Simple ideas about **complexity**

ACUMEX

Definition of "complexity": something complex, the quality or state of being complex (Merriam-Webster)
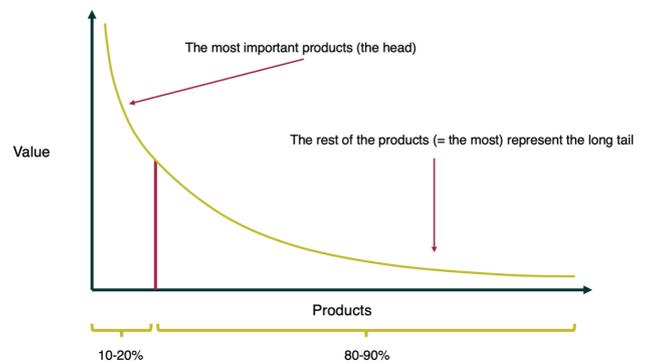
A damn fine cup of coffee

Remember when a damn fine cup of coffee could be a simple cup of black joe from the pot in a diner? FBI special agent Dale Cooper from the 1989 TV-series Twin Peaks knew all about that. In the mean time a plethora of individual preferences, global supply chains, fine-grained market segmentation, data analysis etc. have led to an explosion in the number of variations of the product "coffee". You now choose type of coffee bean, roasting, grinding, with or without milk, which type of milk, additional flavour, which size and ultimately to stay or to go. And that's before you get to the cake!

"A damn fine cup of coffee"

Any colour - as long as it is black

Henry Ford knew that complexity leads to increased costs, but even the Ford Model T was available in a choice of colours. With a huge variety of choice, modern supply chains contain thousands of items used in varying quantities and values. When plotted by decreasing value they usually form a curve with a long tail (like a Brontosaurus tail). This Pareto distribution indicates that many products will have low value and suffer from the law of diminishing returns. One approach to solve this may be to try to "cut off" the tail by reducing the number of items, but this may not always be possible, at least not to the extent desired.This remains one of the permanent struggles of procurement.

Value

The most important products (the head)

The rest of the products (= the most) represent the long tail

Products

10-20%   80-90%

The simple ideas

Some lizards may lose their tail deliberately to protect themselves from being eaten. Similarly, we may cut off the long tail of procurement to protect ourselves from being eaten by costs. In Acumex, we think, that all things considered, the lizard will prefer not to lose its tail as the replacement tail is less functional and the trick may only work once. Instead, we suggest to use AI-technology to work with the tail and completely remove the long-tail problem. Having the luxury of choice and the capability to deal with the complexity is a simple idea from head to tail.