

Pareto Distributions The Most Important Reliability Tool

Paul Barringer, P.E.

Barringer & Associates, Inc.

P.O. Box 3985

Humble, TX 77347

Email: hpaul@barringer1.com

Phone: 1-281-852-6810

<http://www.barringer1.com>

For More Reliability Tools: See <http://www.barringer1.com/nov07prb.htm>

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What Is A Pareto Distribution?

- Pareto distributions are rank-ordered list of **money problems**.
- The money problems include **maintenance costs + lost profit opportunities (lost gross margin)**.
- Large \$'s spent (or at risk) are the **vital few** problems to solve first.
- Small \$'s spent (or at risk) are deferred for solutions at a later date as the **trivial many**.

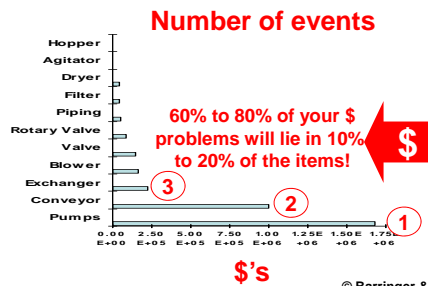
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Pareto Example



Nose counts of problems mislead!
It's not about events—
it's all about the money!



Here's the money! Get it back quickly--as in PDQ!! Pareto distributions based on \$s organize work priorities.

60% to 80% of your \$ problems will lie in 10% to 20% of the items!

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The Most Important Reliability Tool: Pareto \$'s

- \$Pareto distributions (**based on money**) **What** separate the **vital few problems** from the **trivial many problems**.
- Use the \$Pareto distributions to set work priorities—**work the vital few problems** **Why**
- Reshuffle \$Pareto's quarterly to see who has solved what—**it's a key measure** **When**
- Use throughout the organization to **focus your effort** for monetary gains **Where**

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Success or Failure?

- **Success:** ←A Management Approach Of First Things First For The Money!
 - Build Pareto lists based on \$'s—concentrate on reducing the big \$ items first as a business issue.
 - Talk to management about \$ priorities for work lists.
 - Update management about \$'s saved each quarter.
 - Reshuffle Pareto \$'s priorities at least quarterly.
- **Failures:** ←A Gear Head Approach Lacking A Primary Business Focus
 - Build Pareto lists based on nose counts of things—concentrate on reducing big nose count events first.
 - Talk to management about setting priorities based on nose count of things to reduce (love affairs!).
 - Update management about events reduced (things).
 - Reshuffle Pareto list of events occasionally.

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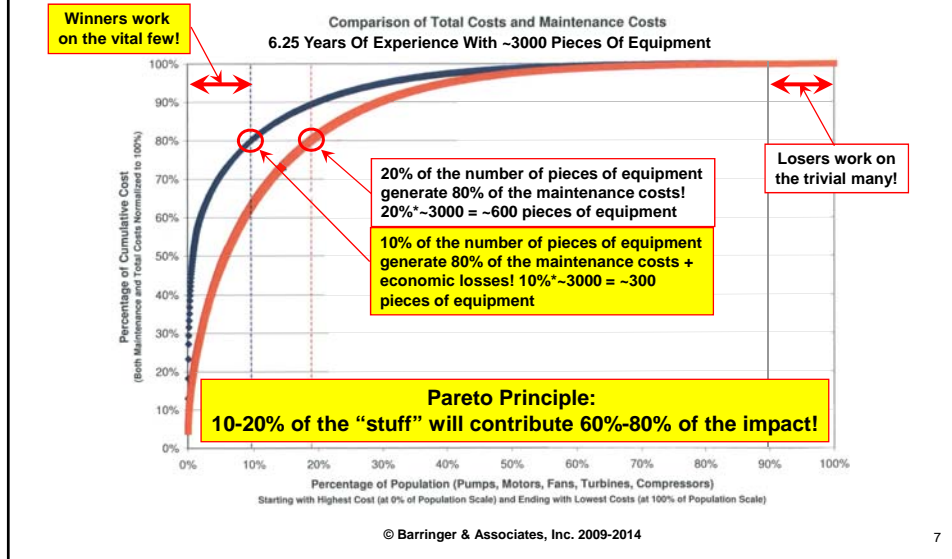
Sharpen Your Focus With \$ Pareto's

- Focus your department strategy with a Pareto \$ list
 - Align your maintenance interests with business interests.
 - Focus on the vital few issues for quick returns.
 - Advertise your \$ cost reduction focus to management.
 - **Strategies drive the tactics**—a collection of tactics does not make a strategy. Keep your focus on the money.
- Make your tactics function to support the \$ controls
 - Stay focused on the big money issues.
 - Don't backslide to a focus on "things"—1st things 1st—always and it's \$'s!!
 - Yes, I know you'd rather work on "thing" issues but stay disciplined and focused. **Keep a focus on the money!**

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Pareto Distribution- VIP Status Based On Real Data!



Follow The US Navy 3M List

Correct Priorities:

1. **Mission completion** is most important!
2. **Men & Women** your second concerns
3. **Me** is the last concern!!

Incorrect Priorities (how to fail in 3 steps):

1. **Me** first screws up the system!
2. **Men & Women**
3. **Mission**

First Priority: Your Company's Mission

- Your company's mission is to **produce and sell** your products at a **quality level promised** with **timely delivery**, at a **price customers are willing to pay**, while producing an **expected financial return** expected by **share holders/owners** while safely **protecting workers** and the **environment** in an **ethical environment**.

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Second Priority: Men and Women

- Men and women need to be **empowered** to take action and **enabled** to perform the assigned task with **minimum supervision** so they can perform in a carefully choreographed manner to **smoothly and effectively contribute** to the **productive output of the product**.

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Third And Last Priority: Me

- The enterprise does not exist solely for my interest! I must conform to work on first things first (\$) to further the enterprise by my teamwork effort and professional expertise.

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Stay Focused!

- Work on costly items first—think like a bank robber!
- Avoid your love affairs—business first.
- Keep your eye on the money!
- Set your priorities to get the **big \$'s** first!

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