

Faculty of Islamic/Economics and Finance Semester I, 2020/2021 Academic Session

Final Examination Question Paper

Course Code: BF3324

Course Name: Total Quality Management

Course Level: Bachelor of Business Management

Time : 2 hours

Note(s):

- 1. This examination is divided into TWO (2) SECTIONS with 60 marks.
- 2. Write ALL of your answers in the Answer Booklet provided.
- 3. SECTION A consists of FOUR questions with 15 marks. Answer ALL the questions.
- 4. **SECTION B** consists of FOUR Short-Essay questions base on two case studies with 45 marks. Answer ALL the questions.
- 5. Candidates are not allowed to take the Answer Booklet out of the examination venue.

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SECTION A: SHORT ESSAY-TYPE QUESTIONS (15 marks)

- 1. Explain briefly Quality Deployment Function (QFD) (3 marks)
- 2. Label the four types of customers according to David & Davis; where they fall in the customer loyalty/profitability matrix (4 marks)

CUSTOMER LOYALTY/PROFITABLITY MATRIX	CUSTOMER LABEL
1.	
2.	
3.	
4.	

3. List 8 thrusts of ISO 9000 (8 marks)

SECTION B: SHORT ESSAY-TYPE QUESTIONS (45 marks)

Short Case-Study 1

Defective Steel in a New Aircraft New Piper, an aircraft manufacturer, issued a Mandatory Service Bulletin grounding 76 new aircraft manufactured during the first 5 months of 2004. Thirty-nine of the airplanes were in customers' hands, and the rest were at dealers or at the New Piper factory. The bulletin was issued after a production-line worker noted a bent seatbelt bracket in a new airplane. The defective bracket had been fabricated of high-strength steel that should have been very difficult to bend.

Investigation revealed that the steel was insufficiently strong. New Piper traced the steel to a particular order and determined that a large number of other aircraft parts requiring the use of high-strength steel were manufactured from the same batch of steel. This signaled a flight-safety issue resulting in the grounding order and meant that New Piper must locate, remove, and replace all the affected parts in all the airplanes. Grounding a fleet of airplanes is a costly move. New Piper had to absorb the cost of repairs, many of which were very difficult and, therefore, expensive. In addition, with half the airplanes scattered all over the globe, the manufacturer endured significant travel costs just getting to the planes. On the other hand, owners of the airplanes had to bear the cost of lost productive flight time while their planes remained

grounded. The extent of damage to New Piper's reputation, along with customer loyalty and satisfaction, is unknown but could pose a blow to the company's future bottom line—all from a single order of high-strength steel.

It would be in the interest of all parties to find and eliminate the root cause of the problem. This information was known at the start of the investigation:

- o New Piper purchased this batch of high-strength steel from its supplier, Wilco Inc. of Wichita, Kansas.
- O Wilco sent the raw (untreated) sheet steel to Certified Steel Treating, a Los Angeles company, to be "normalized" in a process that heats the steel to specified temperatures and then cools it at a controlled rate to increase its strength.
- o Then, as required for all normalized steel, it was sent to an independent lab for testing.
- The steel and its certifying paperwork (which was all in order) subsequently went to New Piper in Florida where it was used in the manufacture of critical aircraft parts.

QUESTIONS:

- 1. Clarify the problem and determine the most likely point of cause (POC) (10 marks).
- 2. Develop a plausible counter-measure to solve the problem (10 marks).

Short Case-Study 2:

As British Telecom (BT) emerged from the public sector it was realized that to be successful, a significant cultural change would have to be stimulated and managed within the organization. Accordingly in 1986 BT embraced enthusiastically the philosophy of total quality management (TQM) to drive continuous improvement through a focus on customer requirements, team working and problem solving. Led personally by the chairman, TQM was implemented through a series of workshops involving all managers and their teams.

At the same time BT launched the BT Values to define the desired culture of the organization. Despite many organizational changes the five BT Values remain unaltered and continue to guide behaviors within the company. The BT Values are:

- We put our customers first.
- We are professional.
- We respect each other.
- We work as one team.
- We are committed to continuous improvement.

All quality programs have to have, at their center a very clear focus on customers. Delivering customer satisfaction is the primary goal for BT Retail and the approach is inherently simple — listen to customers and respond to what they say. BT Retail has a wide range of methods for listening to their customers, ranging from market research to asking thousands of customers detailed questions about how they felt about a specific transaction with BT. From this data BT Retail has built quantitative models of the drivers of customer satisfaction which enable them to ensure that internal measures are aligned with what customers really want.

One major shift in approach made early in the life of BT Retail was to change which senior managers were targeted against a customer satisfaction measure. Traditionally customer satisfaction had been the responsibility of the customer service manager with revenue being the responsibility of the channel managers. Now, everyone who deals with customers has a customer satisfaction target, normally with the same importance as financial targets. BT Retail also changed their primary customer satisfaction measure from 'overall satisfaction' to 'satisfaction compared with competitors' so that benchmarking is built in to this key measure.

As well as this fundamental shift in measurement methodology a number of strategic change programs were introduced to enable process and system improvement. In addition there was a massive increase in focus on the behaviors that support customers having a great experience with BT. BT Retail have introduced '10 Golden Rules for Customer Satisfaction' and developed new approaches to recruiting, training and coaching people to ensure that everything that delivers customer satisfaction is aligned and focused.

QUESTIONS:

- 1. Explain in your perspective how the role customer satisfaction played in BT's total quality journey? (10 marks)
- 2. Do you believe the privatization of BT was the early impetus for the organization to achieve success in quality efforts? Justify your position and explanation (15 marks).

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