

For example, electricity generation appeared in the past and then evolved through competition becoming more industrialised. This in turn through componentisation effects enabled higher order systems such as computing which enabled new industries serving new user needs. Computing in turn evolved through competition enabling the creation of novel higher order systems such as databases which enabled new industries. And so the process continues until the modern day where we have intelligent machine agents. I've summarised this in figure 23, adding a line of the present (i.e. where we are today) but also highlighting the past (where we were) and adding the fairly obvious anticipation that intelligent agents will themselves become commodity like (where we will be). Without a long history of more industrialised forms offering highly efficient components for once magical wonders then I would never have had the ability nor the capital to write this story on a digital computer in a word processor.

Figure 23 — Efficiency enables innovation