

Extra Credit Challenge

Forecasting and Managing Quality

Introduction:

- Ch. 4 Forecasting
 - Formula
 - Definitions
- Ch. 6 Quality Management
 - Definitions
 - My experience
 - Conclusion

Forecasting

- Economic Forecast -
- Technological Forecast -
- Demand Forecasts -

- Quantitative - mathematical modeling,
- Qualitative - Forecasts from decisions making

Forecasting

- Forecasting 7 steps
- 1. Determine the use of the forecast
- 2. Select the items to be forecasted
- 3. Determine the forecast
- 4. Select the forecasting model
- 5. gather the data needed to make the forecast
- 6. make the forecast
- 7. validate and implement results

Forecasting

	pints used	Formula	sigma: .3 Forecast starting forecast given 350	Forecast
• Sep 7	350		$350 + 0.3 (350 - 350)$	350
• Aug 31	372		$350 + 0.3 (372 - 350)$	356.6
• Sept 21	410		$356.6 + 0.3 (410 - 356.6)$	372.62
• Sept 28	383		$372.62 + 0.3 (383 - 372.6)$	375.734
• Oct 5	366		$375.734 + 0.3 (366 - 375.734)$	372.8138
• Oct 5 374			$372.8138 + 0.3 (374 - 372.8138)$	373.16966
• Oct 12	-		$372.8138 + 0.3 (374 - 372.8138)$	

- Forecast $t_1 + .\text{sigma} (\text{actual } t-1 - \text{Forecast } t-1)$

Quality

- Quality: The Ability of a product or service to meet customer needs
- ISO 9000 - a set of quality standards developed by the international organization for standardization (ISO)
- Total quality management (TQM) - Management of an entire organization so that it excels in all aspects of products and services that are important to the customer
 - Seven concepts for an effective TQM program include:
 - (1) Continuous improvement
 - (2) Six sigma - Save time, improve quality, and lower cost
 - (3) Employee empowerment
 - (4) Benchmarking - Standard of performance
 - (5) Just-in-time (JIT) - System designed to deliver goods as they are needed
 - (6) Taguchi concepts - Quality robust, Target-oriented quality, Quality-loss function
 - (7) Knowledge of TQM tools - Cont. on next slide

Quality

- TQM Tools: Most commonly used in business
 - Pie Charts and Bar Graphs
 - Histograms
 - Run Charts
 - Pareto Charts/ Analysis
 - Force Field Analysis
 - Focus Groups
 - Brainstorming and Affinity diagrams
 - Tree diagram
 - Flowcharts and Modeling diagrams
 - Scatter Diagram
 - Relations Diagram
 - PDCA - Plan , Do, Check, Act

My Experience



My experience with Quality leads back to one of my first jobs after high school, at FedEx.

Customer satisfaction was huge at FedEx. If a customer didn't get their package delivered in a timely manor. You could probably agree that if you didn't get your package within the first week of ordering it you might be a little ticked.

FedEx really focused on maximizing space for their packages. The example I will use is loading trailers with all sorts of packages. You really had to focus on making everything fit as compact as possible. This ensured that they were using up as much of their space as possible.

Conclusion

- As seen above we went over chapters 4 and 6
- Both forecasting a quality are central in management operations and contribute to a companies success.
- Thanks you