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Designing a consumer product? Five things to think about

We are let down by everyday products far too often. Here Nick Mival from DCA takes us through five recurring themes to think about when you are designing your next product

Watching an average product being communicated through a great TV advert or social media campaign makes my heart sink. Wouldn't it be good if the product lived up to or exceeded the audience's expectations?

Successful products improve or surpass what has gone before. To do this, it must be more useful, relevant or desirable. It needs to do its job excellently, efficiently and effectively. Too many products don't.

Budgets are tight on both sides of the checkout. In this context, it is more important than ever to create products that are genuinely better. All too often an average product can be produced rather than a great one.

We have been designing products from toothbrushes to trains for the last 50 years and are often asked by our clients: 'What should we be thinking about when we design our new product?'

Obviously everyone has specific issues based on their particular scenario but many of the same issues keep coming up.

Here are five themes to think about when designing your next product.

1. Design fewer products, beautifully

Designing a great product takes far more effort than most people think, so don't waste effort on the wrong product. Once you have limited the amount of products you are designing, spend that saved time on the important aspects of the products left. Listen to Jony Ive of Apple when he says: 'Deeply understand the essence of the product you are designing in order to get rid of what is not essential.'

Often scorned as a designer's mantra, 'less is more' should be a guiding principle to all great product design and product strategy. The 19th century phrase was adopted by Mies Van der Rohe, one of the founders of modern architecture, as a precept for minimalism. However the principle is not just limited to the Bauhaus, but is a philosophy that underpins most great products through a high level of clarity and simplicity.

2. Exploration or delivery

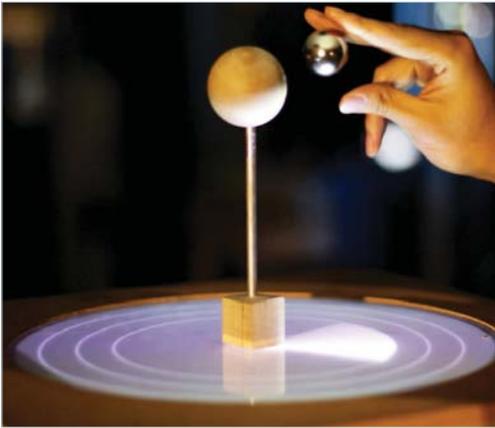
What is the right level of innovation in your new product? The answer usually revolves around risk. It is important to distinguish whether a project is exploratory or delivery orientated. It seems simple but it is often the case that these two types of projects become mixed. When this happens

on what should be an exploratory project, it can lead – as Dr Astro Teller of Google warns us – to a 'failure in imagination'. Alternatively, too much innovation on what should be a delivery project often means that an unresolved product hits the high street.

Keep these two types of projects distinct. It is very easy to dismiss a wild idea and leave it festering on a shelf with no more time or love, just because it is too risky for the delivery timeline or would introduce a few too many unresolved dreams which really require separate exploratory work. 'Constant Beta' projects are hard when tooling up for a few hundred million units per annum. Run exploratory projects to feed into delivery projects or allow yourself much more time.

3. Systems not products

A product is always part of a larger system. The simple act of making a cup of tea is a complex system which, if analysed effectively and understood, will help create a better kettle, tea bag or new category of product altogether. Don't start with the kettle. Understand what the user is trying to achieve and help them achieve it. It has led to the term 'user experience design'.



- 1 **ZeroN** The exploration project from MIT is a new physical/digital interaction element
- 2 **The Nest** smart thermostat by Bould Design uses data about the way we live
- 3 **Upcoming video** game console Ouya mixes Yves Behar's design expertise with crowd funding and open source software



As we move forward, this process of understanding the systems in which a product partakes is becoming increasingly important. We are at a point where our everyday decisions will change as we learn to manipulate and cherish the layer of data captured by ubiquitous computing and sensor technologies. 'Big data' is here; and not just for use by quantitative researchers. It will change the system your product belongs to, from consumer healthcare to soap powder, so it needs to be understood.

4. Balance evidence and intuition

Through design research, we need to understand what the product means to the user, what they are trying to achieve and what they value. But while we make the subjective, objective, it is important not to just design purely by numbers. Let a good designer

close the door and use their experience, skill and intuition to create products with soul.

When designing a new product there are times to be open and times to be closed. As we 'co-create' with users and embrace the power of the crowd, we need to be careful how it is leveraged when designing a new product. Designing great products is very complex and not for 'crowds'. While great albums may be funded by crowds, great songs aren't written by them and most people wouldn't want to live in a town with houses designed by the occupants. Crowd-sourcing is a low-cost, high-volume way to receive data and ideas on simple issues. All the while, 3D printers are hitting our high streets; we see mass customisation and hacking leading to people designing their own products. In this context the power of the crowd should be recognised and respected.

5. Love thy engineer

Great products don't exist without great engineering. It seems obvious, but it still amazes me how many products are let down by poor engineering that lacks care and rigour. Design teams and engineering teams must integrate and align. There is no point having a great strategy leading to a great design, sending it to a disconnected engineering team with different incentives in a distant factory, and still expecting a great outcome. The smallest sink mark on a product's moulding can undermine the brand in the user's hand. Allow both designers and engineers to be ruthless with the detail, keeping them close all the way through prototyping and manufacturing.

Then you can achieve products with purpose and soul through beautiful aesthetics, elegant engineering and intuitive usability. ●