing Ne 20s K black dyed yarns. He was facing problem of barre and diamond formation and was attributing it to high count variation. The spinner was having auto-levellers at both carding and draw frames, was checking the count CV% on a regular basis by taking 20 cops at random, and was always getting a count CV% of less than 1.0. The spinner told the customer that he cannot give CV% lesser than what was being produced. The customer invited the Quality In-charge to visit the factory. The Quality in-charge visited the customer to find the problem. The customer was using one cone or two cones in a creel and the weight of each sock was 6.5 Gms. The count variation

referred by the customer was short term drafting waves and not the count CV% between the cops.

> **Case – 3: Carded yarn for T-Shirt**
> A customer wanted Ne 20sK for T-shirt. The spinner was having S4 cotton running for Ne 40s, and decided to use the same cotton for this. They had good tandem cards and their yarns were considered as semi-combed in the market. As the customer was new to the company, it was decided to use tandem cards and give one of the best qualities so that customer can be delighted. The yarn was supplied and the customer was very happy on the knitting performance. However, after 3 months the spinner received a complaint that the T-shirts were not liked by the ultimate consumers. The customers rejected the T-shirts stating that it had 'Feminine feels' and the customers wanted 'Masculine feel'.

> **Case – 4: Carded yarn for sports socks**
> A customer ordered Ne 12s K Hosiery yarn. The spinner used good J34 cotton, worked on good machinery. The yarn was produced with 3.7 TM as the yarn was going for hosiery. The yarn was having around 16 RKM and was quite uniform. The customer used this yarn for producing sports socks with pile knitting. The spinner received the complaint that the socks were shedding while washing. The spinner visited the knitting factory and observed the working. Knitting working was good and there were no shedding. When the used socks were analyzed, it was found that the fibres were coming out from the piles due to abrasion. The yarn needed slightly higher twist compared to normal hosiery yarns.

Devising a method for measuring customer perception:

We find that in a number of cases understanding the real needs of the customer is a challenge. It needs the spinner to see the requirements from customer's perception and not by the norms given by a research association or statistics by testing instrument manufacturers. The customer requires the yarn to perform at his place, perform at his customer's place, liked by his customer, supplied to him at the time when he needed it and at reasonable price.

There are number of ways of getting the customer perception on the quality and services of our products. They include sending a questionnaire requesting the customer to fill up, sending a third party for interviewing customers, a marketing representative visiting the customer and getting feedback, conducting customer meets and getting feedbacks etc. Normally the response from the customers for the questionnaire sent is found very poor. Only 10 to 15% of the customers respond to the questionnaire. Even if they respond, majority of the ratings shall be in between 4 to 7 in a scale of 0 to 9. They do not want to tell anything as excellent and also as very bad. Further, we cannot understand the reason behind the ratings given. While the third party interviews can cover more customers, there is a basic doubt on whether they collect the information needed by the organization or not. The third parties normally have their own stereo type question and approach, and numbers of customers do not like them. As they do not have confidence about the actions

taken on their feedback, they normally allot a junior person to respond to the interviewer. Also, it is very difficult to validate the opinions collected. When a marketing representative visits the customers, he normally gets more of negative feedback as the customers always doubt the intention of marketing person. The marketing people normally discuss more with the purchase people and very less with the shop floor technicians using the products. The customers are afraid of increase in prices incase the product and services are told as good or excellent. Also, the marketing person cannot really communicate the exact problems faced by the customers to the shop floor technical persons in their language. In the customer meets, some talkative customers raise their voice and others just support them. Only 10 to 15% of the customers talk. Most of the time is spent in lectures, introductions and on the new products launched.

Analysis of complaints and feedback give a good clue. It was observed that only 10 to 15% of the customers make complaints, where as others keep silent inspite of the same bad quality material is given to them. We cannot assume that they are happy. It is found that the normally the customers complaining regularly are the one lifting more materials. The analysis showed that 15% of the customers normally lift 65 to 75% of the production, and they are also the maximum complaint givers. Further, the numbers of complaints have a direct relation with the price at which it is sold. When the price is high, the complaints are more. In specialty products, the lot size will be smaller compared to commodity products. Each lot is having a potential to receive a complaint. Hence, with specialty products, the number of complaints shall be more. Further, when the quality is improving, the expectations of customers also improve. We get more complaints in a quality conscious mill compared to a mill producing cheaper variety yarns. Therefore it is better to present the data of complaints in complaints per Rs 100 crore turnovers rather than the number of complaints received in a year.

Visiting customer in a team

One of the best methods of collecting the customer perception is visiting customer's work place in a team consisting of a technical person from production, a quality control person and a marketing person. Some companies even send senior workers in the team. The customer shall be happy to receive the production person as they can explain their problems clearly and get commitment from him to correct the same. The team should discuss with the people actually using the materials. A worker from the supplier's team can discuss with the workers in the customers team and understand the real problems. The workers discuss freely and hence the real problem is understood and action can be taken. The level of satisfaction increases as more useful dialogues takes place. This type of visits eliminates the probable communication mistakes and misunderstandings.

There are number of yarn parameters, and it is important to know as to which parameter is critical to that customer. It is also necessary to know as to why that parameter is critical for him, and what the normal complaints he gets from his customers are. Once it is clear, then we need to understand as to how much we are fulfilling it.

The following examples can clearly explain the concepts.

> ➢ A weaver normally wants the yarn count to be slightly on finer side where as a sweater knitter wants it slightly on coarser side.
> ➢ A knitter of under wears prefer a low twist, where as a knitter of socks prefers a slightly higher twist.
> ➢ A knitter is satisfied with a low strength yarn provided the yarn is uniform, but it should not break. Hence for high speed knitting machines, he demands yarns of higher strength.
> ➢ A knitter having flat knitting machines for sweaters can accept variations in length of yarn on cones, but not a knitter having circular knitting machines for T-shirts.
> ➢ Length uniformity of yarn in cones are demanded when yarn is going for warp, but not for the weft.
> ➢ A weaver prefers a yarn with less hairiness where as a knitter wants some hairiness on yarn.
> ➢ Uneven yarn is not accepted where single yarns are used for weaving or knitting, but the same customer accepts the yarn if it is going for doubling.
> ➢ Uneven yarn is not accepted in case it is going for plain weave and single shades, but the same is accepted if it is going for printing, or for checks.
> ➢ Strength is more important than other parameters like count, twist and evenness incase the yarn is used for industrial purposes like canvas, belts etc.
> ➢ The bulk of yarn becomes more important when they are used for tufted carpets, razed cloth like velvets, looped fabrics with designs like terry towels.

Apart from the yarn parameters, the packing and presentation also play a part in making customers happy. Some are interested in the materials inside, where as some wants the presentation to be good. Depending on the culture of the customer's society, the expectations also change. However, nobody likes if the material is not in line with their requirement.

It is observed that the number complaints received from a customer also depend on the season and the market condition. The analysis made for over a decade in number of spinning mills indicated that the complaints received from the customers from Europe and USA in the month of December was always lower compared to other months. Similarly in the Indian market, the complaints were found lower during November. It needs further investigations to find the reason for such trend.

When technical persons meet, they can discuss in depth regarding the technical performance of the yarn and decide on the critical points. The quality control person in the team shall decide on the parameters to be checked critically before allowing the materials to despatch. He shall also make a study of the performance of their yarn at customers end and compare with the performance of other yarns. This gives a clear idea

on the area to be concentrated while producing yarns for this particular customer. The marketing man will be the coordinator.

In order to measure the satisfaction level, the formats can be designed as follows.

Table -2 Customer satisfaction analysis

Customer – XYZ   Product: 20s K Hos   Type of machines: High speed circular looms

	A. How much this parameter is critical to you in a scale of 0-9? (9 is highly critical and 0 is not critical)	B. How much you rate our yarn in the scale of 0-9? (9 is excellent and 0 is poor)	Product A x B
Count (tolerance of average count)	8	6	48
Count Variation CV%	8	5	40
Twist (tolerance)	6	8	48
Twist CV%	5	6	30
Strength (RKM)	5	9	45
Tensile CV%	7	9	63
Elongation %	7	7	47
U%	6	6	36
Thin (-50%)	5	7	35
Thick (+50%)	7	7	49
Neps (+200%)	4	6	24
Classimat faults			
Objectionable 6	9	6	54
E+F+G	9	6	54
H+I	9	6	54

Although the expectation rating is low for certain parameter, the customer expects us to meet level 9 to that extent of his expectation.

Another method of evaluating the customer needs from the past performance is by analysing the data of complaints and feed backs. For the same quality of yarn, different customers give different feedbacks. The feedbacks given or the complaints made indicate the real need of customer. Table 3 gives a Matrix for analysis of customer feedbacks.

Table - 3 - Customer complaint and feed back analysis matrix

Customer	Number of complaints/feed backs received from 1st Apr 2000 to 31st Mar 2009														Product
	Count is fine	Count is coarse	Count CV% high	Twist is low	TPI variation	High snarling	Low RKM	High tensile CV%	Low elongation	High U%	High imperfection	Cone weight is not uniform	Low carton weight	Total	
A	3		6		2	5				3	8	15	3	45	20 KHC
A	5		3		3	3		1		4	4	13	5	41	30 KHC
A		4		3			4		3			31	1	46	40 CWP
A		5		3			4		3			23	1	39	44 CWP
B		2		3		3					7			15	20 KHC
B		3		2		1					6			12	30 KHC
B		10	2	3			5		2	5	8			35	40 CWP
B		12	1	2			2		1	1	4			23	44 CWP
C	2		4		3	2		2			2		1	16	20 KHC
C	1		1		1			1			1		1	6	30 KHC
C	1		3				1		1		1		1	8	40 CWP
C	1		1				1				1		1	5	44 CWP
D	2		2	2			2		2		3	1		14	20 KHC
D	3		5				2		1		1			12	30 KHC
D		1		1				1				3		6	40 CWP
D		2			2		4		2		1			11	44 CWP
Total	18	39	28	19	11	14	25	5	15	13	47	86	14	334	

4 customers viz. A, B, C and D were getting the same quality yarn from the spinner XYZ. Although same quality of yarn is supplied to all, the customer A has made maximum complaints, where as customer C has the least complaints. The customer B complained more on count being coarse, where as for the same yarns the customer C complained the count as fine. Customer A made more complaints on cone weight variations, where as B and C do not see it as a problem. The complaints depend on the type of machines the customers have, the product quality demanded by their customers and their management objectives. It is therefore suggested to view each customer as separate, and do not try to combine them and workout indexes.

It is good to make customer wise reason wise trend analysis of complains and feedbacks. The feedback got in customer satisfaction surveys also need to be analyzed criteria wise. Figure – 3 is an illustration.

Customer satisfaction index Customer A
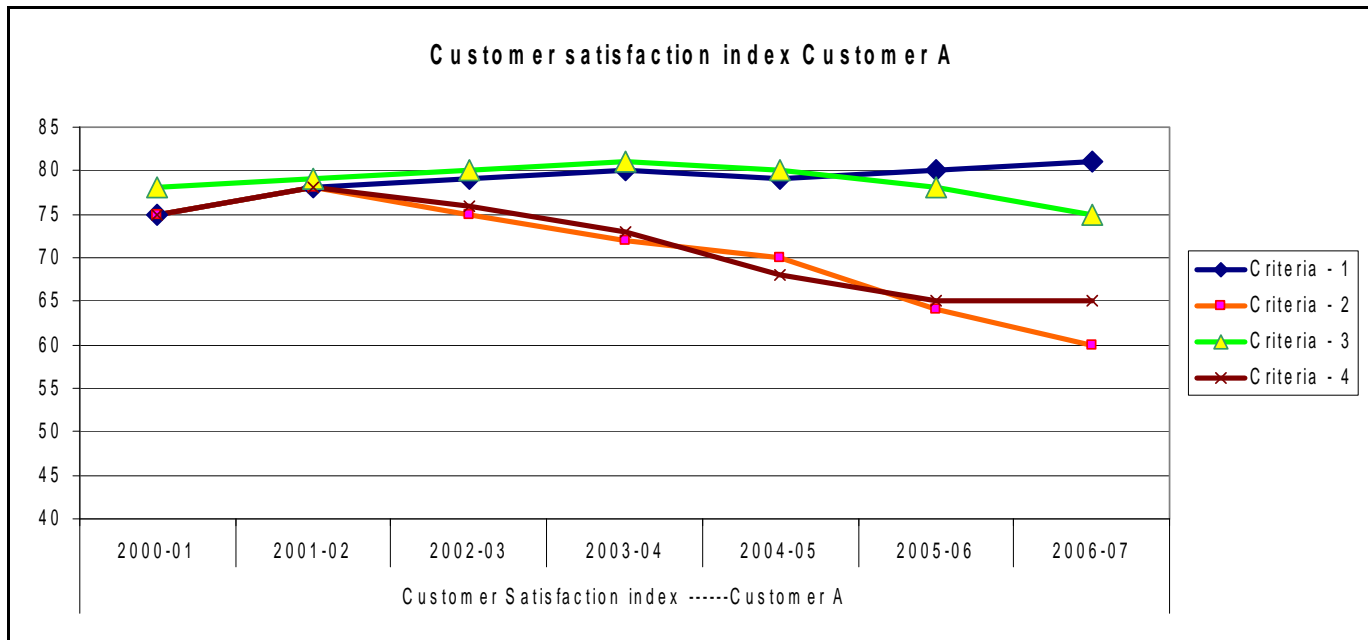
The figure three shows that the satisfaction level of customer A is gradually decreasing in criteria 2 and 4, where as in criteria 1, the level is showing continuous improvement. There is a need to take actions on criteria 2 and 4 for this customer.

Some of the organizations have started a system of displaying the customer complaints prominently in their work area so that all in the company can contribute for overcoming that complaint. Before starting production for a particular customer, the previous complaints and actions taken are reviewed, and the operators are educated.

Conclusions

1. Customer satisfaction level does not remain constant, and hence yearly surveys do not help the industry to improve them.
2. The requirement of customers depends on the product they are making, the end use and the demand of their customers, the work culture and the society culture.
3. Understanding of the customer needs by visiting them in a team consisting of shop floor technician, quality control personnel and marketing personnel can help in understanding the real needs and in improving the satisfaction level.
4. Reason wise and customer wise analysis helps in understanding the requirements precisely.
5. Instead of concentrating on overall customer satisfaction index, it is necessary to understand customer wise problems and address them.
6. The customer complaints need to be linked with the sale value of the product.

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