

Instruction:

Discussion #1: Our survival is dependent upon growing the business.

Through his

- Our survival is dependent upon growing the business.
- Our business growth is largely determined by customer satisfaction.
- Customer satisfaction is governed by quality, price and delivery.
- Quality, price and delivery are controlled by process capability.
- Our process capability is greatly limited by variation [and waste].
- Process variation [and waste] lead to an increase in defects, cost and cycle time.
- To eliminate variation [and waste], we must apply the right knowledge.
- In order to apply the right knowledge, we must first acquire it.
- To acquire new knowledge means that we must have the will to survive.

Discuss the merits of these interlocking causations.

Example 1:

The list of chain of causation starts from the basic phenomena of survival. In order to survive in this competitive world, business needs to grow on a rapid mode through inculcating advanced technology, making strategies to meet the demand of consumers from their viewpoint. There needs to be a continuous updating in the way the business is operating. The growth should be in line with the competitors in the industry.

The most important factor that contributes to business growth is customer satisfaction. If a customer is satisfied in terms of what he expected and what he received in the form of product and offerings of the business then he may spread a positive word of mouth about the business, may remain loyal to the company, increasing company's sales and profits, thus contributing to the overall growth of the organization.

Customer satisfaction depends on three factors i.e. quality, price, and delivery. If the customer is not getting the appropriate quality of the product he will probably shift its preference to competitors

providing better quality products. Same is the case of price where customers are price sensitive. Customers want to be satisfied with high-quality products at a reasonable price. They would not take much time in shifting from one company to another in search of better options for product offerings. Another thing customers feel satisfied with is on-time delivery of products. If there is any delay in the delivery of products they feel dissatisfied of the company's customer service and will have a negative image of the company. The ability of a business to satisfy these needs of quality, price, and delivery with certainty are controlled by process capability and amount of variation in your processes. Process capability is what your process can deliver as compared to requirements. If your process is capable to provide products at desired quality at a reasonable price with on-time delivery then only you can meet these demands and grow your business.

Process variation comes when a customer sees and feels differently resulting in waste by failing to deliver what the customer has ordered. Solving these problems such as eliminating defects and removing waste results in significant profitability improvement as well as increased customer and employee satisfaction

When there is a variation in the process, this results in an increase in defects of what customers wanted and what is being provided which in turn leads to higher cost of wastage and producing again according to requirements thus increasing the cycle time from producing the product to delivering the right quality to the customers

Having the right knowledge of conducting the process is important to eliminate such waste. The processes must be such that they present perfection to customers. The right knowledge can only be implemented when it is acquired and we will be determined to continuously acquire knowledge only if the business has the will to survive and grow continuously.

Example 2:

Although Dr. Mikel Harry's teachings on The Six Sigma Way are simply based on common sense, they are extremely relevant to every aspect of a growing company/industry. The interlocking causations listed above effectively describe the need for Six Sigma implementation in the marketplace, and a generalized "plan of attack" for doing so.

Harry's first two causations state how "our survival is dependent upon the growing business" and how customer satisfaction dictates business's growth rate. In essence, Harry is describing a few key elements of the free marketplace, like that of America (well, mostly free). Our economy is dependent on an increased flow of money between the consumer and the seller/provider. For our economy to thrive, companies must produce quality products that promote sales and ultimately the flow of money.

Harry then comments on the quality, price, and delivery of products. He states that these three pillars of a desirable product not only dictate customer satisfaction, but "are controlled by process capability". In essence, Harry is stating that a company has the ability to maximize customer satisfaction through constant improvement of the development/manufacturing processes. To build the best possible product, a company must invest time and resources into cutting costs and building value throughout the long-term.

Furthermore, Harry discusses the impact of variation (and waste) on building customer satisfaction. Variation not only causes defective/inconsistent products, but ultimately leads to costly countermeasures such as recalls and reworks. These will ultimately increase the products' price tags and will diminish customer loyalty. It is brutally important that companies employ the Six Sigma Way to avoid these circumstances as much as possible. Investing the time and resources into building products the right way will always pay-off in the long term.

Lastly, Harry notes that companies must acquire and apply the right knowledge in demonstrating their will to survive in the marketplace. Leadership and process developers must take the time to learn about the methodologies behind building a quality product. Then, they must use this knowledge to effectively and efficiently implement change, as well as sustainability for these changes. Doing so will not only lead to survival in the marketplace, but will cause a company to thrive and grow.

Example 3:

The chain of causation proposed by Dr. Mikel J. Harry might seem paradoxical or nebulous at first glance, each entry seemingly introducing a significant number of input variables. What's more, one might be tempted to examine the chain exclusively as a series: if one link in the chain is broken, the proposed system will fail. There is, however, another way to view the criterion laid forth by Dr. Harry: the provisions as a whole are a set of detachable links that can be locked together in arrangements tailored to an organization's mission or objectives which, in turn, dictate the sequence of links in the chain.

Let's assume we have a business that wishes to follow the Six Sigma methodology. From a Six Sigma standpoint, the business strategy revolves around the consumer. Gleaning knowledge about consumer wants must take place beforehand. For instance, the project leaders could assess the viability of a product or service based on the market performance of similar goods from other companies. To elucidate the chain of causation for a Six Sigma company, an alternative layout adapted to the interests of the consumer is presented forthwith:

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To acquire new knowledge means that we must have the will to survive.
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The first step in this new chain is procurement of the proper knowledge about customers' demands through various means. The flow of information is crucial to the continued survival of the business. In this customer-oriented perspective, customer satisfaction is the foundation upon which the business strategy is built. As such, the growth of the business depends on how well the products and/or services fulfill customer needs and expectations. Based on established customer needs, a product or

service and the necessary processes required to make them then become the focus of attention. This would encompass planning to the fullest possible extent potential variables that might contribute to variation and waste in the output variable(s). At this final stage, the necessary knowledge must be applied to develop or refine the product and processes whilst mitigating the impact of the aforementioned detrimental variables. Since Six Sigma is a continuous improvement process, this model can serve as the basis for a closed feedback loop that enables the enterprise to recursively improve upon its products and/or services taking into account consumer advice regarding quality. This feeds back into the first step which is knowledge acquisition and the process begins anew.

This is one possible arrangement but it nonetheless showcases the versatility of Dr. Harry's suggestions. Indeed, the greatest strength of Dr. Harry's chain of causation is its malleability, permitting business leaders to adapt the outline to the interests of their organization(s). As time goes on, the chain can be modified within an enterprise to meet challenges and keep pace with consumer needs.