

8 June 2005

### TQM for the Service Sector

#### **TQM different for different industrial sectors - One size fits all – Does not fit all !**

One of the most dangerous places in the world is on-board the flight deck of an aircraft carrier. The noise emitted from the jet engines is so high that flight deck attendants wear ear protection devices. Given high noise levels verbal communication is ruled out. Visual communication is the order of the day.

The ugly gets worse by the night. Visibility becomes zero. Pilots and flight deck attendants rely on their training and instinct to keep the entire operation safe. Aeroplanes takeoff, land and are serviced on the same flight deck. Speed aside, it is the quality of service that determines the efficiency of both the aircraft carrier and the aircraft. Given that fighter planes are complex machines, quality of service plays a vital role in ensuring equipment longevity and reliability.

High Service quality is not just restricted to fighter plans but it applies to all service enterprises. According to some industrial gurus, *“Every enterprise is a service company”*. In one way or the other every organization provides value added service to specific customer bases. All this topped with severe competition and volatile markets create a strong need for high service quality.

#### **The objective**

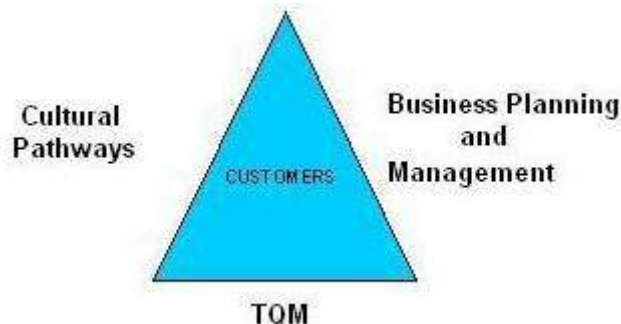
The last decade has seen significant changes in the approach to quality. The focus has apparently shifted from cost cutting to fostering growth/change initiatives and performance enhancement. The idea is to provide “strategic advantage in the marketplace”.

One efficient way of achieving this objective is through Total Quality Management.

#### **The service perspective**

Quality management is no longer restricted to just reducing defects. Today the emphasis is more on providing value added service to customers consistently.

The prospective TQM model for service organizations is illustrated below.



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The heart of the objective is the customer. On one side of the triangle are the organization's business planning and management. The other side represents the cultural pathways amongst customers, employees and the organization. At the base is the TQM initiative.

This paper aims at highlighting the importance of tailoring and optimizing TQM approaches for each business process. It tries to disprove the misconception that "One size fits all". Every business process is unique and thus demands a tailor made TQM approach.

The Centre for Quality Management (CQM) initiated a research project to understand the application of TQM in the service sector.

The research identified the following impediments to successfully implement TQM.

- Most organizations found it difficult to implement TQM programs in general (What to do? how to do and when to do?).
- Service organizations reviewed the operations of typical manufacturing companies who implemented TQM. These examples provided little insight as to how a service organization would implement TQM.
- Service organizations belong to a working culture that changed frequently. Accordingly service organizations struggled to set performance metrics as internal processes changed frequently. The research concluded that if you cannot map it, you cannot measure it, and if you cannot measure it you cannot improve it.
- Most service organizations aimed at mapping the voice of the customer to the business objectives/strategies to provide value added service.
- Service organizations felt that there was a strong link between customer satisfaction (external) and employee/workforce satisfaction (internal). However, they could not determine how these factors affected their business.
- Collating the "quality of service" related data seemed both tedious and misleading. This was because the data was often lost during communication (when data passed from one hand to another).
- Service organizations indicated that they were unable to understand the customer needs fully and tailor the TQM initiative appropriately.
- There was a strong feeling that any activity that lay beyond traditional manufacturing, was hindered the appropriate implementation of TQM.
- Service organizations felt that they had to fully understand the working of a TQM initiative.

These findings inspired CQM to chalk out a framework to tailor TQM in the service sector.



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### **What must be done -The framework**

The first was to identify the quality attributes critical both for service organizations and its customers.

### **Employee satisfaction**

Most service organizations recognized a strong link between the customers (customer satisfaction) and employee/workforce satisfaction. The research group realized that they had to calculate the emotional component for both customer satisfaction and employee satisfaction.

Based on these findings, the research group concluded that employee satisfaction was the key to customer satisfaction. Therefore, they had to establish performance metrics and constantly monitor employee satisfaction. This would not only send warning signals but help prevent customer dissatisfaction.

The research team identified the need for an employee reward and recognition system. The idea was to keep employee enthusiasm at a high to ensure customer satisfaction.

### **Management Skills**

Organizations undertake numerous activities to provide value added service to the customer. In short, it is all about managing activities. Easier said than done!

Managers are the key to managing activities. Their ability to manage activities and leverage employee performance determines organizational success. Thus there is a strong need for managers to continuously improve their managerial skills. The survey by CQM (Center for Quality Management) showed that most organizations felt the need for strong and innovative managerial skill sets.

Further, there was a strong feeling that managers must actively involve in process orientation. They need to act as shock absorbers between the top management and the employees. This requires them to fine tune processes and the working culture.

Thus the CQM research team saw the theorization of management skill training programs for managers as imperative.

### **Information/Communication**

Another important finding by the research team was the criticality of information access. Projects often fail and customers back out because the teams did not have reliable information.

The key to attracting customers was to know their likes and dislikes. Most organizations could provide this information. However, the source to the information was unreliable. Further, conflicts/difference of opinion between bosses and their subordinates or between employees jeopardized the flow of reliable information. Concerned personnel approach customers with insufficient information to the annoyance of customers. Such customer dissatisfaction eventually led to customer switching.

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### **Now what?**

Successful organizations on the other hand adopted a different approach. They installed a common knowledge management (i.e. information portal). Employees could thereby access 'customer relevant information' no matter where they were located. No phone calls, no heated arguments, no communication gap! "*Log on and see for yourself*" was the order of the day. These information hubs were a one-time investment and they eliminated the huge telephone bills.

### **Process enhancement**

The research team identified many TQM methodologies that could be used to a good effect, like Concept Engineering (CE).

CE can be used to design the service process. Organizations can take help from customers and internal partners/stakeholders in designing the service. ISO certifications can help standardize processes and focus on process orientation.

Few organizations had applied Goldratt's Theory of Constraints to eliminate service bottlenecks and streamline work flow.

Finally, the research team proposed the need for real time data to optimize workflow and process feedback loop. This would help augment the responsiveness both to the customer and the market.

### **Performance metrics**

One of the main reasons for the failure of TQM was the absence of performance metrics. The best way to initiate performance metrics was to discipline the internal processes. This can be accomplished through ISO certification. Further, the team proposed the use of the *voice of the customer* as a yardstick to measure service parameters.

Finally the team recommended the Hoshin management as an effective tool to set goals and deploy strategies (throughout the organization) to accomplish these goals.

### **Employee empowerment**

Service organizations simply put are a monolithic chain of activities. Too many activities are involved. It is crucial that activity empowerment is granted to the concerned.

Otherwise, every issue trivial or big must be sent to the high command i.e. the top management for approval/disapproval. This would in turn delay the entire proceedings.

Employee empowerment and management training inspires innovative and spirited decision-making. The research group observed that in few organizations, employees took responsibility of critical issues. This generated a feeling – "I am a part of this family".

Employees must feel that they belong to the setup. Otherwise disorder and self-interest will persist. Employees will restrict their contribution, merely discharging their duties mechanically. Such an attitude would create an uncongenial work environment.



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Employees have a greater responsibility than just flashing their ID cards to open the office doors. Their ultimate goal must be customer satisfaction. This can be achieved only through employee satisfaction. For this they must be empowered to take decisions and provide quality of service to the customer.

### **TQM – Its importance!**

TQM focuses largely on the customer, defines goals with the customer in mind and then helps improve the process as per the customer. A prospective model for the TQM would be the customer at the centre. TQM primarily aims at customer satisfaction. This it does by integrating cultural pathways of organizations with the business environment.

Some gurus visualize every organization as a service organization. Thus there is an emergent need to improve the quality of the service.

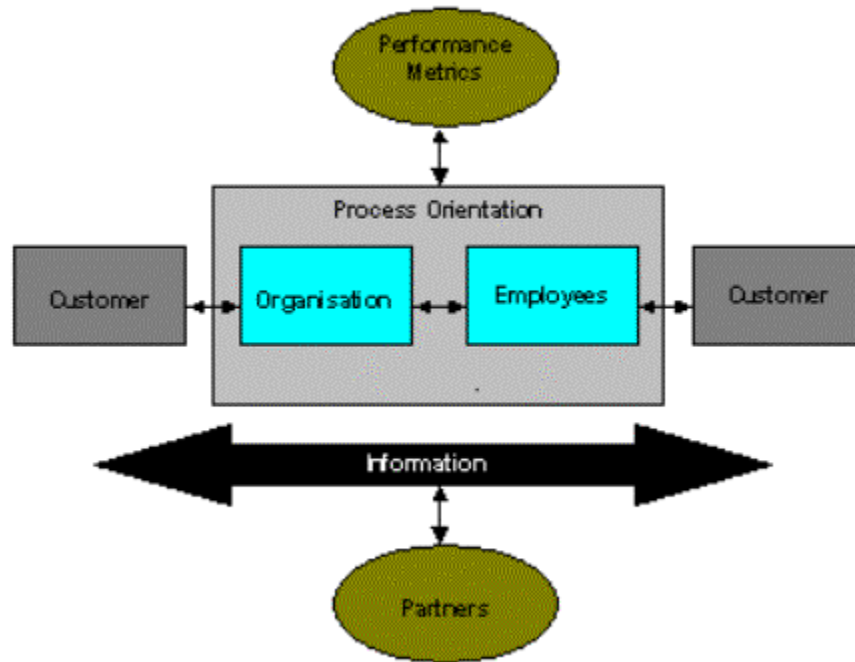
The Center for Quality Management (CQM) initiated a research project on understanding the application of TQM in the service sector. The research identified key aspects that differentiated organizations that enjoyed success in implementing TQM, from those that did not.

The following aspects emerged as critical in improving service quality.

- Management skills
- Information/Communication
- Process enhancement
- Performance metrics and
- Employee empowerment (These points have been discussed in the previous articles)

Based on these aspects, CQM developed an enterprise model and process matrix for TQM and the application of TQM in the service sector. The model is as shown below.

**Enterprise Model for TQM**



**Explanation**

Irrespective of the business, each process starts and ends with the customer. The process flow is a loop that begins with the customer needs and ends with customer satisfaction.

Also the process involves extensive co-operation with the suppliers/partners. In all, the model encompasses the suppliers, the organization, the employees and the customers.

In order to improve clarity of the research, the CQM team considered functions in typical service organizations like, hotels, fast food chains, insurance companies and consulting firms

The research identified three business processes common to the service sector.

- The operation – The objective process
- What needs to be done - The reality!
- Innovative process

A typical business process matrix is as shown below.

<b>Business</b>	<b>Objective</b>	<b>The reality</b>	<b>Innovative Process</b>
<b>Hotel</b>	<i>Food / Laundry Accommodation</i>	<i>Proper functionality/ Excellent customer service</i>	<i>Design process to reduce customer annoyance</i>
<b>Fast food chain</b>	<i>Serving Food</i>	<i>Taking orders</i>	<i>Example : Online ordering</i>

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<b>Insurance company</b>	<i>Claims Processing</i>	<i>Sales/Customer service</i>	<i>Online and easy claiming process</i>
<b>Consulting firm</b>	<i>Accounts management</i>	<i>Customer support</i>	<i>Bag new projects</i>

At this stage two aspects were identified, the enterprise model for TQM and the business process matrix. Based on this information, a typical Process matrix for the service organization was identified.

### The process matrix

The process matrix as given hereunder relates these different business processes to the attributes of the enterprise model.

<b>Attributes</b>	<b>Objective</b>	<b>The reality</b>	<b>Innovative Process</b>
<b>Process Orientation</b>	<i>Aim at customer satisfaction</i>	<i>New ideas to improve process management</i>	<i>Attempt changes yet ensure reliability</i>
<b>Customer</b>	<i>Not involved in the process</i>	<i>On the face answer as to the product is good or bad</i>	<i>Aim at long term relationships and mutual understanding</i>
<b>Partners</b>	<i>Ensure high quality supplies</i>	<i>Co-ordinate to supply raw materials</i>	<i>Long term relationships and focus on cost cutting</i>
<b>Information</b>	<i>Must be reliable and accurate</i>	<i>Real time, accurate, transparent and reliable</i>	<i>Encompass more number of employees by creating an information web</i>
<b>Employees</b>	<i>Dedicated, process oriented and good problem solving ability</i>	<i>Honest, empathetic and dedicated</i>	<i>Employee empowerment and involvement in the business process</i>
<b>Organisation/Management skills</b>	<i>Employee empowerment</i>	<i>Delegation of authorities to satisfy customer needs</i>	<i>Delegation of authority to improve organisation performance</i>
<b>Performance metrics</b>	<i>Practical and conclusive</i>	<i>Hard to update and modify</i>	<i>Enhanced project performance and customer satisfaction</i>

The CQM research team developed the Process matrix based upon the research it conducted in various service organizations.

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Based on the process matrix one can easily co-relate to the enterprise model for service organizations with the business processes. The CQM team was convinced that this Process Matrix could be applied to any sector, let alone the service sector.

Nevertheless, the team set about verifying if the process matrix was “indeed correct”.

The testing ground for this research was the Federal Reserve Bank of Boston. The bank was looking to devise a monetary policy to ensure safety and soundness of the bank system. Armed with the process matrix, the team along with the bank set about achieving the desired objective.

First was the ‘check error reduction method’ as a test case for the operational process. A check error matrix was developed to analyze the seven attributes of the enterprise model.

Attributes	Happenings	Solutions
<b>Process Orientation</b>	<ul style="list-style-type: none"> <li>• <i>Repetitive actions like checking customer accounts, balance, transfer of accounts, case withdrawal, loan sanctions etc</i></li> <li>• <i>Critical data rests with the management</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Process mapping</i></li> <li>• <i>Feedback sessions to analyse errors in detail</i></li> <li>• <i>Make the data and the system transparent.</i></li> <li>• <i>Keep a check on the error rates.</i></li> </ul>
<b>Customer</b>	<ul style="list-style-type: none"> <li>• <i>Customers are our suppliers.</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Enhance customer interactivity</i></li> <li>• <i>The Boston Fed bank co-ordinated with its customers to increase money/work flow.</i></li> </ul>
<b>Partners</b>	<ul style="list-style-type: none"> <li>• <i>Suppliers/partners are our customers.</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Same as above</i></li> </ul>
<b>Information</b>	<ul style="list-style-type: none"> <li>• <i>Had to be relevant and accurate (More so in this case as it was a bank)</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Create customised web portals that allowed the customer to view their account status online and</i></li> </ul>

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		<i>thus reduced office work.</i>
<b>Employees</b>	<ul style="list-style-type: none"> <li><i>Employees were dedicated however it was observed that they lacked team spirit.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Employee promotion based on review and performance, conduct feedback sessions</i></li> </ul>
<b>Organisation/Management skills</b>	<ul style="list-style-type: none"> <li><i>Errors were often spotted after the debacle.</i></li> <li><i>Sensitive working environments demanded the need for a reliable management.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Increased employee empowerment (only for those capable of it)</i></li> <li><i>Focus on process enhancement rather than project enhancement</i></li> </ul>
<b>Performance metrics</b>	<ul style="list-style-type: none"> <li><i>Customer driven metrics were not in place.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Long term policy - devise clear and transparent customer driven feedbacks and metrics.</i></li> </ul>

The ultimate goal of the check error reduction was to reduce the errors at the operational process stage.

This method helped the Boston Federal Bank to significantly improve its process and utilize the hidden potential that was earlier untapped.

### **Innovation through TQM at Synetics**

Synetics is a service company and a global systems integrator. The company wanted to innovate its existing operating culture. In the process, few attributes were identified.

- Managing and meeting customer expectations
- Optimal use of information systems

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- Leveraging workforce performance
- Devising performance metrics.

Synetics applied the seven-step method PDCA (Plan-Do-Check-Act) to its process. The aim was to achieve higher levels of customer satisfaction.

A few attributes emerged as critical to achieve the above objective.

**Rapid Action Development** - RAD is software that Synetics' engineers developed by applying the TQM. The software aimed at processing customer orders quickly and efficiently.

**Joint requirements planning (JRP)** and joint application development (JAD). JRP and the JAD were platforms wherein customers interacted with the Synetics and conveyed their opinions. This in turn allowed Synetics to modify product design as per customer requirements. In short, they allowed Synetics to collect the voice of the customer.

**Notes databases and standard project notebooks** - Synetics being a systems integrator had many stages, wherein the product was assembled step by step. As the product passed on from one stage to another, engineers needed to know what was done at the earlier stages. This demanded a standard process.

To achieve this objective, Synetics standardized its design notebooks. Engineers were now aware of all the developments relevant to the product. Further, the database was made global. Thus everyone from the design team to the sales team were aware of the proceedings.

In order to innovate its process, Synetics devised its process matrix based on the attributes of the enterprise model.

### Enterprise model at Synetics

Attributes of the enterprise model	Solutions
Process Orientation	Determine all repetitive process within the organisation. Standardise these processes and monitor them to control
Customers	Understand the needs of the customer and support them with the best technology and service.
Partners	Team with suppliers who can provide value added service. Involve their contribution thereby transforming the system into a two-roof activity. In short, look for suppliers as value added resellers.
Employees	Never separate the customer and the employee. No TQM initiative can be successful, unless employees realise the importance of following the customer's voice
Organisation	Managers must look beyond being just co-ordinators. They must aim at motivating the workforce towards the organisation's ultimate goal i.e. customer satisfaction.
Performance	Measure key processes to ensure reliability and efficiency.



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metrics	Documentation must be standardised and accurate. Achieving ISO 9001 2000, compliance for the Quality management system is the ideal way to kick off the improvement initiative.
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By devising an enterprise model matrix, Synetics was able to implement TQM. The process matrix is an excellent approach to TQM as the goals are clearly defined. Since the approach consciously takes into consideration the voice of the customer. It helped Synetics to continuously improve its customer service.

### **Learning**

#### *Manufacturing -*

Quality is a buzzword within the manufacturing department. Operational process and products are tested to check for errors and discrepancies. Given that manufacturing is more physical construction, the environment demands quality. Accordingly, the bias is towards quality. Nevertheless, customer needs may take a back seat.

#### *Service -*

The service sector tilts significantly to the customer. Communication with the customer is more interactive. Orders often run back and forth between the organization and the customer. Hence, in such cases service quality is evident and key to success.

The CQM team found that in most organizations, business processes are the same, irrespective of their domain. However, they do differ in unique business processes that demand different strategies. These organizational characteristics determine the organization's market penetration and customer satisfaction. In short, these unique business processes are "key" to organizational success.

All unique/key processes must be monitored and checked for discrepancies. One effective way of achieving this objective is by implementing TQM. By developing the enterprise model and the process matrix, organizations can be sure of **what they want** and **how to get it!**