

# [Strategic quality change for construction company](https://assignbuster.com/strategic-quality-change-for-construction-company/)

Gill Construction Ltd, is currently based in Alberta state, and running different construction projects all over the state. Most of the construction projects are residential based, however they have also participated in commercial projects in Lacombe, which includes Fountain Tire, Lacombe Action Group, Wilson’s Funeral Chapel and numerous shops.

In the recent time Mr. Amar Geet Jill believes that it is time for their company to move on and expand the business to other states and also do more projects in commercial sector. The current quality systems in place have many loopholes which allow the wastage of raw materials, high costs, untrained staff and lack of machinery. Mr Jill believes that before he expands the business he wants to gain NQI award for excellence in quality, which will add more to the business reputation and will also help them to improve quality management system and sustain growth.

In order to gain the NQI Excellence award it is important to have effective quality management systems in place which requires a systematic approach. It involves following steps.

## Gap Analysis

A technique utilized by the managers to compare the actual performance with the potential or expected performance in order to determine the whether the goals are met or not, and if resources are used effectively. It involves two questions ‘ Where are we?’ and ‘ Where do we want to be?”

Gap in actual and expected performance

With the help of Gap Analysis Report, Manager will be able to identify the problem easily, Gap analysis report shows that problem is everywhere so it’s big task to cover all areas and rectify all problems to make a smooth system as per quality system. Depending on the situation, Gaps are classified into four types:

The customer-operations specification gap: the gap identified between what customers expect and what is the outcome of the operations, For- example, Customer expects a car to give service after 15000km, but the operations specification states 10, 000,

At Gill Construction, customer expects the project to be completed in 3 months time, but company specifies 4 months time, same can be the concern for the costs.

The concept-specification gap: the gap identified between the concept and the operations specification of a product or a service. For-example, keeping the costs low for the customer but use of low quality material to keep the costs low has compromised the quality.

The quality specification-actual gap: When there is a gap between, quality specified by the organisation and the actual outcome of the operations. For-example: the specified standard was that the wall will be built using concrete blocks and mortar, but due to certain reason it was built using brick and mortar. In another case, it was specified that the wall will be at 90 degree straight but due to human error, it is not a straight wall but a slightly tilt.

The actual quality- communicated image gap: The gap between, the image marketed, or communicated to the customer and the actual quality of the product or service. For-example it was advertised that the workers at Gill Construction are highly skilled and trained, and latest technology is used however that is now the case.

The gap analysis report generated for a newly built house, which has 5-bedrooms with attached toilets, a sitting lounge, dining room, kitchen, and 2 car garage:

A very significant gap was noticed in the report between the actual resources utilized and the expected resources.

The gaps identified under each type, can lead to poor and perceived quality, and hence it is the responsibility organisation to eliminate these gaps, and come as close to the specified quality and as they.

## Degree of Change:

In order to close the gaps, and meet the quality standard, a companywide change is required. The planned change is a continuum ranging from incremental changes, which involves the improvement in the processes and operations to a limited dimension to fundamental changes that involves the complete redesigning of its operations. Incremental changes involve the changes to decision-making process of the organisation, which exist between the business strategy and culture.

## Employee Participation:

Employee Participation is very important to improve the quality. Managers need to encourage workers to take responsibility for the quality they provide, and meets the customer’s expectations. Employees are the internal customers for the organisation, who receives the product of service by their supplier.

Before planning and implementing a companywide change, it is important to get their employees on board. There suggestions are very important to the management. It is in human nature that it is always afraid of uncertainty, something which is unknown and un seen. It is the job of managers to manage this uncertainty. They need to involve the employees in decision making process and take their suggestions, this increases their confidence level and motivates. If the organisation is going to get new cement mixers, then first they need to train the staff in order to operate that mixer. It is important that work-force needed to be trained to operate the new machinery so that the specified quality standard can be achieved.

## Resource Requirements:

Following resources and tools are required to implement the new quality improvement plan.

Technology – In today’s modern age, technology sector is growing rapidly, and everyday new machinery is invented for human comfort. If Gill Constructions, wants to improve their work build quality and speed up the construction process they need to utilize the new technology. In current process, mortar was prepared using the large mixer. This mixer was operated using the belt connected to the truck shaft, which was used to transport the mixer. This was adding an extra fuel cost. They had to use the same mixer for smaller projects. A new mixer is available in the market, which is small and portable and easily fit in the back of minivan. It also has a small generator attached to it, to power it up.

Worker were using the old water-bubble scale to align walls and doors straight and levelled,. However they are not always correct. A new digital scale is required for this purpose.

Training and Development – It is seen that most of the work-force is from Indian Punjab, hence not very skilled and qualified to operate the new machine. In the previous construction projects, it was seen that accident rate was very high, which was also adding extra cost to the organisation. With old bigger, mixer, there was no cover to the belt connected to shaft of the truck and mixer, and many workers, got their hands stuck in their, which caused the injuries. It was also noticed that they were working without any protective gear e. g safety helmet, masks, gloves. Hence they need to be aware of health and safety hazards at work place. They also need to be trained to operate the new machinery.

Transportation – In the previous projects, the cost was very high due to high waste material. This was due to the over stock of the material. They were ordering material which was more than required. In order to lower the costs they need to utilize the idea of JIT ( just in time ) . This means that material should be stocked just when it is needed. For this approach to be effective, they need to have a good transportation system and good relationship with the supplier. They need to check with the supplier to provide the material when it is needed, they also need to negotiate the on the quick transportation of the material as well.

Quality System – Quality Systems will be in place to ensure that quality objectives are met. The first step in this system is to identify what our customers want. At Gill’s Construction, customer satisfaction is very important. Customer expects the work to be done and time, and the build quality should be strong and, reliable and durable. The next step is to identify the service or product which responds to the customer’s need. They need to develop processes which will respond to that need. They need to give a quality and reliable build to the customers.

Quality Circle: These are a group of worker or employees who work together to improve the quality and give solution to the problem. Quality Circle will be formed in order to help workers participate in the improvement process. For-example, workers can suggest the amount or type of material required. Depending on their experience they can also suggest what type of paint can be used.

## Total Quality Management:

TQM is a philosophy of management, which addresses the means of raising the quality performance to unprecedented levels. TQM involves the participation from whole organisation and demands to be implemented in all aspects of the business processes. It focuses on the involvement of the management, workforce, suppliers and business process. This means that if the problem lies in any of the business sector that has to be addressed in order to sustain growth.

### Benefits of Quality Change:

Following benefits can be gained with quality change

### Improved business performance:

With the help of this quality change, Gill Construction will be able to see a improved business performance. They can keep their costs low and keep the profit margin high. They will be able to expand their business to a higher level.

Training and Development of the staff will help them to get a skilled work force which will be highly motivated and professional. This way they can also keep the accidents rate low.

## Corporate Image:

Since Canadian market is very competitive, the new improved processes and systems will also create a good image for the organisation. With the use of new machinery and training staff, they will have a competitive advantage. They can promote their business in a better way.

## Motivated Work Force:

The use of new machinery and training and develop will assist employees to develop their new skills this will act as a motivating factor and build their confidence level. It will also make them feel empowered. Hence Gill construction will have a highly skilled and motivated work force on board. They can also assist the management to further improve the business processes.

## Customer satisfaction:

The quality improvement technique will also help them to get customer satisfaction on a higer level. They will be able to address their customers’ needs in a more efficient and effective way. With this they can rebuild customer relation and help maintain business

## Performance measurement

Even though, quality systems are in place and operations are running as per specified, but that doesn’t mean, that job of manager is finished. All the operations, regardless of the fact how well they are managed and running, need to be monitored all the time. This ensures that if the Quality System has given the desire result or not.

Performance can be measure using five performance objectives, it is the degree to which operations fulfil these objectives

* Cost
* Speed
* Quality
* Dependably
* Flexibility

## Total Quality Management Principles:

TQM is a management approach which involves the strategy, data and effective communication to integrate quality principles into the organisation.

#### Customer focused:

The very first principle of TQM is to be customer focused. Whatever done for the quality improvement, is to gain customer satisfaction. If Gill Construction will training the work force so that they can operate the new machinery, that will be done keeping in mind, customer’s demand.

#### Employee Participation:

The next principle is that managers need to ensure that they have employees on board. Managers need to ensure that they have complete participation from employees

#### Process Focused:

This involves the complete focus of the management centred towards the process thinking, so that two key principles can be achieved:

Prevention: the first step to improve quality is to prevent errors. It is better to train staff and avoid accidents rather than finding ways out of it

Zero defects: The ultimate aim should be to provide a service with zero defects, that means no comprise at all. The mortar should be prepared by missing the correct ratio of cement and sand.

Getting things right first time: The idea of zero defect gives rise to getting things right first time. This means that things need to be done in right way first time. Rather than mixing the preparing the mortar in wrong ratio in first attempt and expecting it to be correct in next attempt should be prevented,

For an organisation to successfully implement a strategic quality change it is important to manage six key supporting factors:

#### Action Planning

The very first step for organisation is to devise a detailed implementation action plan. This includes chronological lists of actions (tactics) which add the necessary detail to their strategies. And assign responsibility to a specific individual for accomplishing each of those action steps. Also, they set a due date and estimate the resources required to accomplish each of their action steps

#### Organization Structure

Next step is to sort the organizational structure according to the action plan and strategy. It is very important that managers must align the strategy with organizational structure. They manage the question “ Is the organization’s current structure appropriate to the intended strategy?”

#### Human Resources

Organizations successful at strategy implementation consider the human resource factor in making strategies happen

#### The Annual Business Plan

Organizations successful at implementation are aware of their need to fund their intended strategies. And they begin to think about that necessary financial commitment early in the planning process

#### Monitoring and Control

Monitoring and controlling the plan includes a periodic look to see if we’re on course. It also includes consideration of options to get a strategy once derailed back on track.

#### Linkage

Many organizations successfully establish the above five supporting  factors. They develop action plans, consider organizational structure, take a close look at their human resource needs, fund their strategies through their annual business plan, and develop a plan to monitor and control their strategies and tactics. And yet they still fail to successfully implement those strategies and tactics. The reason, most often, is they lack linkage. Linkage is simply the tying together of all the activities of the organization…to make sure that all of the organizational resources are “ rowing in the same direction.”

After the critical analysis of the current business situation and thorough strategic planning, it is time to implement it. Managers have planned the project to be implemented in a course of time, so that it is easy for them to manage it and also for organisation to adopt it.

## Staff Training:

Before the strategic change is implemented, it is important to get staff on board; hence it is important to train the staff. Workers will be given training on operating the new machineries. 2 hour workshop will be held over the weekend, without affecting the daily construction work. They will be given training on importance of health and safety at work place.

## Transportation:

To utilize the idea of JIT efficiently and effectively, it is important to have a good transportation system in place. Contract with the transportation company who transports the material from supplier to the construction site will be review. It need to be on time and as and when required basis. A penalty will be charged for late delivery. Also try to negotiate on charges, since the current charges are higher than the market rate.

## Supplier:

Once the transportation system is in place, next is to negotiate with material supplier to provide materials on as and when required basis, this is called Just In Time. The supplier will provide the material as required by the organisation. This will help to keep the stock and inventory costs low. Good relationship will be maintained with suppliers as this will help to get good service in return.

## Communication:

In order to keep the gaps close due to communication errors, an effective communication system will be adopted. Project Managers will be placed in organisation, which will supervise their respective construction site. Everything including the material supply and HR will be managed by them. All the workers working on that site will be answerable to the Project Manager. They will also be in direct contact with the client so that customer’s demand and requirement is passed down the line more effectively. Project Managers will than answer to Mr. Amaar Jeet Gill, who will supervise and discuss the issues with them on the wider perspective.

## Quality Culture:

Before a quality change is implemented in the organisation, it is important to implement a quality culture first.

A cultural and behavioural shift in the mind-set of all participants in the construction process especially top or senior management is necessary if the construction industry is to improve its performance (Kanji and Wong, 1998; Love and Heng, 2000; Haupt and Whiteman, 2004).

Culture in context of organization is the ways institutes and businesses implicit beliefs, norms and values and premises which underline and govern the behaviour. Hence a quality culture in an organization can be stated as ‘ one having clear values and beliefs that foster total quality behaviour’.

Quality Culture in Gill Construction can be adopted in following ways:

#### Top Management Commitment

It will be important for management to commit their self in the implementation of Quality Change, since it requires everyone to work to satisfy the customer’s needs continuously. Without the clear commitment from top management and leadership it will be hard to get others on board. Leadership has to make this change their strategic objective. Hence Leadership will be able to provide suitable environment to the members of the organisation to improve performance. Top – Management will have to put forward quality over costs and other factors, and it is due to this reason, their commitment is required.

#### Customer Management

It is important to focus the result of all the processes towards customer satisfaction. When the focus is towards customer satisfaction then it will be easy to prioritize thing. Customer oriented culture will help them to gain service and product with zero defect and right first time.

#### Employee Participation:

Employee participation is very important if quality is the goal. This will help to break down many barriers to achieve quality. They also need to be encouraged to work in a team. Team-work will help encourage them to help each other and come up with solution many problems. The use of Quality Circle will also help them to pass on their suggestions to top management.

#### Self-Managed Teams:

A self-managed team is defined as ‘ a group of employees or staff who is responsible for the management of themselves and the daily operations carried out by them.’ Work carried out by a typical self-managed team is handling job assignments, plan and schedule work, make decisions related to production and deal with problems.

At Gill’s construction similar teams will be made on the operational level, they will be different from labour union. The teams will be made based on the project and the department related. Each team will have a group manager/ team leader who will be electeed by all the team members however final authorization will be from project manager. A self-managed team is different from quality circles.

#### Quality Circles:

Quality Circles are informal group of employees / team members / staff, who meet together voluntarily to discuss their work related issues. Their aim is to identify, define, analyze and solve work related problems.

At Gills Construction staff will be encouraged to make quality circles, which will help them to share their knowledge and experience. They can give their suggestions to improve quality or service which will be formally submitted to group manager/ team leader who will pass it on to project manager.

## Monitoring and Evaluation

The final step is monitoring and controlling the implementation. This step is performed throughout the life of the project and ensures that the work results lines up with the schedule plan. Schedule control requires the use of progress reporting, schedule change control systems, such as the use of project change requests, performance management, and variance analysis to determine if additional action is required to get the schedule back in line with the plan.

## Internal Auditing

Professional Auditors will be appointed for the purpose of monitoring and evaluation. Their task will be to assist with the corrective action and investigating problems that have occurred, and taking action to prevent them from reoccurring within the process or organisation.

The first step will be to identify the root cause and what really made this happen? What can we do to prevent it from happening again?

Once the solution is devised for the problem, the follow up will be done to ensure that it has worked and positive results are achieved. Auditors will revisit the issue and check if it happening again. For sake of record, the problem, its root cause, the action taken, its effectiveness and the actual results will be recorded.

Record the problem, the root cause, the action taken, the effectiveness of the action, and the actual results of the corrective action. Did the problem occur again? Were they able to see measurable improvement? If so, how much? What date did the problem disappear? Record the results that they observed when following up on the corrective action to determine effectiveness.