

# **CHAPTER V**

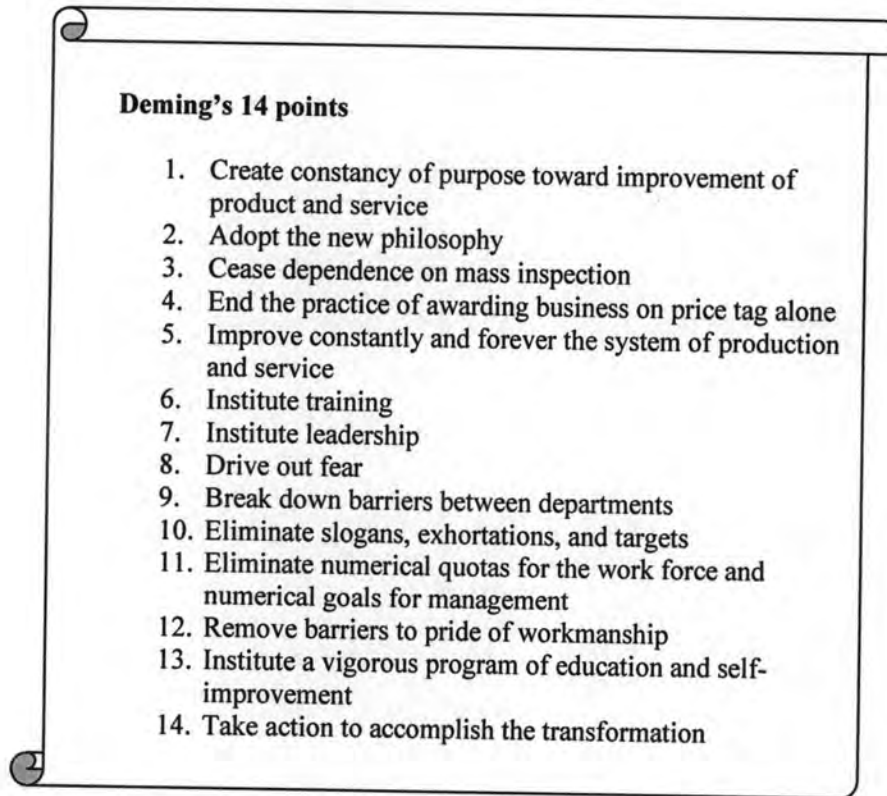
## **IMPLEMENTATION CRITICAL FACTORS AND PLAN**

The implementation of new production planning system is very significant to this study. Unless of the well and concrete plan to the implementation, the failure to the implementation might result. The implementation will need a cross functional support for action, information, and resources. Further discuss in this section will looking at the critical success factors that are required to make sure in the company and implementation plan.

### **5.1. Critical Factors to the Implementation**

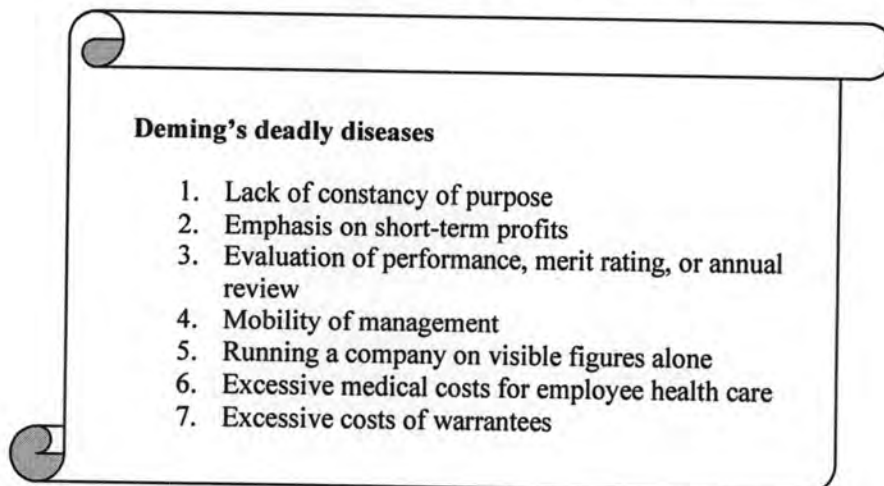
The W.E.Deming has discussed on major points to achieve the quality organization and the serious obstacle. The quality achievement model is widely recognized and can be used in extensive dimension in the business. The implementation requirement also need to ensure this points are carried out to assess in for the implementation with quality and success.

Figure 5.1: Deming's 14 points



Source: W. E. Deming, *Out of The Crisis*, The MIT Press, 2000

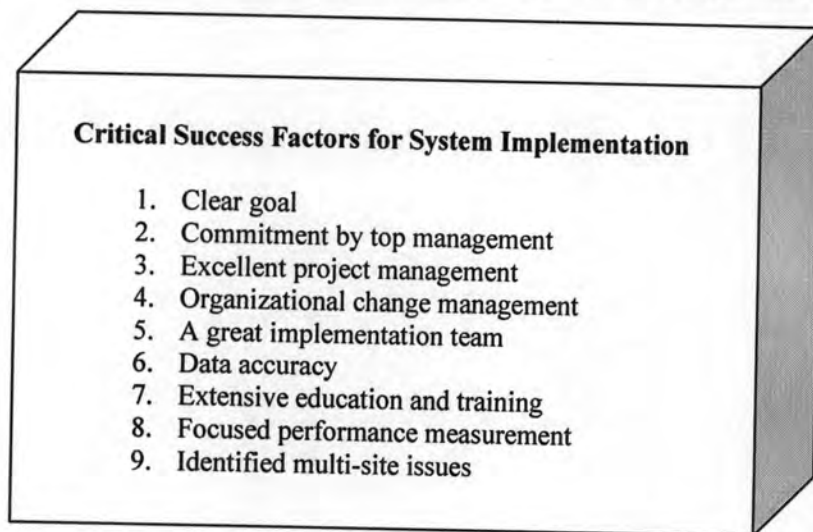
Figure 5.2: Deming's 7 deadly diseases



Source: W. E. Deming, *Out of The Crisis*, The MIT Press, 2000

E. J. Umble, R. R. Haft, M. M. Umble also discuss on the key success factor for the effective project implementation that it needs 9 major elements to the system implementation. It can be seen that the major focus is most likely same as a way to quality organization that Deming explained.

Figure 5.3: Critical Success Factors for System Implementation



Source: Extracted from E. Umble, R. Haft, M. Umble, *Enterprise resource planning: Implementation procedures and critical success factors*, European Journal of Operational Research 146 (2003)

Therefore the same imply the requirement of XYZ to support the achievable system implementation need a major support from the company top management, need to set up project pilot team who know well on the problem symptom and the ability to work on the new things, the implementation team need to have ability and authority to manage the lead and solve on the changes, the well corporate cross functional, procedure and manual with training and monitoring the process. An important for this schedule implementation is that the pilot team and the management of all relate function must fully support to the implementation along with the data driven and effective authorized project management team.

The critical factor to XYZ that must need to be ensure internally for the system implementation including

- Management support and prioritization: High management to prioritize the importance of system and the implementation and asking for the improvement and result of system usage from the system and push evaluate the ability to operate the system for future improvement on both human resource and system itself
- Understanding and encouragement during the implementation period: Current employee has been with company for many years and already remember the existing part number, to bring up and push to use the new coding will result employee to work slower, low motivation, and mistaking
- Strong implement team: The implement team must encourage relate person to use the system as during the implementation all person must get use to the new system as much as possible and avoid to use the old method. As well as keep timing plan and drive the problem solution as a team
- Continuous education and training: In order to utilize system effectively, the training procedure must be cleared and carried out every year for the user to ensure work are follow the procedure and user can make the most out of the system capability
- Ensure procedure for long term hardware and software maintenance

## **5.2. Implementation Plan of new XYZ Production Planning System**

Since the model developed for study does not complete the whole requirement which is to develop the support to all product pattern planning. The implementation planning made below is the expectation of the implementation plan for the whole system. The implementation stages include following points.

1. Pilot test the system with real order situation to check the unforeseen problem and further improvement required.
2. Improve system and validate system by running the actual order again.
3. Real time operating with planner to verify the system.

4. Set up the training session for pilot group. Then conduct the simulation for real time planning to collect user problem and improvement needed.
5. Establish security and authority permission.
6. Document policies and procedures for the system usage and procedure for maintaining system.
7. Training to the cross-functional team involved and start using the new system in simultaneously with the current system. In order to ensure the users has time to get use to the system.
8. Simultaneously transfer data from existing system to new system
9. Fully employ the new system and cutover existing system usage
10. Keep monitoring the new system and improve the newly found problem.
11. Improve continually. The organization can only absorb a limited amount of change during a certain period. Change is an on-going process; successful companies understand this and encourage their employees to use the system to continue to improve.
12. Yearly audit the system usage to magnify the usage and keep follow the working procedure.