

# [The external triggers for change in toyota](https://assignbuster.com/the-external-triggers-for-change-in-toyota/)

In today dynamic marketplace, change management has become a very vital element of the organisation development. Change doesn’t not always imply innovation, thus, change is defined as a part of organisation invariably influence people and process of the organisation (Cole, 2008).

The pace of global, economic and technological development makes change an inevitable feature of organisational life. Change can be classified into planned change and unplanned change. Unplanned change is a piecemeal reaction to circumstances as they occur. Whereas, planned change is change that is designed and implemented in an orderly and timely fashion in anticipation of future events (Hayes, 2002). For instance, the implementation of Just-In-Time (JIT) operation in the Toyota Production System (TPS) is considered as a planned change. It is because the adaption of JIT is gone through a planned and well-managed change process.

Change is crucial to strategy and vision generation when organisation is preparing for the strategic planning process (Burnes, 2004). Change is an alternation of organisation’s environment structure, technology or people. Organisation often view change as a continuous process that they need to capture the learning and pass it on.

The forces of change can be divided into internal and external forces. External forces include economic factors, and new market opportunity. By contrast, the internal forces inside an organisation can lead to a change (Griffin, 2003). Organisation need to clearly clarify the factors, which have triggered the changes. After that, a change management approach should be undertaken, which comprises of change management process, approaches adopted to minimise the resistance to change and an overall performance evaluation program of the change.

History of Toyota

Toyota Manufacturing Corporation (TMC) story starts, when Sakichi invented the wooden Toyoda handloom, which was to revolutionize the country’s textile industry. Toyoda Automatic Loom Works, which is now known as Toyota Manufacturing Corporation (TMC), was founded in 1918 by Sakichi Toyoda and Kiichiro Toyoda. Kiichiro Toyoda had travelled to Europe and the US in 1929 to research automobile production and begun researching gasoline powered engines in 1930. The 1st A1 prototype passenger car was completed in year 1935 (http: //www. toyota. co. uk).

Toyota began its operation in Europe since the early 1960s. They attempted to design the car based on Europe market needs and wants. Further, Toyota had established a manufacturing plant operation in UK in year 1989 because of the strong tradition of vehicle manufacturing in UK and the large domestic market for their product (http://www. toyotauk. com). In year 2004, Toyota has become the one of the top three car manufacturer, alongside General Motor (GM) and Ford. Globalisation has forced Toyota to improve their business process to be more competitive in the global market. Toyota has established a clear vision – ‘ 2010 Global Vision Strategy’.

The mission of Toyota is to create a more prosperous society through automatic manufacturing. Therefore, Toyota has to always focus on the future of the automobile industry when deciding the position of the company. The vision of Toyota aims to achieve long term, stable growth in harmony with the environment, the global economy, the local communities it serves and its stakesholder (http://www. toyota. co. jp).

Forces for Change

The external and internal forces have resulted in the need of change. The external triggers for change are derived from outside the organisation.

The external triggers for change in Toyota:

Globalisation – The declination of barriers to the free flow of products and services had driven the trend of globalisation. Globalisation has opened up new market and created opportunity for business to expand their market share (http://news. bbc. co. uk).

Increased Competition – The increased the competition in the market has forced companies to improve their business operation to be more competitive in the market. For example, as a global player – Toyota, frequently confront each other as competitors in nation after nation. Ford, for instance, has 5 car-design centres scattered around the world, each focus on specific market segment (Terpstra and Sarathy, 2000). As a result, change may occur. In this assignment, case regarding to the impact of change on TPS had changed the company policy, process, and decision making.

Tough rivalry – There are many aggressive competitors, such as Nissan, GM, Ford and so on. Most of them have established their own competitive advantages in the global market, thus, this may constraints Toyota to gain more market share in the global market (Hill and Jones, 1998). Thus, there a need of change for Toyota to create their competitive advantages.

Low Demand – The demand of consumers is low so Toyota needed to turn out low volume of different models using assembly line instead of supporting the dedicated assembly lines for one vehicle. Finally, Ohno developed the TPS, by adapting the Ford production system to improve the effectiveness and efficiency of production lines. This idea was derived from the trip to Ford factory and designed to achieve three main objectives: costs reduction, quality improvement and zero inventory (Lynch 2006).

The internal triggers for a change in Toyota:

The introduction of JIT – The new management philosophy – Just-in-time system had been applied by Ford companies in 1910. They arranged all the elements of a manufacturing system – people, machines, tooling, and products in a continuous system for manufacturing the Model T automobiles – designed to make huge quantities of limited number of models (Lynch, 2006). As a result, Ford became the largest car company in Japan with GM as the second largest manufacturer, together manufacturing over 90% of the vehicles manufactured in Japan.

New product innovation – There is a need of new product innovation because the increased fuel price has influenced the consumer buying behaviours. Therefore, there is a need for Toyota to develop fuel-efficient vehicles and hybrid vehicles (Lynch, 2004).

Management and Marketing – The poor management of Toyota in India has led to a lockout in India plant. The falling demand of car in Philippines has led to the Toyota plant close down because of the poor marketing expertise to help the Toyota to increase their product awareness (http://news. bbc. co. uk).

Operation problem – Based on the mass production paradigm of the day, economies of scale alone should have made this an impossible for the tiny Toyota. The new discovery of the technology that used by Ford in production line became a threat for Toyota’s position in the market. The only way that it could survive was by finding new and flexible production methods that could help them to create more value on car manufacturing process (Lynch, 2006).

Production Lines – There are numerous problems with Toyota (without using the technology in its TPS) (Turban, 2008):

Problem in its supply chain and its operations, and its ‘ car keeping’ costs mounted.

Customer dissatisfaction increased due to Toyota inability to deliver cars to dealers on time.

Management used computer that generated useless reports and data. Thus, management faced the problem in using the data strategically.

Internal department often failed in file sharing and information exchange. Thus, it had slow down the speed of reporting.

Report system that used in TPS always provides inaccurate information and information overlaps.

Management failed in making decision in a given time due to the inaccurate information.

Types of Change

Change is the transition from one state to another. There are three types of changes which may undertake by the organisation to response to the change in external and internal environment:

Incremental Change – According to Hayes (2002), incremental change is a continuous adaption and modification of organisation existing strategic, process, policies and system. It is risk for an organisation adapts incremental change if the external forces of change are great because the opportunity of organisation development and expansion may be constrained by the existing systems and operations.

Strategic Change – Strategic change is the proactive management of change in organisation to achieve strategic objectives, which involves establish new systems, policies or procedures (Lynch, 2003).

Transformational Change – Transformational change may involve both strategic and incremental change because the intervention leads to alignment among the organisation’s strategies, design element, and culture (Johnson and Scholes, 1999).

The revolutionary of Toyota is considered transformational change. The transformational change of Toyota occurs in response to external and internal disruptions, which consist of tough rivalry, internal company dynamics and so on. There disruption severely jolt organisation and push them to alter business strategy, and in turn, their mission, values, structure, systems, and procedures (Cummings and Worley, 2001):

Transformational change involves altering most of the featuring of the organisation and achieving a fit among them and with the firm’s strategy. Today, the demand of better quality has been on the increase for the past two decades or more. Toyota has change process in production, business operation and retail system. The culture of Toyota has changed as they attempt to develop a lean organisation. Previously, the culture of Toyota is problems of production are corrected later and quality of controlled by additional inspection and containment. Now, they build a culture that stops to fix problems with the core philosophy of eliminating waste (Liker and Meier, 2006).

Transformational change happens in situation experiencing huge change and uncertainty, thus, changing never finished as new structures and process will continually have to be altered to fit the changing condition. The adaption of JIT approach in TPS enable Toyota to produce different types of cars in one production line, thus, it has increase the ability to Toyota in response to the different types of customer preferences (Hino, 2006).

Transformational change requires innovation and continuous learning. Toyota is considered as a learning organisation because their culture is stopping the problem and fixing the problem at that time. This typically is a continuous learning process and trying new behaviours, assessing their consequences, and modifying them. Learning occurs at all levels of the organisation from top level management to low level management (Liker and Meier, 2006).

Change Management Of Toyota

Change is a critical part to be managed when Toyota’s globalization had started – exporting the Crown to the United States. Thus, a well-organised change management process (Appendix 1: Change Management Process, p 20) needs to be carried out to avoid the problem of inefficiency works due to the lack of concentration on specific aspect (http://blogs. iht. com). According to Hayes (2002), there are several steps involved in the process of change management:

1. Recognition: Organisation has to be clearly aware of the external and internal factors (Refer to force for change above) that lead to a need of change take place within the organisation.

In year 1940, Ohno Taiichi, chief engineering of Toyota found that it is difficult for tiny Toyota to compete with Ford and General Motors (GM) (the world largest car manufacturing company) in a global market. The only way that it could survive was by looking for new and flexible production method that could help them to establish their position in the global market (Lynch, 2006). Other than that, the demand of better quality of the market has indicated the problem of traditional TPS – focuses on reducing per unit costs generates a mind-set of never stopping the line because higher production number theoretically equal lower cost per unit (Refer to the internal and external factors, which trigger the need of change).

2. Start of Change Process: In this stage, it involves the translating the need for change into an aspiration of change among the people, deciding who will manage the change and building a workable and effective change relationship.

In order to start the change process, Ohno had visited the Ford factory because of the belief that Ford factory can provide him a way to modify the TPS. However, Ohno found that the Ford production was flawed. In response, he looked for a way to make mass production efficiency with small production volumes and at lowest costs – Just-In-Time (JIT) approach (Stevenson, 2007). Thus, forces of change have encouraged Toyota to develop lean system for TPS by adopting JIT approach (Appendix 2: Attributes of Lean Organisation, p21) (Appendix 3: Traditional unit-cost-focused manufacturing, p22) (Appendix 3 (a): Lean Waste Reduction Result in Lower Total Cost, Improved Delivery, p23) (Hill, 2007).

3. Diagnosis: Then, diagnosis of reviewing the present and identifying the future for better change management is taken place. Reviewing the present state can help organisation to the need of change through diagnosis the causes of problems, current deficiencies and opportunities. Organisation may able to clearly identify what is changing and the future direction through reviewing the current state. Organisation have to imagine how and what future that business likely to achieve and then establishing objectives to accomplish it.

The present state of Toyota is unable to produce the types of cars, which can meet the market needs and wants, mass production lead to high waste, and so forth. Therefore, in order to a well-entranced global company, Toyota had established the major objective of revolutionary TPS is to build up competitive advantages- affordable price and high quality and eliminate the problems of current TPS, so that Toyota can compete with other larger car manufacturer although their market share is smaller (Krajewski and et al., 2007) (Appendix 4: Toyota Production System, pg 24).

3. Prepare and plan for implementation: Subsequently, organisation need to make choices such as which method should adopt for the change and whether full or trial implementation should be run.

Toyota had established 14 management principles (Appendix 5, pg 25) in its new TPS to guide its operation in various countries including UK (Liker and Meier, 2006). The 14 management principles have developed Toyota’s supplier throughout the value stream. Furthermore, Toyota has established four underlying principles to TPS (Stevenson, 2007):

Work should be finished specified as to content, sequence, timing and outcome.

Every customer-supplier connection, both internal and external, has to be direct and specify. The people who involved in the connection, the forms and quantity of the services and goods and so forth need to clearly indicated,

The flow of products and services must be simple and direct – goods and services are directed and specific person or machine.

Any improvement in the system must be made in accordance with the ‘ scientific method,’ at the lowest possible level in the organisation.

4. Implementation change: The implementation of change need to be carried out in an appropriate time. Further, organisation needs to be focused on monitoring and controlling actions to ensure everything flow smoothly.

The implementation of lean system has affected the Toyota’s internal linkages between its core and supporting process and its external linkages with its customers and suppliers. In the human resource department, they had emphasised on the right incentive systems that reward team work. Toyota has provided training and education for employees regarding the responsiveness of system to problems that makes the seemingly rigid system so flexible and adaptable to changing circumstance (Hino, 2006).

As a consequence, Toyota developed a new HRM system – inserted new program such as assimilation (process of bringing people into their new TPS culture) and training (On-the-job Training-OJT) into the recruitment system. They are adopting the OJT to encourage employees to learn their own jobs well to be able to train others (http://www. toyotauk. com). Furthermore, they exert tremendous efforts to develop people who live in their system through the kaizen program (continuous improvement) such as suggestion program, quality circles, leadership development and the like (Liker and Meier, 2006) (Appendix 6: HRM Framework TMUK, pg 27).

5. Review and consolidate: Feedback of the change process is needed for review and consolidation. Consolidation primarily refers to the unfreezing concept of Lewin’s model. After implementing the new TPS, Toyota had announced there is a huge reduction of costs in production process. Further, Toyota can better response to the customer’s needs and wants.

To sum up, organisation may not able to sustain in the market if they don’t manage the change process properly. Thus, managing change and the ability of perceive the change is crucial to future success.

The resistance of Change

However, there are some circumstances faced by Toyota when implementing the change in their operation. According to Mr. Stevenson, the employees of Toyota fear that they will be unable to implement the JIT approach in production with reach the cost-efficiency objectives, and therefore develop negative attitude toward the change or behave poorly if required to use them. Besides that, the staff of Toyota has used to the traditional production. Every day, they are doing the same job, thus, they rely on habits in doing the job. The habit of the employees has become a source of resistance to change.

Furthermore, the implementations of changes require high capability workers and high skills workers. Some employees are fear of losing status, jobs, authority and other economic benefits has refused to change. It is because the changes lead to some change in the organisational structure of Toyota. Some low level workers have been promoted to become high skills workers to participate in the production lines. Some older workers are not able to cope with the changes, thus they tend to resist change.

Techniques for Reducing Resistance

There are various methods can be used to overcome the resistance to change: education and communication, participation, facilitation and support, negotiation, manipulation and co-optation and coercion. Among those techniques, Toyota has applied the education and communication techniques. They discuss the change with the employees to help them to see the logic of change. They try to understand the problems that faced by employees during the change process and attempt to solve it out.

Apart from that, participation is undertaken by Toyota to work out the problem of resistance to change. Toyota has involved all the employees in the implementation of lean system in business operation. Toyota also provides supportive efforts such as training and development, which help the employees to adopt the change easily.

(Source: Interview from Sales Executive – Mr. Stevenson, R.)

The Impact of Change on Toyota’s Operation

Production Process

The external and internal factors had encouraged Toyota to build lean system in TPS – a philosophy of continuous improvement and forced problem solving that drives out waste, which can help create a lean organisation. By implementing the new production system, all the stages in production must be carried out by establishing the quality and continually improving quality standard; therefore, it can meet total quality standards and delight customers. The revolutionary of the TPS has completely changed the manufacturing process in term of inventory, scheduling, quality control and so forth (Taylor and Brunt, 2002) (Appendix 7: JIT contributes competitive advantages, p 28).

The revolutionary of TPS had encouraged Toyota create one-piece flow within the organisation because it helped Toyota to eliminate waste, force problem to surface, create interdependency, make problem uncomfortable and identify weak links in the flow and strengthen them (Appendix 8: Waste Reduction Model, pg 29). Thus, it can save their resources and uses it in other areas (Liker and Meier, 2006).

The new TPS helped Toyota in establishing standardised process and procedures to create consistent performance and better manage their operation around the world. The revolutionary of the TPS is focusing on flexibility – by basing production on demand rather than simply on capacity. According to Mr. Stevenson, Toyota has developed a flexibility and responsiveness that continues to set the standard for the industry by concentrating on small quantity and manufacturing on what customers want. With the continuous improvement, TPS has become the ideal system in today’s rapidly changing global environment. TPS increases the production flexibility – able to produce different models on one assembly line (http://news. bbc. co. uk).

Marketing and Customer Services

The old TPS is focusing on economic of scale rather than the customers’ needs and wants. Therefore, demand of products is low as the new competitors such as Ford and General Motors has introduced the new vehicles. The use of new TPS has changed from supporting dedicated assembly lines for one vehicle with high volume to low volume of different models of vehicles by using the same assembly line.

Furthermore, the revolutionary of TPS had enabled the Toyota served all the segment of passenger car vehicle market by offering an extensive range of innovative, high quality vehicles and engines. The vehicles are designed to satisfy the varied demand of Toyota’s customers, while delivering superior quality and reliability (Hino, 2006).

Customer satisfaction is a top priority in today competitive market environment. Mr . Stevenson cited that the implementation of revolutionary of TPS has impacted on the business operation of Toyota – Lean Customer Relationship Management (CRM). Toyota built lean CRM in response to the growing volume of customer information collected at the many touch-points during the customer lifecycle. Therefore, Toyota can capture the change in customers’ behaviour easily.

The ‘ Customer First’ concept is generated from the TPS. Toyota realise that no matter how good the final product might be, it is worthless if the products don’t meet customers’ demands and needs. Thus, Toyota Retail System (TRS) are developed to define the Toyota Way in retailing. The concept of ‘ Customer First’ is about putting the customer in the driver’s seat before the car has even been designed. The concept has separated throughout the whole organisation. The creation of 14 principles of Toyota Way has applied to the TPS – Plan Do Check Act – to retail environment. The objectives of TRS are to reach efficiency in retailing and delivering best purchase and ownership experience for customers (http://www. toyota. co. jp).

Technology

The continuous improvement in TPS had developed the use of technology in production. The expensive fuel price had encouraged Toyota to develop hybrid engines (Lynch, 2006). Other than that, the issues of global warning has increasingly concerned by stakeholders. The development of hybrid technology enables Toyota to more emphasis on promoting environmental friendly vehicles, which can more commit to corporate social responsibilities.

Traditionally, Toyota was using digital print to print large areas of solid colour without areas of banding appearing and ruining the piece. The development of new technology – DocuColor enables Toyota to produce with exceptional print quality (www. xerox. com).

Culture

In the past, the culture of the Toyota has increased the costs of production; it is because employees keep producing the products without stopping and correcting the problem of the products. Therefore, Toyota has the intention to build up an organisation culture, where employees need to detect a problem, stop the problem immediately and solve the problem at that time (Krajewski, and et al., 2007). The improvement is made at the lowest level of the organisation so that the employees who are actually doing the work are actively involved in doing the improvement (Appendix 9: The contrastive between traditional method of correcting problem and the Toyota method of stopping to fix model, p30 ).

Other than that, the implementation of lean system has fostered the culture of continuous improvement, which placed high value on performance and result. Mr. Stevenson cited that Toyota has also build up a close relationship with its suppliers, thus, Toyota only order the materials, which is needed and there is no extra storage for unused materials.

Evaluation of the Effectiveness of Change

In the past, Toyota is considered as a low cost producer. But, the low cost strategy unable to help Toyota to establish s strong position in the global and compete with its competitors. Therefore, the implementation of lean system in TPS with JIT approach enables Toyota to pursue both cost leadership and differentiation strategy (Morrison, 2006). Differentiation strategy can be developed through the total quality control and continuous improvement in the stages of TPS.

Furthermore, the new TPS provides an opportunity for Toyota to pursue its global niche strategy – Lexus, which tend to target high income level people and to increase its presence in the global market (Lynch, 2006). Other than that, new technology that invented into the TPS had lowered the cost of production through eliminating waste and making it more efficient for Toyota to change model quickly in response to changing customer taste.

With the revolutionary of TPS, Toyota has dominated the top ranking for reliability and manufacturing excellence in the third party quality survey since year 2006. Based on a Consumer Report, there are 47 most reliable car models in today market. Surprisingly, 21 Toyota’s models are ranking in the survey of evaluating around 1. 3 million vehicles. Toyota had been voted the global most admired motor vehicles by Fortune 500 global executives in 2005 and 2006, ranking first in the industry for quality, and social responsibility (http://www. toyotauk. com).

Today, Toyota has replaced GM as the world’s largest car manufacturer. The successful of Toyota is the global market is because of its sophisticated lean system in business operation: production, customer services and marketing areas. Traditionally, it takes 3 days to build up a car. With the implementation of JIT approach in TPS, it only takes 24 hours to build the car from a roll of steel to finished vehicle. In average, the construction of engine is done every 54 seconds (http://www. toyotauk. com).

The whole concept of Toyota is ‘ customer first’, which has result in the increasingly growth of sales in Europe in 2006. Toyota had announced its record sales in Europe for 10th year in a row – the achievement of an annual sales growth of 13% and a market share of 5. 8%. The development of hybrid technology was voted as the Best Eco-Friendly Engine in 1999 and 2000 (www. issolutions. co. uk).

According to Mr. Stevenson, Toyota has maintained its competitive advantages without making any loss, while other large car manufacturers are making loss during the economic downturn. This has prove that the lean system in the Toyota is efficiency and effective and able to react to the external change.

Conclusion

The implementation of lean system in business operation in Toyota is focuses on elimination waste, zero inventories, respond to customer’s behaviour quickly, quality management, and continuous improvement. However, ‘ no process can ever be perfect, thus, continuous improvement is needed. ‘ The element of continuous improvement can be a competitive advantages for Toyota to sustain competitive in the global market.

TPS enables Toyota to produce vehicles at low costs, but low costs in production only reduce the selling price (short-term benefit). Therefore, Toyota can endeavour to produce vehicles which contribute the long term benefits for customer – fuel-efficient engines. Fuel efficient engines not only offer the customers with long-term benefit, but also cultivate the environmental protection policy. Furthermore, Toyota can research on every aspect of the vehicles and find out the way to save the customer long-term costs with the basic requirement of security and safety policy.

Nowadays, global warming is becoming an issue that concerned by public. Although, Toyota had developed the new technology – hybrid engines, which is a combination of petrol and electric. However, this technology is not widely developed by the Toyota because not all the vehicles are manufactured by using hybrid engine. In order to contribute to the society, this is an opportunity for Toyota to strive in research and development by using hybrid engines in producing all the vehicles.

Technological changes can make well-establish product obsolete, while technology can be used as a value-added function to achieve organisational competitive (Terpstra and Sarathy, 2000) (Hill and Jones, 1998). In order to avoid from vehicles obsolete, Toyota has to always keep updating the latest technology that used in manufacturing. By using the latest technology, Toyota can be more innovative in creating and manufacturing the vehicles.

The revolutionary of TPS has developed Toyota as a learning organisation – learning continuously from the problem solving. Furthermore, globalisation had influenced the way Toyota conduct its business in term of marketing and customer services, production, human resource management, strategy, use of technology and its business process.

The changed of company policies had led Toyota successfully passed its competitive competitors – GM and Ford. The implementation of TPS enables Toyota to uses both cost leadership and differentiation strategy to compete in the global market. As a consequence, Toyota has become one of the world largest car manufacturer companies in term of low price and high quality.

In conclusion, their lean system made them an innovative leader in the auto industry and served as an important cornerstone of their success.

Appendix 1: Change Management Process

Start of change process

Diagnosis – review the present and identify the future state

Review and consolidate

Implement change

Plan and prepare for implementation

Recognition of the need for change

External change, problem & opportunities.

(Source: Hayes, J. (2002) The Theory and Practice of Change Management, 1st Edition, Palgrave Macmillan, New York)

Appendix 2: Attributes of Lean Organisation

Apply JIT techniques to reduce virtually all inventories.

Establish system that assist employees produce a perfect part every time.

Reduce space requirements by minimising the distance a part travels.

Build close relationship with supplier, helping them to understand their needs and their customers’ needs.

Educate supplier about the responsibility of helping meet customer needs.

Eliminate all but value-added activities. Material handling, inspection and rework jobs are the likely target because these do not add value to product.

Build the workforce by constantly improving job design, training, employee participation and commitment, and teamwor