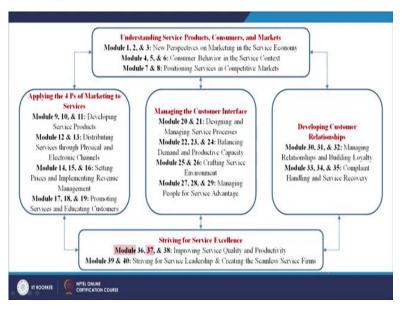
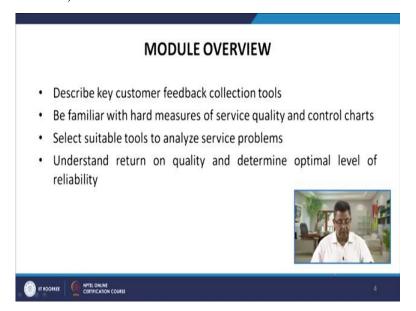
Services Marketing: Integrated People, Technology, Strategy Professor. Zillur Rahman Department of Management Studies Indian Institute of Technology, Roorkee Lecture 37 Improving Service Quality and Productivity Part II

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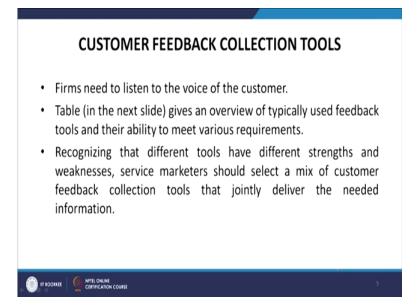
Welcome to Services Marketing. Now we will talk about module 37. These 3 modules 36, 37 and 38, they are dedicated to the title of improving service quality and productivity and we have talked about module 36, now let us see what we will talk about in module 37.

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So, we will describe key customer feedback collection tools. We will familiarise with hard measures of service quality and control charts. Select suitable tools to analyse service problems and understand return on quality and determine optimal level of reliability.

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So, let us start with the customer feedback collection tools. So, firm needs to listen to the voice of the customer. So as we have talked about earlier also that it is always very important to know what customer wants. So, the firm need to listen to the voice of the customer, so there is a table on the next slide that gives an overview of typically used feedback tools and their ability to meet various requirements.

Recognising that different tools have different strengths and weaknesses, service marketers should select a mix of customer feedback collection tools that jointly deliver the needed information. So, no one tool will give everything that the manger want. These tools are to be used in combination and more than 1 tool is to be used to get the needed information.

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	Cellaution Youts	Firm	Francis	Transaction Specific	Actionship	Representations ratio	Forestial for Service Recessity	First-hand Learning	Energy En	
123	Total market survey (including sumpetitors)	•	0	0	0	•	0	0	0	Strengths and weaknesse of key customer feedback
	Annual survey on systal satisfaction	•	0	0	0	•	0	0	0	
	Transactional survey	•	•		•	•	0	0	0	
1	Service feedback cards and messages	0	•	•	•	()	•	•	•	
56789	Mystery chapping	0	•	•	•	0	0	•	0	
	Unaplicited feedback to p. Completes	0	•	•	•	0	•	•	•	
	Focus group discussions	0	•			0	•	•	•	
	Service reviews	0	0	•	•	0	•	•	0	
	Ordine reviews and discussions to g. Reviews and social media postings)	0	•	•	•	0	•	•	•	
	Legend	Mosts requirements fully; Anoderately; Chardly at all								collection tools

Now, these are the strengths and weaknesses of key customer feedback collection tools. So on the left hand side, we have the various collection tools. The first collection tools is the total market survey that is that includes market survey of competitors also. So, now it gives the level of measurement of the firm level measurement and it is representative and reliable, while so when it is fully coloured, it needs requirement fully, when it is half covered, then it needs the requirement moderately and when it is not coloured at all, it does not cover things.

So, this first tool that is the total market survey will give information on the firm and it is representative and reliable while the other characteristics, other requirements, they are missing. Another tool is annual survey on overall satisfaction. So, it gives information about the firm, moderate information about the processes and then it is representative and reliable but it is missing on the other 5 characteristics.

The third tool is transactional survey. Now this transactional survey as compared to the other 2 tools, it gives more information on firm, processes, moderate information on the transaction specific things, it gives actionable information, it is also representative and reliable but the other three things are missing here.

The fourth tool is the service feedback card and messages. So it gives moderate information about the firm but full information on the processes and the transactions. Again it gives moderate information on the action, what action needs to be taken and the information is moderately representative and reliable while it has the potential for service recovery, the information that it gives for potential service recovery is full, but then the first hand learning is only moderate and it is highly cost effective.

The fifth tool is mystery shopping. Again, it does not give any information for the firm level and it is not representative. The potential for service recovery information is not there, then it is also cost effective. The sixth tool is unsolicited feedback that is the complaints that customer make when the service fail. So again, it gives lots of information about the particular transaction, they give actionable information and it provides information about potential for service recovery and it is also cost effective, but then it does not give anything on the firm level as well as it is not representative and reliable.

The seventh tool is the are the focus group discussions. Again, they give lots of information that are useful for transactions and the information given is actionable, it also leads to first hand learning. The eighth tool is the service reviews. Again, it does not give any information for the firm, some moderate information about the processes but full information for a particular transaction. The information is actionable while it is not representative and reliable but the potential for service recovery and first hand learning information is there and it is partially, moderately cost effective.

And the ninth tool is online reviews and discussions and it gives lots of information on the 5 characteristics and it does not provide any information on these 2 characteristics.

Now, you see after having learnt about the various strengths and weaknesses of this customer feedback tool, so now you see that there is no 1 tool that can give all the information. Therefore, as we have mentioned in the last slide, there is a need to use a combination of tools instead of just one tool.

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1. TOTAL MARKET, ANNUAL AND TRANSACTIONAL SURVEYS

- Total market surveys and annual surveys
- measure satisfaction with all major customer service processes and products.
- The level of measurement is usually high, with the objective of obtaining a global index or indicator of overall service satisfaction for the entire firm.
- · Limitation -
 - Tells us how satisfied customers are, but not why they are happy or unhappy.
 - Limited number of questions can be asked about each individual process/product.



Now, lets us look at the first one that is a total market annual and transactional surveys. They measure satisfaction with all major customer service processes and the products. The level of measurement is usually high with the objective of obtaining a global index or indicators of overall service satisfaction for the entire firm, but the limitations of these surveys are they tell us how satisfied customer are but not why they are happy or unhappy.

Limited number of questions can be asked about each individual process and product. So, this is the limitation of this survey that it will tell you that the customers are satisfied but why they are satisfied? Why they are happy? And why they are not happy is not there. Second, there can be only limited number of questions on individual process and product and otherwise that will make these surveys very long.

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Another type of surveys are transaction surveys that is intercept surveys conducted after customers have completed specific transactions. So, as soon as you have bought something, then these surveys, they happen. If time permits, they may be queried about the process in some depth, but then maybe customer because he has made the purchase and he would like to leave, so therefore time may not be there with the customer to give all this kind of information.

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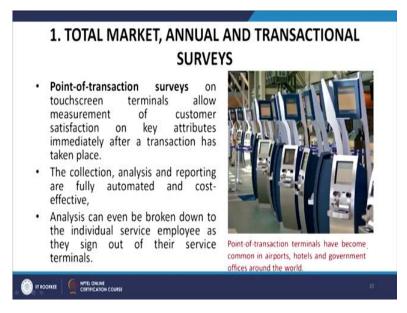
1. TOTAL MARKET, ANNUAL AND TRANSACTIONAL SURVEYS

- Such feedback is more actionable, can tell the firm why customers are happy or unhappy with the service, and usually yields specific insights on how customer satisfaction can be improved.
- Many market research agencies offer cost-effective email, SMS, electronic terminals, and app-based transactional survey tools.

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Such feedback is more actionable can tell the firm why customers are happy or unhappy with the service and usually yield specific insights on how customer satisfaction can be improved. Many marketing research agencies offer cost effective emails, SMSs, electronic terminals and app-based transaction survey tools.

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Then there are some point of transaction surveys on touch screen terminals allow measurement of customer satisfaction on the key attributes immediately after the transaction has taken place. So, immediately as soon as you have made the purchase, so the survey happens and these surveys are called point of transaction surveys. The collection, analysis and reporting are fully automated and cost effective.

Analysis can even be broken down to the individual service employee as they sign out of their service terminals. So, now here is the picture that shows point of transaction terminals have become common at airports, hotels and government offices around the world, so that people can give their feedback immediately and this also happens with several websites that as soon as you complete the transaction, they ask you to rate their service.

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The second is service feedback cards, online and mobile messages. These powerful and inexpensive tools involved providing customers the opportunity to use feedback cards, online forms, emails, text messages or apps. They are a good indicator of process quality and yield specific feedback on what works well and what does not. So, now in this picture, it shows that the widespread use of SMS text messaging allows for convenient mobile feedback.

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The third type of tool is the mystery shopping. Service businesses often use mystery shoppers to determine whether frontline staff display desired behaviour or not. So, they are specifically for the frontline employee and whether these frontline employees they are displaying the desired behaviour. Action such as the correct positioning of various products, up-selling and cross selling and closing deals are measured during mystery shopping.

Mystery shopping provides highly actionable and in-depth insights for coaching, training and performance evaluation. So, as you can see that this lady is disguised as a mystery person and then she goes to the shop and then she is she will make some purchase and that will give up lots of information to the company.

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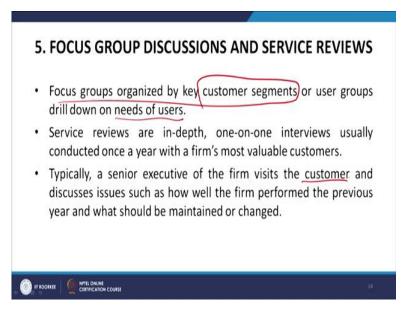
4. UNSOLICITED CUSTOMER FEEDBACK

- Complaints and compliments are rich sources of detailed feedback on what makes customers unhappy and what delights them.
- Detailed customer complaint and compliment letters, recorded telephone conversations, and direct feedback from employees are also excellent tools for communicating internally what customers want.
- For complaints, suggestions and inquiries to be useful as research input, they have to be funneled into a central collection point, logged, categorized and analyzed.



The fourth type of tools are unsolicited customer feedbacks. Complaints and compliments are rich sources of detailed feedback on what makes customer unhappy and what delights them. Detailed customer complaint and compliment letters, recorded telephone conversations and direct feedback from employees are all excellent tools for communicating internally what customers want. For complaints, suggestion and enquiries to be useful as research input, they have to be funnelled into a central collection point logged, categorised and analysed.

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The fifth type of tools are the focused group discussions and service reviews. So, focus group organised by key customer segments or user groups drill down on needs of user. So, now these focus groups will consist of customer segments. So, each segment of customers may have one focus group and that is how they will boil down. They can they can come up with a what are the needs of the users.

Service reviews are in depth one on one interviews usually conducted once a year with the firm's most valuable customers. Typically, a senior executive of the firm visits the customer and discusses issues such as how well the firm performed the previous year and what should be maintained and changed. So, these people they go to their important customers and they keep on and they ask them what are the problems and what are the opportunity for service delivery.

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6. ONLINE REVIEWS AND DISCUSSIONS

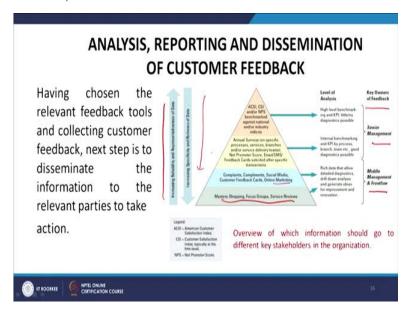
- User-generated content and data increasingly provide rich insights into quality perceptions of a firm and its competitors.
- Sentiment analysis of postings and automated text processing allows real time insights into changes in consumer perceptions.
- Online monitoring tools combined with big data analytics allow real time sensing of information.

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The sixth type of tool is online reviews and discussions. User generated content and data increasingly provide rich insights into quality perceptions of a form and its competitors. Sentiment analysis of postings and automated text processing allows real time insights into changes in consumers perception. Online monitoring tools combined with big data analytics allow real time sensing of information.

So, now the companies they have their softwares and they keep on scanning the net and they keep on catching the keywords from the user generated content and then those words are then analysed and that gives lots of information about the services of the company.

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Analysis, reporting and dissemination of the customer feedback. Now having chosen the relevant feedback tools and collecting customer feedback next step is to disseminate the information to the relevant parties to take action. Now let us look at this figure on the right. Overview of which information should go to different key stake holders in the organisation.

So on this right hand side, we start with the middle level management, goes to the senior management and the key owners of feedback. Now this ACSI stands for American Customer Satisfaction Index CSI is Customer Satisfaction index typically at the firm level. So, companies have their own CSIs and NPV NPS is Net Promotor Score.

Now this triangle, at the bottom are the mystery shopping, focus groups and service reviews and above that are complaints, compliments, social media, customer feedback cards and online marketing. Now these 2, they give rich data that allows detailed diagnostics drilled down analysis and generate ideas for improvement and innovation. So, that is for the middle and the front line. Above that are the annual surveys on specific processes, services, branches, service delivery teams, net promotors scores, emails, SMS, feedback card solicited after specific transaction.

Now these are these give up internal benchmarking and key performance indicator by process branch, team etc. good diagnostic possible. And at the top are American Customer Satisfaction Index and the Company Satisfaction Index, net promotor scores, benchmarks against national or industry indices. So, now these give feedback on high level benchmarking and the key performance indicators.

Now these arrows show that measuring, increasing reliability and representative of data while on the opposite side it increases specificity and richness of data. So again, you will see that there is no particular tool that is giving everything that every kind of information that the company is looking for.

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ANALYSIS, REPORTING AND DISSEMINATION OF CUSTOMER FEEDBACK Three types of service performance reports:

- A monthly Service Performance Update provides process owners with timely feedback on customer comments and operational process performance.
- A quarterly Service Performance Review provides process owners and branch or department managers with trends in process performance and service quality.
- 3. An annual **Service Performance Report** gives top management a representative assessment of the status and long-term trends relating to customer satisfaction.



So, 3 types of service performance reports can be generated. The first one is a monthly service performance update provides process owners with timely feedback on customer comments and operational process performance. The second are quarterly service performance review provide process owners and branches or department managers with trends and process performance and service quality.

The third are an annual service performance reports gives top management a representative assessment of the status and long-term trends relating to customer satisfaction.

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HARD MEASURES OF SERVICE QUALITY

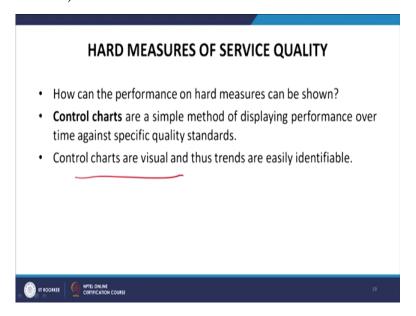
- Hard measures refer to operational processes, or outcomes and include data such as uptime, service response times and failure rates.
- In a complex service operation, multiple measures of service quality will be recorded at many different points.
- In low-contact services where customers are not deeply involved in the service delivery process, many operational measures apply to backstage activities that have only a second-order effect on customers.



Now, lets us look at what are the hard measure of service quality. So, hard measures refers to operational processes or outcomes and include data such as up time, service response times

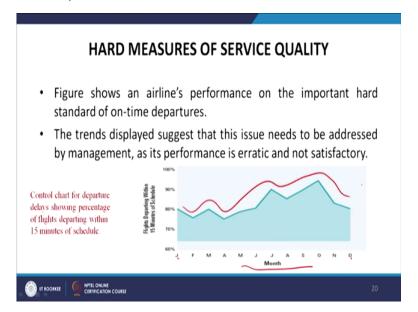
and failure rates. In complex service operations, multiple measures of service quality will be recorded at many different points. In low contact services where customers are not deeply involved in the service delivery process, many operational measures apply to backstage activity that have only second order effect on the customer.

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How can the performance on the hard measures be shown? Control charts are a simple method of displaying performance over time against specific quality standards. Control charts are visuals and thus trends are easily identifiable. So, these are the uniqueness of this control chart that they are visual and therefore it becomes easy to identify the trends.

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So, this figure shows an airlines performance on the important hard standard of on time departures. The trends displayed suggest that this issue needs to be addressed by management as its performance is erratic and not satisfactory. So, on this right hand side, this is the control chart for departure delay showing percentages of flight departing within 15 minutes of schedule.

On the X axis, they have these months from January to December and then on the Y axis you have the flights departing within 15 minutes of schedule. So, now you see that how erratic this curve is. So, it gives the clear picture of the performance of this Airline company.

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ANALYZE AND ADDRESS SERVICE QUALITY PROBLEMS

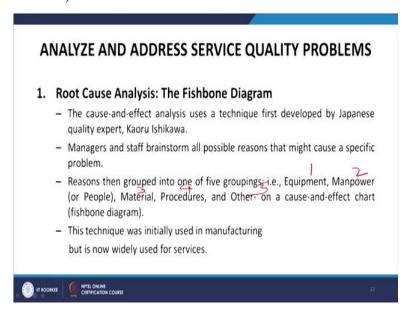
- When a problem is caused by controllable, internal forces, there's no excuse for allowing it to recur.
- After having assessed service quality using soft and hard measures, now it is important to identify common causes of quality shortfalls and take corrective actions.
- With prevention as a goal, let's look briefly at some tools for determining the root causes of specific service quality problems.



Analyse and address service quality problems. When a problem is caused by controllable internal forces, there are no excuses for allowing it to recur. What we are trying to understand is whether this problem is because of internal forces which are controllable? After having assessed service quality using soft and hard measures, now it is important to identify common causes of quality short falls and take corrective action.

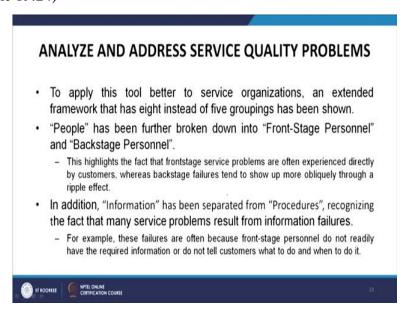
So, now why the service quality is a problem? So, now there is a need to find out the common causes and then take corrective action. With prevention as a goal. Let us look briefly at some tools for determining the root cause of specific service quality problem and we want prevention so that the things do not happen again.

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The first method for that is the root cause analysis and we make a fish bone diagram for that. The cause and effect analysis uses a technique first developed by Japanese quality expert Kaoru Ishikawa. Managers and staff brainstorm all possible reasons that might cause a specific problem. Reasons then grouped into one of the 5 groupings. So, these are the 5 groupings, first is equipment, manpower or people, third is material, fourth is procedure and the fifth is other. So, these are the 5 groupings, equipment, manpower, materials, procedures and others. On a cause and effect chart, that is a fish bone diagram.

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This technique was initially used in manufacturing, but is now widely used for services also and to apply this tool better to service organisation and extended framework that has 8

instead of 5 grouping have been shown, so earlier we have those 5 grouping in the last slide but then we will show 8 groupings. People have been further broken down into. Now you see how important the people component is that it is further broken down into 2 that is front stage employee, front stage personnel and the backstage personnel.

This highlights the fact that the front stage service problems are often experienced directly by customers whereby backstage failures tend to show up more obliquely through a ripple effect. In addition, information has been separated from procedures recognising the fact that many service problems result from information failure. For example, these failures are often because front stage personnel do not readily have the required information or do not tell customers what to do and when to do it.

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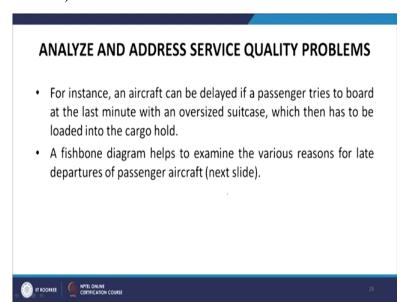
ANALYZE AND ADDRESS SERVICE QUALITY PROBLEMS

- "Customers" were added as a further source of root causes.
- In manufacturing, customers do not really affect the day-to-day operations. However, in a high-contact service, they are involved in front-stage operations.
- If they don't play their own role correctly, they may reduce service productivity and cause quality problems for themselves and other customers.



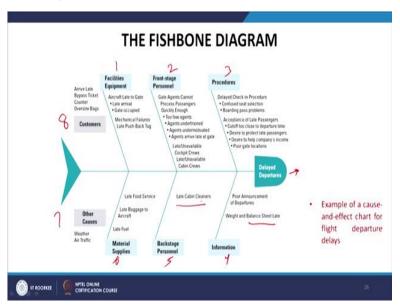
So, customers were added as further source of root cause. In manufacturing customer do not really affect the day to day operations. But in services, in high contact services, specially they are involved in front stage operations and they are present there when the service is delivered while that is not the case with products. So, if they do not play their own role correctly, they may reduce service productivity and quality problems for themselves and for other customers also.

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For instance, an aircraft can be delayed if a passenger tries to board at the last minute with an oversized suitcase which then has to be loaded into the cargo hold. So, then the luggage will be taken from the passenger, sent to the cargo hold and that delays the flight. A fishbone diagram helps to examine the various reasons for late departures of passengers aircraft.

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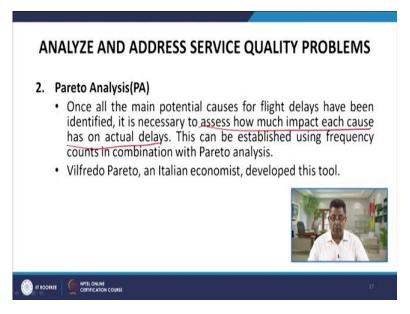
So, this is the fishbone diagram that we have been talking about. Now you see that there are facilities and equipment front stage, 3 procedures, 4, 5, 6, 7 and 8 categories and because of all these things, this leads to delayed departure. So, this is example of a cause and effect chart for flight departure delays. So the customer, let us start with the eighth one, the customer, they arrive late, bypass ticket counter with oversized bags.

The first is facilities and equipment, aircraft late to gate: late arrival, gate occupied mechanical failure, late pushback tug. The second maybe the front stage employees. Gate agents cannot process passengers quickly enough or they were too few agents, agents were not trained, agents were under motivated, agents arrive late at the gate, late unavailable cockpit crew, late unavailable cabin crew.

Then the third problem can be from procedures that it delayed, check in procedures, confused seat selection, boarding pass problems, acceptance of late passengers, so cut off too close to departure time, desired to protect late passengers, desire to help company's income and poor gate locations. The fourth is the information that is poor announcement of departures, wait and balance sheet late.

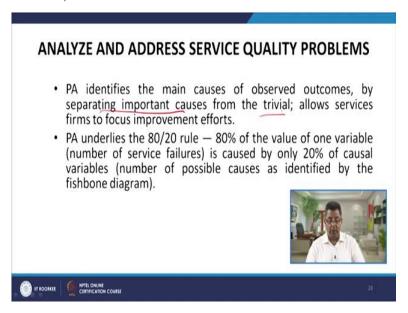
The fifth is the backstage employees that is the late cabin cleaners. The sixth is the material supplies, late food service, late baggage to aircraft, late fuel and then there are other causes weather or air traffic which may not be in control of this company. So this is the fishbone diagram that depicts the problem that can be at more than one of these 8 points.

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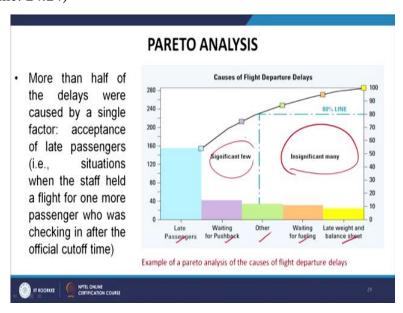
Now the second is Pareto analysis. Once all the main potential cause for flights delays have been identified, it is necessary to assess how much impact each cause has on actual delays. This can be established using frequency counts and combination with Pareto analysis. So, Vilfredo Pareto, an Italian economist developed this tool. So, what we are doing is that we are assessing how much impact each cause has on actual delay. So, some cause may contribute 1 minute, other cause may contribute 10 minutes.

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So, this Pareto analysis identifies the main causes of observed outcomes by separating important causes from the trivial. So, we are looking at segregating the important causes from not so important causes, allow service firms to focus improvement efforts. So, underlive there the Pareto analysis underlies the 80-20 rule. 80% of the value of one variable that is number of service failure is caused by only 20% of causal variables that is number of possible causes as identified by the fishbone diagram. So, there are only 80% of the problems can be because of 20% of the reasons. So, that is what the Pareto rule is.

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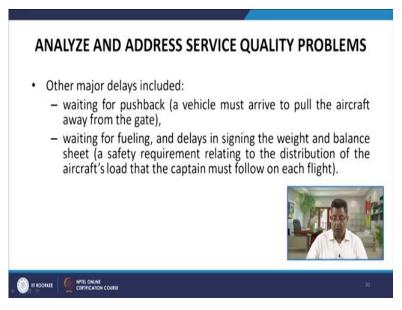


So, more than half of the delay is caused by single factor, acceptance of late passengers, that is situation when the staff held a flight for one more passenger who was checking in after the

official cut off time. So, now this is the example of Pareto analysis of the cause of flight departure delays.

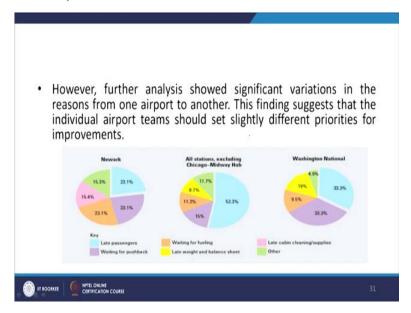
So, on the X axis there are these late passengers, waiting for pushbacks, and others and waiting for fuel, late weight and balance sheet and these are the percentages. These are the numbers 0, 40, 80 and this gives you different colours. So, this is the 80% line, this is significant few and this is insignificant many. So, these significant few are always the problem, so they are the causes of flight departure delays.

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Other major delays include waiting for pushback, a vehicle must arrive to pull the aircraft away from the gate, waiting for fueling and delays in signing the weight and balance sheet, a safety requirement relating to the distribution of the aircraft load that the captain must allow on each flight.

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However, further analysis shows significant variation in the reasons from one airport to another. This finding suggests that the individual airport team should set significantly different priorities for improvement. So, now you see that these are the different types, different airports and let us look at the late passengers, they contribute 23.1% in Newark while all stations excluding Mexico etc. that contribute to 53% and in Washington national that contribute to 33.3%, so the different reasons can be there for delays from different airports.

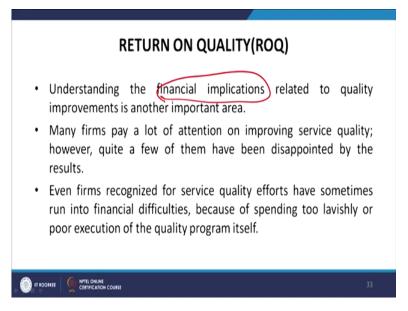
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The third tool is blueprinting. A powerful tool for identifying the fail points. Allows us to drill down further to identify where exactly in a service process the problem was caused. So,

the blueprinting has a flow chart that describes the service processes and then we are able to identify where exactly in that process the problems are there. It help to visualise the process of service delivery by showing the sequence of front stage interactions that customer experience and supporting backstage activities.

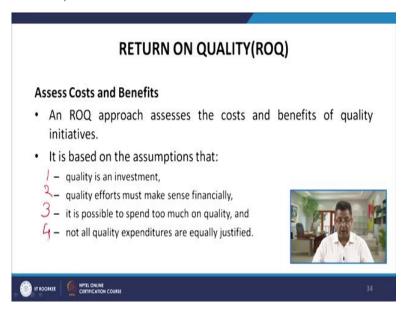
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Now, let us look at the return on quality that is ROQ. Understanding the financial implications related to quality improvement is another important area. So, we are always worried about this financial implications, so what does it means when we are improving the quality.

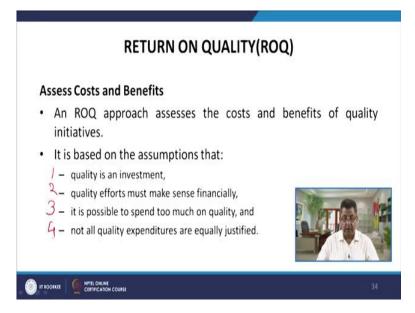
Many firms pay a lot of attention on improving service quality, however quite a few of them have been disappointed by the results. Even firms recognised for service quality efforts have sometimes run into financial difficulties because of spending too lavishly or poor execution of quality program itself.

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Let us look at how to assess the costs and benefit and ROQ that is, Return on Quality approach assesses the cost and benefit of quality initiatives. It is based on the assumptions that quality is an investment. Quality efforts must make sense financially. It is possible to spend too much on quality and not all quality expenditures are equally justified.

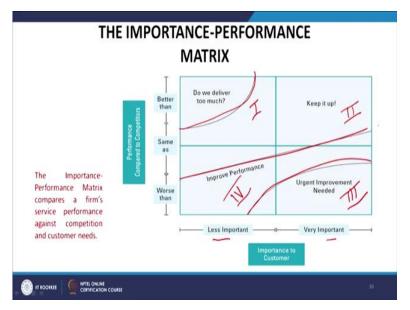
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So, methods that can help to identify the improvements with the greatest impact on customer satisfaction and purchase behaviour, they include; first the importance performance matrix, for example we will see that in the next slide. Multiple regression analysis that establish the attributes with the highest impact on overall satisfaction. So, what are the biggest attribute that leads to overall satisfaction which have more impact on overall satisfaction?

A new method called as marginal utility analysis which uses direct questioning of customers on their improvement priorities, for example, if you could make an improvement which four would be your top priorities?

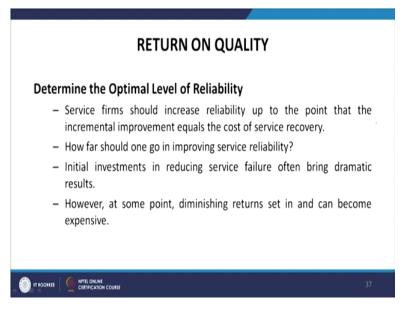
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This is the performance importance matrix, so on the X axis we are looking at those attributes which are important to the customer and on the Y axis, we are looking at what is the company's performance compared to the competitor. So, at the lowest it is worst than the competitor, then it is the same as the competitor and at the top it is better than the competitor and on the X axis, it varies form less important to very important, so now we have these 4 quadrants.

So, in the first quadrant, it is do we deliver too much? In the second, it is keep it up, in the third it is urgent improvement needed and in the fourth it is improves the performance. Now, you see when we are, this is one curve, then this curve and then here. So, we are delivering too much when it is less important, this area is when it is very important we are worse in the competitor and this line shows that it is the normal line.

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Now, determine the optimal level of reliability. Service firm should increase reliability up to the point that the incremental improvements equal the cost of service recovery. How far should one go in improving service reliability? Initial investments in reducing service failure often bring dramatic result. However, at some point, diminishing returns set in and can become expensive.

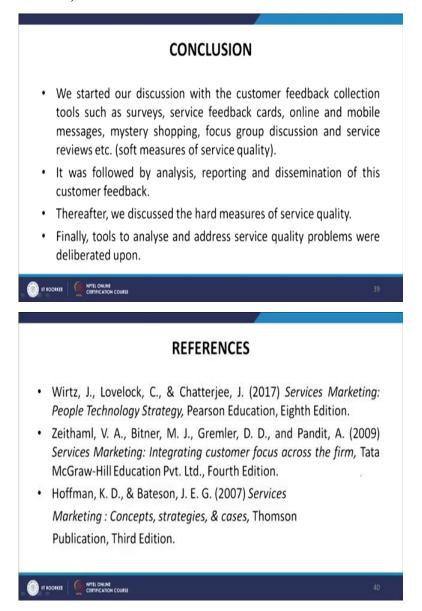
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So, when we are improving service quality becomes and when it becomes uneconomical, so when does improving service reliability becomes uneconomical, on the Y axis we have service reliability and on the X axis we are looking at the investments. So, from A to B this is low cost and large improvement between C to D it is large cost and small improvement.

And then at this point, it is satisfied target customers through service recovery and at this point optimal point of reliability that is equal to the cost of failure and this area is satisfied target customers through service delivery as planned. So assumption is that the customers are equally or even more satisfied with the service recovery, then with a service that is delivered as planned.

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So, in order to conclude this module, we started our discussion with the customer feedback collection tools such as the surveys, service feedback cards, online and mobile messages, mystery shopping, focused group discussions and service reviews etc. soft measures of service quality. It was followed by analysis, reporting and dissemination of this customer feedback.

Thereafter, we discuss the hard measures of service quality and finally we have discussed the tools to analyse and address service quality problems were deliberated upon and these are the 3 books from which the material for this module was taken. Thank you.