Quality managment of a histogram and a pareto chart

Business, Management

Quality management of a Histogram and Pareto graph Table The time for the decision at Golden Valley rounded to the nearest hour

Decision Process Time

Frequency

7-9 hours

5

10-12hours

12

13-15hours

38

16-18 hours

19

19-21 hours

22

22-24 hours

0

25-27 hours

8

Table 2: Histogram Data

Decision process time

Frequency

7

3

10

1

13

1

16

0

19

1

22

1

25

0

27

0

More

1

Table 3: Pareto Chart Data

Decision Process time

Frequency

Cumulative %

Bin

Frequency

Cumulative %

7

3

37. 50%

7

3

37. 50%

10

1

50. 00%

10

1

50. 00%

13

1

62. 50%

13

1

62. 50%

16

0

62. 50%

19

1

75. 00%

19

1

75. 00%

22

1

87. 50%

22

1

87. 50%

More

1

100. 00%

25

0

87. 50%

16

0

100. 00%

27

0

87. 50%

25

0

100. 00%

More

1

100. 00%

27

0

100. 00%

Response to Part a

Chart 1 represents a histogram and chart 2 is a Pareto chart. A histogram displays the variables distribution. It represents each characteristic as a column together with the frequency of each characteristic happening as the column’s height. On the other hand, The Pareto chart is a particular form of histogram that ranks the issues by their general effect. It helps in prioritization of the corrective actions as issues with huge effects and are arranged in a given order. The Pareto Chart includes a representation of the cumulative percentage of the causes (Atchison and Ross 57).

The most useful chart for the data is the Pareto chart because it shows the prioritization of the corrective actions. The shown data could also be communicated using a frequency polygon. A frequency polygon is a graphical representation that is used in understanding the distribution shapes of data (Atchison and Ross 57). They have a similar role as the histogram but useful in making the comparison of a data set.

Response to part b

From the two graphs, it is evident that the Competitive priority of Golden Yalley bank is reducing with time. This is evidenced by the reduction of the frequency with the increase in the decision process time. This shows that the department was not doing so well if compared to other competitors with an increasing trend of their frequency. The frequency reaches its maximum at around 13 to 15 hours implying that the manager should consider this decision process time as the optimum time for maximum loan application.

Work Cited

Atchison, Nick and Ross, Ron. Methods for analyzing probe yields sensitivities. New York: McGraw-Hill. 2001. Print.