

novel and new becomes commonplace. Yesterday's wonders are destined to become today's discounted special offers. The magic of the first electric light bulb, the first computer and the first telephone are now an expected norm. We no longer marvel at such things but instead we would reel in utter shock if presented with a workplace that did not provide them. Competition and the desire to gain an advantage not only creates change, it spreads it and forces companies to adopt it. Somehow, I had to map this competition itself including the journey from novel to commonplace. But what is that journey and what are the components that I'm going to map?

The more I looked into this, the more complex it became because that journey from novel to commonplace is not the end of the story. These extremes are connected as one enables the other. A historical demonstration of this would be Maudslay's screw cutting lathe in 1800. The invention of the first screw thread is often cited as 400BC by Archytas of Tarentum (428 BC — 350 BC). Early versions of this and the subsequent nut and bolt designs were custom made by skilled artisans with each nut fitting one bolt and no other. The introduction of Maudslay's lathe enabled repeated production of uniform nuts and bolts with standard threads. One nut now fitted many bolts. The artisan skill of building the perfect nut and bolt was replaced by more mass produced and interchangeable components. The novel had become commonplace. Whilst those artisans might have lamented the loss of their industry, those humble components also enabled the rapid creation of more complex machinery. Uniform mechanical components enabled the faster building of ships, guns and other devices.