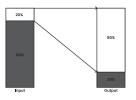


PARETO PRINCIPLE (PT.2) HOW TO USE THE PRINCIPLE







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Introduction

The Pareto Principle was introduced in <u>part 1</u>. A recap of the main points presented is as follows:

- The Pareto Principle is just an observation.
- This observation shows that in most cases, there is an inbuilt imbalance between inputs and outputs, resulting in some inputs being significantly more important than others.
- The typical ratio of imbalance is 80/20, and it is purely indicative (i.e., it can be 90/10 or 60/40).
- The ratio does not need to add up to 100%. For example, 85% of the profits of a company can be from 35% of its products (85/35). The Pareto Principle just acknowledges an imbalance.
- The Pareto Principle can help us prioritize better.

Understanding the essence of the Pareto Principle does not imply we know how to use it. This article presents two ways to help us with that.

Note: I use the terms Pareto Principle and 80/20 Principle interchangeably in this article.

How to use the 80/20 Principle

<u>Richard Koch</u> introduces two ways to use the 80/20 Principle in his classic "<u>The 80/20 Principle</u>". These are **80/20 analysis** and **80/20 thinking**.

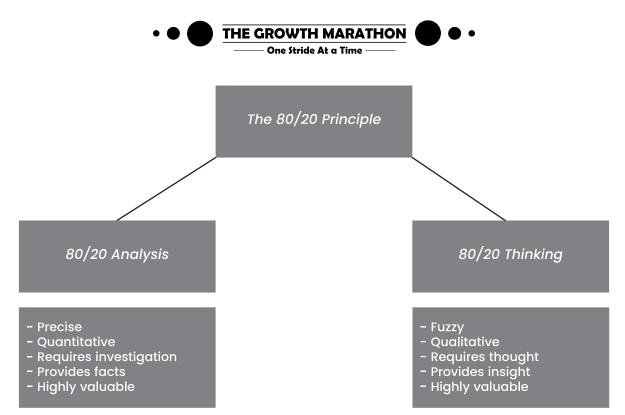
Before we dive into those, let's answer the following fundamental question; is there any requirement to apply the 80/20 Principle? Yes, there is one. To apply the Principle, Koch states that the following must be present:

- Two sets of data each representing 100% of their population (for example set A can be a country's land {100% of the land} and set B can be landowners {100% of the landowners}).
- One set that measures a variable quantity owned, exhibited or caused by the constituents of the other set (for example set A from above represents the land owned by the constituents of set B).

In other words, what Koch is saying is that firstly, each set of data must make 100% on its own (100% products, 100% customers etc.). Secondly, there must be a cause and effect between those two data sets. Those are the two conditions required to have an 80/20 observation. Simply saying 80% of a population eats yams and 20% is **not** an 80/20 observation.

Do you think these conditions are exhaustive? If you don't, let me know what you think <u>here</u>. To simply understand the Principle I think the above conditions are good enough. When going through some examples of this Principle in a future article, we'll see how well these conditions hold up.

Let's now have a look at the two ways to use the 80/20 Principle.



Source: The 80 20 Principle (by Richard Koch)

80/20 Analysis

The 80/20 analysis can be used for any decision-making decision where there are 2 groups with a cause & effect relationship. The 80/20 analysis is just some form of statistical analysis. You are just trying to find which cause has the largest effect and which has the lowest. Be careful about which variables you analyze though. Analyzing the wrong variables will not give you the expected results. The essence of the 80/20 analysis is to do the following:

- 1. Identify your top performers and concentrate more on them i.e., the 20% that produce 80% of the results (symbolically speaking).
 - Some examples of your top performers are; the customers that generate most of your profits, the products that generate most of your profits etc.
 - "In every important sphere, work out where 20% of effort can lead to 80% of returns" Richard Koch
- 2. Identify and do something about the low performers i.e., the 80% that produce 20% of the results (symbolically speaking). According to Koch, this second use is generally harder work and less rewarding than the first use.

For example, it has been found that women (about 50% of the population) account for 70% of the dollar value of all purchases. A way to increase the 30% of sales to men might be to build stores specifically designed for them (This is in U.S stores). (Source: Malcolm Gladwell; The Science of Shopping - 1996)

This analysis is highly quantitative (you need data), requires investigation, and is precise and highly valuable. The main question that should always guide you when performing this analysis is as follows:



Which few parameters from set "A" cause the largest effect in set "B"? Prioritize those.

80/20 Thinking

80/20 analysis is great but requires time and data. To guide us in our daily lives, we need a tool that is more instantly available, and this is where 80/20 thinking comes in. Koch refers to the application of the 80/20 Principle to daily life, for non-quantitative applications of the principle as 80/20 Thinking. As opposed to the 80/20 analysis, here we **hypothesize** the possible imbalance between inputs and outputs and then we **estimate** them (instead of collecting data and analyzing them).

To engage in 80/20 Thinking, never assume you automatically know the 20% that leads to the 80%, always ask yourself: "What is the 20% that leads to the 80%?" and think about that answer creatively. You use the results of this creative thought process to change behavior and concentrate on the most important 20%. With enough practice, this becomes an invaluable tool in our daily lives, leading us to get much more from less.

An example of 80/20 thinking in my life involves the activity I do straight after heading home from work. The input set is a list of activities (sleeping, reading, running, working out, calling someone, chilling etc.) and the output set is my productivity after that. If I decide to run or workout straight after work, my productivity shoots up typically after the exercise. If I rather decide to just chill, I am not so energized and my productivity sinks after that.

In summary:

80/20 Analysis: empirical procedure, you hypothesize that there is the existence of the 80/20 relationship and then you look for facts. If your results show a marked imbalance between inputs and outputs, then action should be taken.

80/20 Thinking: Less factual, more chance of wrongly finding the most important causes. it requires deep thought about any issue that is important to you and asks you to make a judgement on whether the 80/20 Principle is working in that area.

Concluding thoughts

In this article, we had a look at how to use the 80/20 Principle. The two tools provided by Richard Koch help us find the most impactful elements in various scenarios (i.e., the 20% that produces 80% of the results). For a quantitative analysis, which takes a bit more time, the 80/20 analysis can be used. For our daily life decisions, the more readily available 80/20 thinking can be used.

I have started using these two tools a bit more proactively in my life, and I am enjoying the results I see. I use my time significantly more efficiently just by consciously finding which action has the most impact and prioritizing that.



I encourage you to go ahead and use these tools in your own lives and see which benefits you get from them. Drop a comment here if you resonate with this article or have a different view about the points presented.

Next, we will have a look at several examples of the Pareto Principle, to solidify the knowledge we gained here and in this current article.