



Contents

. 1
. 1
. 1
. 2
. 3
.4
. 6



Introduction

I suspect most of us have already heard about the Pareto Principle. I typically used to see it passively, and the main idea would always be that 20% of x results in 80% of y (x and y depend on the example in question). In my mind that meant you can always identify 20% of inputs that would result in 80% of outputs. A few days ago, I decided to give myself the chance to understand this principle a little bit better (What is the principle about? Who came up with it? Is it important to know the principle?). Hence, I read several articles and a couple of chapters from Richard Koch's "The 80/20 Principle". I present my findings and my new understanding of the principle in this article.

Note that I use Pareto Principle and 80/20 Principle interchangeably in this article.

Who was Pareto?

According to <u>Wikipedia</u>, Vilfredo Federico Damaso Pareto was an Italian civil engineer, sociologist, economist, political scientist, and philosopher (that's quite a bit for one man if you ask me). He made numerous important contributions to economics (especially the study of income distribution and the analysis of individuals' choices). He was born in France in 1848 and died in Switzerland in 1923.

The guy had a keen understanding of income distribution from what I understand, and he eventually managed to find a mathematical relationship between wealth and population.

Origin of the Pareto Principle

If you browse the internet looking for the definition of this principle, you'll read about various origin stories.

<u>Some</u> say Pareto noticed that 80% of the land in Italy was owned by 20% of the population. And after performing a number of surveys, he noticed the same pattern abroad (This is the more prevalent origin story from my research).

<u>Others</u> say Pareto noticed that 20% of the pea plants in his garden generated 80% of the healthy pea pods, and this observation made him start thinking about uneven distribution. And after that, he discovered that 80% of the land in Italy was owned by just 20% of the population. He then made several other similar observations in other fields.

The recurrent origin stories above seem too simple don't you think? <u>Richard</u> <u>Koch</u> presents an origin story (In his book The 80/20 Principle) that feels a bit more "believable" to me.

Around 1897, Vilfredo Pareto taught the Cours D'Économie Politique (a rough translation to this is Course on Political Economics) at Lausanne University, France. According to Richard Koch, Pareto never used the terminologies 80/20 Principle or even Pareto Principle, even though they are directly linked to his name. Apparently, he did not even make the observation that 80% of income



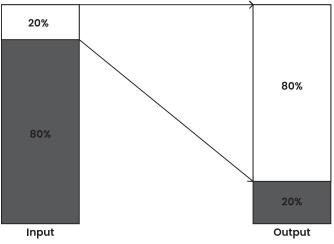
was earned by 20% of the working population (which is a bit surprising to me). Such results could be derived from his calculations though. What exactly did Vilfredo Pareto discover? While looking at patterns of wealth and income in nineteenth-century England, he found that the distribution of wealth across the population was predictably unbalanced. There is a consistent mathematical relationship that can explain this. For those of you who like formulas, you can check the formula below:

logN = log A + mlogx

Where N is the number of income earners who received incomes higher than x, with A and m being the constants.

With all these origin stories, I cannot tell you for a fact which is real and which is not, but the essence of this principle transpires from all of them. I suspect the mathematical formulation is the base and people started simplifying the concept breaking it down to what is now known as the 80/20 principle.

Random fact, the term "Pareto Principle" was coined by <u>Joseph Moses Juran</u> (An American electrical engineer widely credited with being the father of quality control) in the 1940s or so.



Source : The 80 20 Principle (by Richard Koch)

Key takeaways from the Pareto Principle

There are four main things that I think are important to mention about this Principle:

It is **not a law**, but rather, an observation. Hence although it can be applied to a lot of scenarios, it does not apply to every scenario. This observation indicates that **there is an inbuilt imbalance between inputs and outputs**. Some inputs contribute more than others. Or said differently, things in life are not always distributed evenly.

The ratio 80/20 is **purely indicative**. It can be 90/10 or 60/40 or 98/2.

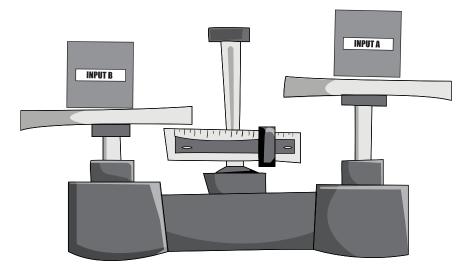
The ratio **does not have to add up to 100%**. Richard Koch points that out quite well, as well as this article. For example; less than 1% of common words make up 60% of our conversation (60/1). This observation was made by Sir Isaac Pitman (inventor of shorthand).





I'll also point out that the Pareto Principle does not imply you only do 80% of the work (or only the most significant part of the work). 80% of the work might be done in 20% of the time, but **you need to do 100% of the work** for it to make sense (Imagine handing in your thesis with only the literature review, analysis and conclusion for example. You need to complete everything to be able to present it).

Remember the main idea of this Principle is that there is a fundamental imbalance between inputs and outputs.



Pareto Principle and prioritization

The Pareto Principle applies in numerous facets of our lives; social (you gain the most growth and happiness when interacting with a small fraction of the people you know), physical (smoking and drinking can have severe consequences despite not taking up a lot of time), mental (meditating only 20 minutes a day can drastically change the outlook of your day) etc. Regardless of how we want to look at it, it is rarely true that 50% of inputs result in 50% of outputs. Understanding that most results come from a small fraction of inputs allows us to prioritize.

Prioritization here means using the resources that have the most impact at the right time. Any resource that has weak effects should be substituted. I'd like to clarify what I mean. I am talking about resources that will help you achieve a desired outcome. If you want a healthy body, one of the most important things is probably watching what you put in your temple, hence focus heavily on that. Once that is a given (i.e., you eat healthy regularly), you can start adding things like running and working out for example (you can do all of them at once if you wish, but there is one action that produces the most results, always. And in this case, I believe it is eating healthy).

We can look at prioritization like an exam, there are some "questions" that carry more marks than others. You should focus on answering those "questions first" (they might be a bit more challenging), before going for the "questions" with fewer marks. Understanding the Pareto's Principle allows you to clearly see that some "questions" are worth more, and deliberately answer them first.



How can we use the Pareto Principle to our advantage?

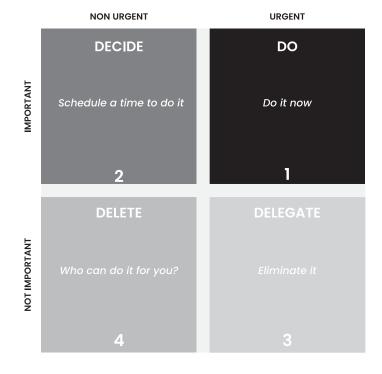
1. Develop a priority list for your goals/targets

For any goal you have, first list the components required to achieve it (this is your typical to-do list). Then, determine which components have the greatest impact (these are the activities that will be the most valuable when completed), and start with those. Some people seem to have more hours in a day than others (due to their exceptional productivity), but a lot of that is because they have fundamentally understood Pareto's Principle, <u>the value of each hour</u>, hence they prioritize ruthlessly. Trim your activities down to the most important and tackle those first.

Have a look at the following examples:

- Do you want to start a website? Identify the most important components for the success of a website and complete those first (things like loading speed, content creation etc.).
- Do you want to write a report? Come up with a solid outline and then attack the most important sections first.
- Do you want to grow in your career? Identify the most important responsibilities you need to take and find a way to fulfil them.

Some more in-depth knowledge on creating priority lists can be found <u>here</u> and <u>here</u>. Both are more on the digital side, which makes things easier to track and share. A key tool I've seen presented to help with prioritization is the <u>Eisenhower</u> <u>matrix</u>. In a nutshell, you need to organize your tasks in the Eisenhower matrix. Do those that are urgent and important and delete those that are neither urgent nor important. Use priority lists not just for work, but equally for personal projects. The Eisenhower matrix can be seen below:



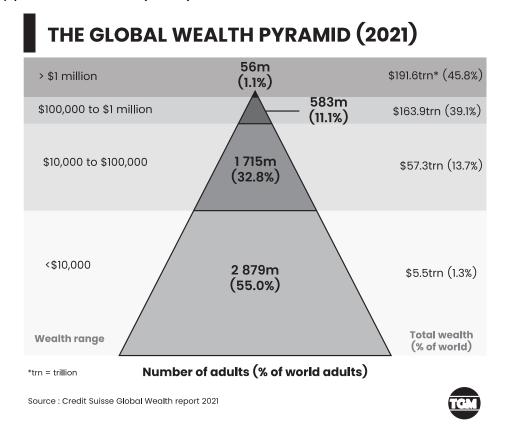


2. Delegate or delete tasks with the lowest outputs

After you have completed your priority list and identified the impactful tasks you will tackle, if possible, delegate the rest (you can delete those that are neither important nor urgent). This might not be possible for personal tasks, but for tasks that are done in group settings, go ahead and delegate the less impactful tasks or drop them. Nobody has the time to do every single thing they want to do, I definitely don't have that time, and unless you are some magician, I doubt you have that time either.

3. Understand the reality of typical distributions

If you are an idealist, you might want to believe that there is a balance between inputs and outputs. Unfortunately, it does not look like the world works like that in most cases. Take wealth distribution for example. Let's have a look at the global pyramid of wealth (2020) from <u>Credit Suisse 2021 Global Wealth Report</u>.



According to this graphic, the top **1.1%** (about 56 million individuals) own **45.8%** of the global household wealth, quite insane. If you look at the base of the pyramid it's even worse, the bottom **55%** only owns **1.3%** of the global household wealth.

The point here is this, **life is not "fair"**, and honestly, I don't think it will ever be. It is good to understand this reality and keep that in mind when navigating through life.



Conclusion

This article is an introduction to what the Pareto Principle is. I present several origin stories of the Principle as well as why it is important for us to know it, and how it can be used to our advantage.

In the next article, I'll focus a bit more on what I gathered from Richard Koch's The 80/20 Principle. This will involve how to think 80/20, the required conditions to apply the 80/20 Principle and some examples of the 80/20 Principle being applied.

I hope you enjoyed the material. What do you think about the Pareto Principle? In which ways have you been using it in your life? Drop a <u>comment here</u> to let me know what you think.