EPICENTRAL

A Newsletter from Epicenter Development Group highlighting ideas that improve organizations

Welcome to Epicenter Development Group's newsletter, EPICentral. The purpose of this newsletter is to highlight fundamental ideas that have helped organizations develop and maintain great manufacturing and service operations. We hope that you find our EPICentral newsletter helpful, and we would welcome your comments on its content.

Making Your Work Simpler with Pareto's Principle

Have you ever felt like you were drowning in information? With the advent of more powerful computers, information overload has become commonplace and organizations are finding themselves with a "treasure trove" of information that is difficult to understand and use. This month's article is about the Pareto Principle and how it can be used to highlight the "vital few" pieces of information that can help you manage and improve your operations.

The Pareto Principle which is also known as the 80-20 rule (and the law of the vital few) states that, for many events, 80% of the effects come from 20% of the causes. For example, it can often be shown that a high percentage of an organization's profits, sales or costs can be attributed to a relatively small percentage of the products. Therefore, by identifying and focusing upon those "vital few" products that have the greatest impact, you will have the greatest impact on your organization's bottom-line.

Pareto Analysis Steps

The following is a simple example of how a spreadsheet can be used to complete a Pareto Analysis that identifies the highest volume products:

Item #	Product Name	Product Description	Annual Volume	Percent of Total	Cumulative Percent
1	G-S	G - Standard	45,000	12.7%	12.7%
2	B-S	B - Standard	36,000	10.2%	22.9%
3	A-V	A - Value	30,000	8.5%	31.3%
4	D-S	D - Standard	30,000	8.5%	39.8%
⋮	⋮	⋮	⋮	⋮	⋮
25	O-S	O - Standard	150	0.0%	100.0%

Total: 354,150

1. Create a spreadsheet with columns for the "Product Name," "Product Description," "Annual Volume," "Percent of Total," and "Cumulative Percent."

2. For each product, fill in the Product Name, Product Description and Annual Volume. For other types of analyses, the "Annual Volume" column might contain information such as annual profit, annual cost or downtime minutes.
3. Sort the list in descending order by Annual Volume (highest volume on top).
4. Total the Annual Volumes at the bottom of the list (Example: "354,150").
5. The "Percentage of Total" is the Annual Volume for the product divided by the Total Volume. Example: 45,000/354,150 = 12.7%).
6. The "Cumulative Percent" is the running total of the Percent of Total column. Example: (for item #2) 10.2% + 12.7% = 22.9%).
7. In our example, the highest volume products to focus upon are those products that occur before the Cumulative Percent equals 80%.

Uses for the Analysis

Some common uses for this type of analysis are as follows:

- **Downtime Reduction** - Identify the top sources of downtime to focus upon (sort by % of downtime by source).

- **Resource Optimization** - Identify the operations that use the most resources or cost the most to run to focus upon.

- **Storage Optimization** - Classify materials by usage or sales to determine how best to store and access them (ABC analysis).

- **Profit Optimization** - Identify the customers or products that result in the greatest profit to focus upon.

- **Operations Strategy** - High volume products, for example, may be better suited for an assembly line operation while medium volume products may be better suited for production work cells.

Next Steps

If you would like more information on this topic or other similar types of tools, please contact Bill Proctor with your request at wproctor@epicentergroup.com or 216-702-0952. You can also find previous issues of EPICentral at Newsletters.

Mr. Proctor also speaks on a variety of problem-solving and system design topics that can help companies significantly increase the success and profitability of their businesses. If you are interested in having Bill speak at one of your upcoming meetings/events or would like more information on any of the speaking topics, please visit Speaker Services or you can email sales@epicentergroup.com.

Epicenter Development Group is a unique consulting firm that seamlessly integrates the disciplines of Systems Engineering and Organizational Analysis & Development to create practical design solutions to your toughest challenges. It is on the cutting edge of problem-solving solutions and the creator of a unique process called

GreenRoom Engineering. This process adds greater value and cost savings for clients as compared to traditional engineering methods.

William Proctor, Epicenter's founder and president, has provided services around the country to more than 100 companies consisting of a variety of organizations; and Epicenter continues to grow as a resource for firms of all sizes.

To learn more about Epicenter Development Group, visit our website:

www.epicentergroup.com

Epicenter News

We are excited to be nearing on the date of our Ten Year Anniversary (June).

Join Our Mailing List

Quick Links
Comments/Suggestions
Archive
Unsubscribe

STAY CONNECTED