1) Describe the foundation of Deming’s “14 Points.” Use at least two unique references.

Length: 4-5 paragraphs.

The word “Success” is playing a major role in the business industry. However, there is always a strategy required for a leader to make the business successful. Quality of products and innovative marketing plays a major role in the success of any business; with this motivation Dr. W. Edwards Deming has invented a business strategy called Deming’s 14 points that helps to increase the productivity of the business. The 14 points that are mentioned by statistician Dr Deming are:

1)Create a constant purpose toward improvement.

2)Adopt the new philosophy.

3)Stop depending on inspections.

4)Use a single supplier for any one item.

5)Improve constantly and forever.

6)Use training on the job.

7)Implement leadership.

8)Eliminate fear.

9)Break down barriers between departments.

10)Get rid of unclear slogans.

11)Eliminate management by objectives.

12)Remove barriers to pride of workmanship.

13)Implement education and self-improvement.

14)Make "transformation" everyone's job.

The advantages of Deming’s 14 points are to develop a discipline , new habits and factors with in your control, which helps to make successful leader and manager. This theory is followed by most of the successful CEO’s all over the world. As stated by B.Adam “ One of the things that I characterize as fearlessness is seeing an opportunity, even though things are not broken," says [Ursula M Burns](http://www.nytimes.com/2010/02/21/business/21xerox.html?pagewanted=all), chief executive of Xerox.

In conclusion, Deming’s 14 points helps to create a frame work , which leads to increase the efficiency and effectiveness of the organization. Most importantly, this strategy helps the employer to retain his employee’s for longer period of time, since employee’s pay a major role in increasing the productivity of the organization.

References:

B. Adam, Five secrets of the CEO’s Retrieved from https://www.theguardian.com/money/2011/jul/22/five-secrets-of-worlds-top-ceos

https://tallyfy.com/demings-14-points/

2. Read the case: Katz Carpeting, available in the Operations Management textbook,

Chapter 7. If production of standards and specials is separated, how different will JIT

implementation be for production of the different products? Explain what would be

needed in JIT implantation for both products. Use at least two unique references.

Length: 4-5 paragraphs.

I would recommend a different production line for standards and specials. A different assembly line would ensure that quality is managed as per the benchmark of the requirements and there is no urgency to fill in a standard product. Secondly, with increased inventory the Katz, should look at creating a special promotion with these excess inventories and reducing the cost of the carpets that are in the excess inventory.

For Katz to implement JIT, Katz would need to follow the pull process instead of the existing push process. It will need to adopt a kanban card that would be required to manage this process.

The specialized machine will use the kanban philosophy and start producing carpets as per requirement. However, the standard machine will also start producing specialized carpets to start with. There will be no production of standard carpets initially. This would ensure that all specials needs would be addressed. When there is a request for an urgent special request that would be pushed through the standard machine and the demand would be met. As far the manufacturing for the standard carpet, the production would remain low to just a few carpets a day. How would the requirement be processed for standard carpets?. Understand volume of current inventory, map that to the sales of carpets daily.

For instance, if inventory of standard carpet is 1000 numbers and the daily sales is 100, it would take 10 days for the company to exhaust all its existing inventory. To ensure that the Katz always have an inventory of carpets, it would look at its previous maximum sales per day. This would allow Katz to forecast the maximum inventory required to be held at any given amount of time. Assumption that Katz was able to sell 20 carpets in one day. Katz would only start manufacturing regular standard carpets when the 80th carpet is taken out of inventory. So Katz, would follow the JIT production with level scheduling. With the introduction of JIT, Katz would be able to manage quality management and reduce returns and sub standard manufacturing.

Finally once Katz old incorporate JIT, they would use a kanban style production card with level scheduling, TQM and respect for employees. To unsure quality production Katz will implement the Jidoka with pok-a-yoke.

3. Describe the two aspects to implementing the six-sigma concept. Use at least two

unique references. Length: 4-5 paragraphs.

Six sigma is a methodology that focus of process improvement. The two sub-methodologies in six-sigma are DMAIC and DMADV

DMAIC: This sub-methodology helps to improve the existing business strategy and processes used. The letters stand for:

* Define the problem and the project goals
* Measure in detail the various aspects of the current process
* Analyze data to, among other things,  find the root defects in a process
* Improve the process
* Control how the process is done in the future.

DMADV: This sub-methodology is develop new business processes and new products or services. The letters stand for:

* Define the project goals
* Measure critical components of the process and the product capabilities
* Analyze the data and develop various designs for the process, eventually picking the best one
* Design and test details of the process
* Verify the design by running simulations and a pilot program, and then handing over the process to the client

This management methodology uses companies data to improve the profits and productivity of the organization. In most of the organizations employers set SMART goals to the employee’s and apply six sigma methodology to those goals for successful results. As stated by R. Dan Reid & Nada R. Sanders “A key individual is a *champion* of Six Sigma. This is a person who comes from the top ranks of the organization and is responsible for providing direction and overseeing all aspects of the process”.

I would like emphasize that Six sigma is a great concept for improving of processes to help business increase productivity, improved customer experience and reduce time in an existing process. Reviewing an existing process and identifying the hurdles is a challenge by itself and formulating a revised process requires different stakeholders to participate to ensure that the revised process is achieves either DMAIC or the DMADV. One of the biggest advantage with the six sigma concept is that it can be paired with any other concept to further increase its effectiveness. For instance, to identify root cause analysis in a process we can combine Sis Sigma with a Fish Bone concept.

<https://www.isixsigma.com/new-to-six-sigma/getting-started/what-six-sigma/>

https://www.processexcellencenetwork.com/lean-six-sigma-business-performance/articles/6-ways-six-sigma-can-benefit-your-company

<http://asq.org/learn-about-quality/six-sigma/implementing.html>

Include text book reference

4. Describe the ten guidelines for selecting forecasting software. Use at least two unique

references. Length: 4-5 paragraphs.

In the present day scenario a dedicated forecasting software solution can support a company’s need for data collection, analysis, model development and evaluation, and forecasting. The key is what software to select for specific needs of the company. Most importantly, according to business needs the software should be selected.

The guidelines to be followed in forecasting software packages according to the need are:

* Does the package have the facilities you want ?
* What platform is the package available for?
* How easy is the package to learn and use?
* Is it possible to implement new methods?
* Do you require interactive or repetitive forecasting?
* Do you have very large data sets?
* Is there any local support?
* Does the package give the right answers?
* What will be the the cost of the package ?
* Whats the compatibility with existing software ?

The strategy to select a dedicated forecasting software depends upon the companies business needs. There is a lot of cost involved to implement a new software in the organization so the experts should invest time in checking the compatibility with the existing . In few cases, an independent consultant can sometimes be of great assistance in giving you an unbiased perspective in these regards. The key aspect is to check the flexibility and expandability of the software with current and future needs.

In conclusion, planning, budgeting and forecasting plays a major role to know the forecasting models. Moreover, if stakeholders involve in predictive analysis while forecasting software there will be a scope to meet customer expectations, which leads to increase the brand image of the organization.

Forecasting software is a critical process and is a backbone for the company/department operations. The right investment can help the business grow in leaps and bounds and an incorrect software could slow down company growth. For instance, the banking domain implements any change in software to ensure that the software complies with security and all other aspects before aligning the software to its organizational requirements. Hence the adoption of new technology is slower in the banking domain. Another important aspect while forecasting software should be that the new technology needs to work for employees and not that the employees have to work around the new solution. Finally the new technology has to be compatible with the organizations existing solution. For example, if a business uses the Google platform for its business operations and would like to increase further collaboration with in the organization and its teams, it plan to include Slack as new collaborative tool. This tool provides enhanced collaboration, education of emails, easy data transfer of files, enhanced security for its communication, provision to incorporate GDPR compliance, platform to invite stakeholders who are not part of the existing business like vendors and consultants. The new solution would have a higher adoption, lower need to learn how to use the tool, since it has chat box feature like messaging and doesn’t require any further customization of software.

*<http://demand-planning.com/2018/07/10/choosing-demand-forecasting-software/>*

https://www.proformative.com/selecting-budgeting-and-forecasting-software-vendor-guidelines