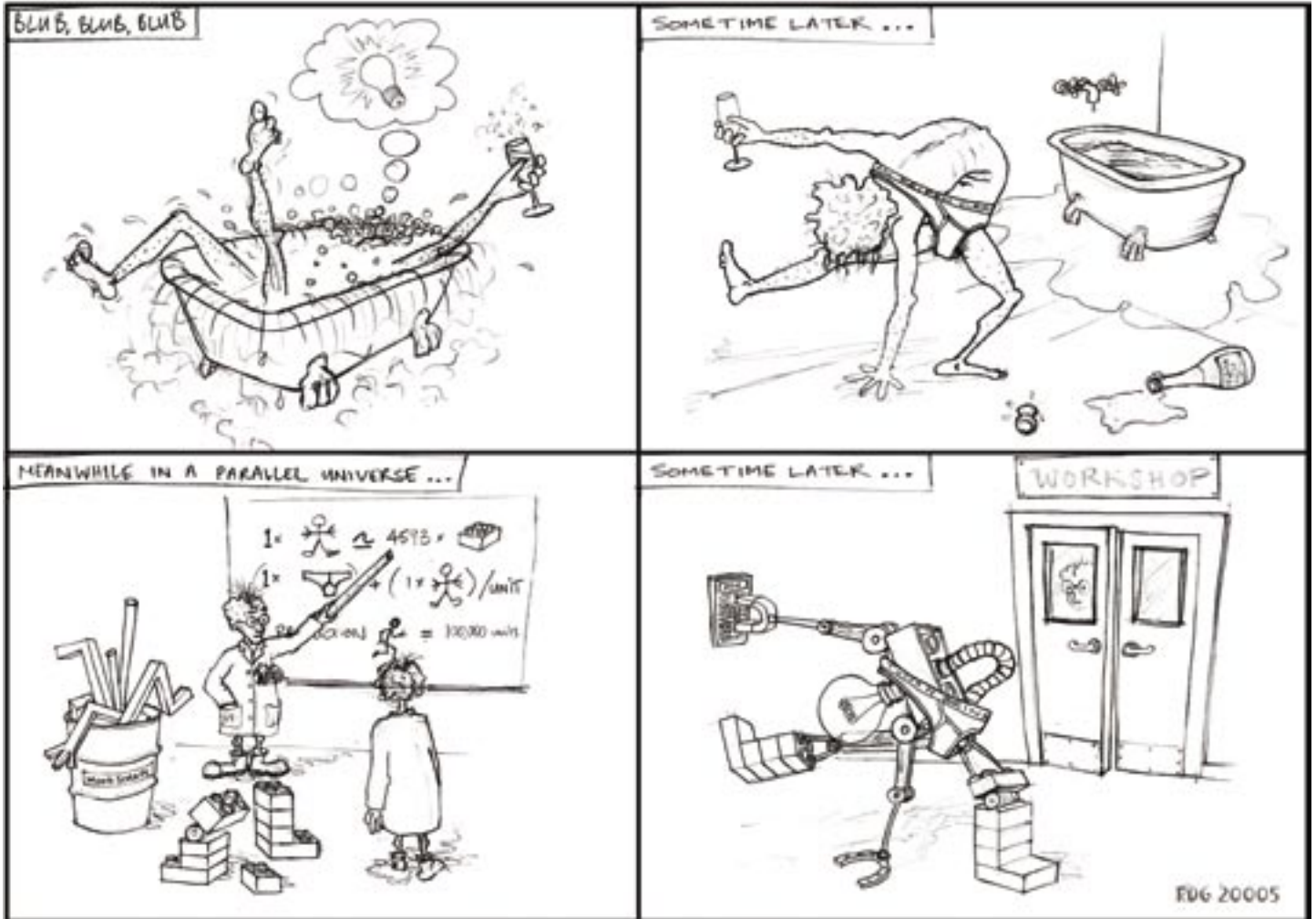


Eureka

Demystifying innovation:
an illustrated manual
by Roger Dennis





Creating original and compelling new products is at best a gray art. Doing it in a repeatable and systematic fashion is the deeper issue that faces many design companies.

Larger consultancies can rely on stable in-house teams that have the resources to avoid succumbing to the design of 'me-too' products. Smaller design houses often depend on the strengths of a couple of key individuals who are relied upon for their ability to snatch creative insights. In their absence it's a matter of wrestling with a myriad of slippery and ill-defined theories of innovation.

It's not like there's a shortage of material about innovation and product design—I should know. After a few years working in and alongside innovation teams in London, I returned to New Zealand to establish a front-end-of-innovation process for InFact, the country's largest product-design company.

With a reputation for delivering well-engineered products on tight timescales, repeat business is the cornerstone of the company. However, while clients always aimed to produce disruptive products, they simply did not have the expertise that would enable them to do so.

InFact's aim was to develop a product creation methodology that would feed its proven product-development pipeline. The key to developing the new methodology, and indeed my challenge, was to make the process so clear that anyone could follow them—therefore eliminating dependence on the "Eureka!" team.

This is where things started getting interesting. In developing a step-by-

step process, it became very clear that in the design context there's not much known about the practical day-to-day job of developing innovative products.

Some of the more popular bibles of innovative thinking—by the likes of Clayton Christensen and Gary Hamel—talk about intangible concepts such as corporate cultures, managing disruptions, interdisciplinary teams and frameworks. These authors all make good points that have been well received, but at the same time give few suggestions for practical implementation.

One of the more interesting theories of new product creation has been developed by Eric von Hippel. His process—called Lead-User Studies—takes an easily understandable proven approach. Von Hippel has taken the time to clearly outline his process both in online articles and easy-to-follow videos. The drawback for a small design business is that it's time consuming, and may take several expensive weeks before the really interesting insights are uncovered.

TRIZ is another methodology with a clear process and numerous excellent online resources. However, it's more suited to problem solving than it is to creating new products, and to really get to grips with it, you need the presence of a potentially expensive trainer.

Voice-of-the-customer studies are a current favourite in new product creation. There is no doubt that starting with the needs of the customer—rather than the needs of your clients Marketing Director—is the way forward. But these studies have a tendency to generate imprecise statements that can be almost

impossible to design directly against.

If you do manage to distill some pearls of pragmatic wisdom from current research, very few clients in New Zealand have the stomach to write large cheques for such time-consuming activities as ethnography and deep dives. I suspect this is also the case for the clients of the many smaller product design consultancies outside of London, Tokyo, New York, and Silicon Valley.

So where does that leave things? In the end I knitted together a process based on quantitative customer research. Contrary to most writings about the innovation process, new product development can be driven by numerically ranked and carefully worded statements derived from customer input. That's not the whole story, though.

To round the process out you also need qualitative input. Many smaller consultancies already possess the necessary skills in the form of brainstorming, rapid prototyping and quick sketching. There's also a verification stage that needs to be present. This is essential to carry out critical thinking and remove the half-baked conjecture that output focused clients bring to the project.

What does this mix produce? A metric-based innovation approach, augmented by qualitative input with a verification stage to weed out the rubbish. More importantly, it should also produce some well-designed products that meet a clear customer need: Not just once, but again and again.

Just don't tell the "Eureka!" team.

