

Anticipating the future

In conversation with Alistair Welch, DCA director **Nick Mival** explains why design consultancies are often the perfect partner in driving innovation

Innovation's great, isn't it? Everyone wants to innovate, don't they? Absolutely. But it's worth remembering that innovation can only add value if it is appropriately directed. Innovating 'randomly' or simply for the sake of the new risks bearing little fruit. Design consultancies, which once upon a time may have received tightly focussed product briefs, are more frequently receiving early, open questions and briefs like 'How do I recruit youth to my brand?' These questions need to be answered by multidisciplinary teams that are comfortable with ambiguity and experienced in working pre-brief, creating opportunities and propositions before product. These teams use design thinking to help clients anticipate the future by devising and implementing innovation strategies.

DCA Design International is a case in point. Founded in 1960 as David Carter Associates, it is fair to say that DCA is one of the stalwarts of the UK's product and industrial design landscape. From its headquarters in the historic Midlands

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town of Warwick, the consultancy has worked with clients from around the world across four key sectors: medical and scientific, commercial and industrial, consumer, and transport. DCA's portfolio includes some of the world's most recognisable brands and the business has had a hand in the design of a host of iconic products from the Stanley knife to the Eurotunnel Shuttle.

Over the decades, DCA has evolved from its core provision of product design and development services to offer a range of insight and strategy capabilities across product and service innovation programmes. These services help their

clients anticipate the future, uncover opportunities and most importantly bridge insight and design to deliver innovation.

Nick Mival is a director at DCA. Originally graduating as an industrial designer he joined the consultancy in 2005 from London-based agency PDD where he was head of strategic design. Through his twelve years (and counting) in a leadership role at DCA he has witnessed how innovation strategy has become increasingly integral to the consultancy's offer. The market – whether for consumer products, medical devices, or large transport programmes – is increasingly shrewd. In Mival's eyes, newness in itself is not enough to deliver a compelling product or service; creating a coherent strategy that informs a client's approach to innovation is critical in determining the success or failure of a project.

Where to begin?

The starting point in any discussion of innovation strategy must be to insist on the value of innovation. "We're taking it as read that innovation is important, a lot of people don't," comments Mival.

If we agree that innovation is important, the question that follows is who does it actually benefit. From Mival's perspective it makes sense to turn back to first principles. "We start with the

basic philosophy that great design stems from empathy. We then ask two simple questions. 'Why is it like that?' and 'How could it be better?'," he says. "I think a lot of work goes on around creating just 'new stuff' when what we are after is genuinely better products and services."

This is where having an innovation strategy is likely to make its presence felt. Often a company will offer a particular type of product or service on account of the structure of the organisation. Therefore, an underlying principle of any innovation strategy is to address existing capability and how this either might be harnessed to move in a valuable new direction or re-organised to create conditions more conducive to the desired innovation.

The advent of new, potentially disruptive, technologies can force companies to examine where their potential to innovate exists. Mival cites the example of a car manufacturer that for years has produced cars with petrol or diesel engines looking to market an electric vehicle. He continues: "If you have been making a physical object that is mechanical, but to make it better it needs to be electro-mechanical or become connected and have an accompanying app, usually you are moving into an area in which you are not expert. At the same time when technologies evolve the lines blur between categories and competitors creating opportunities. It's interesting that Dyson are creating an electric car: that makes sense because their core knowledge is electric motors, batteries and robotics which is what electric cars are essentially about; a more traditional automotive company that manufactures diesel vehicles has various legacies to overcome and new capabilities to build. If you are doing

something new, you need to recognise it is new to you and get your internal knowledge and capabilities sorted, quick."

Some companies are more adept at innovation than others and many large corporations are eager to learn from the agility of start-ups. "DCA is working with a US start-up at the moment, it's a highly nimble and innovative company with no legacy products and few rules with everybody sitting in the same room," adds Mival. "This all leads to fast and brave decision making. Often start-ups are thought of as speed boats and corporations as big ocean tankers. Teams in large corporates look jealously at start-ups and see if they can recreate that culture within their company." He continues: "It is sometimes difficult to determine where innovation sits within these larger companies. Is it in R&D, is it in marketing? It can be tricky for big corporations and most of the quick innovation I see in larger companies involves empowered, autonomous, small multidiscipline groups, all in alignment, effectively acting more like a well-funded start-up. And there is an insight for all you jealous corporate teams. Start-ups spend a vast percentage of their time just raising money."

How to balance risk and reward

Innovation by its nature is risky and product innovation especially so. With the chance of failure always looming, it makes sense to have a strategy in place that ensures a company has the appropriate capability to innovate in a certain space and that gives a product the greatest likelihood of success. "From a strategy point of view, you need to understand when a product is an experimental, exploratory piece of work versus an evolutionary project," says Mival. "The

number one mistake people make is to mix these two different types of project up and think of all innovation as 'just another project'."

Having decided that it wants to create something genuinely innovative, a company may discover that there are barriers within its own organisation – whether they be capability based, legacy issues, or emotional obstacles – that can stand in the way of progress. It is in this situation, Mival argues that thinking in terms of an innovation strategy is vital. "If you ask how to create an innovation strategy, then the very first thing we'd say is put out a vision," he says. "We understand that making something truly better is difficult to achieve and it's necessary to ask what are the stepping stones towards that goal. You can start to create an innovation strategy through streams of work, that might be an exploratory programme around a vision, and through that development you might achieve certain parts of the vision which then cascade down into products and platforms which enable faster and lower risk innovations in the future."

There is a danger that companies are wise to avoid: trying to do too much, too quick on a single innovation. Attempting to innovate on every element of a product is likely to be overwhelming and a recipe for failure.

Mival explains that the most meaningful innovation is informed by a clear sense of purpose

Attempting to innovate on every element of a product is likely to be overwhelming

Opposite | Nick Mival, DCA director

and most successful product innovation always starts by thinking at least two or three products ahead. "We try to innovate through platforms rather than products," he comments. "We should always be designing a platform that can then create a series of innovations. If you're Dyson you have a motor which goes through everything, if you're Philips you have a chassis which runs through a whole series of different implementations and evolutions rather than one-off single innovations. A platform innovation or technology will underpin the efficient and effective development of a number of products for years to come."

Be Dick van Dyke not Katie Hopkins

Collaboration and discussion are important, but there comes a time in any innovation programme when the talking needs to stop and the doing needs to start. Think of the scene in *Chitty Chitty Bang Bang* when the eccentric inventor Caractacus Potts shuts the door of his workshop to dedicate himself – beyond the distraction of even his children – to the creation of his fine four-fendered flying car. It's an approach which Mival contrasts with the way 'design' is seen to happen on the BBC's *The Apprentice*.

Each series of the business show typically features an episode in which the candidates are tasked with creating a new product. What ensues is invariably scenes of argument, waffle, and talking at cross purposes. A flimsy idea of a product is then communicated to a somewhat bewildered designer in front of his or her CAD workstation. "I watch and think, great TV but that's not how to do it," says Mival. "As a designer there's a moment when you've taken all the insight, information and inspiration in and you just need to shut the

doors and get on with it. The great thing about consultancy is as you build trust with your client you are able to 'shut the door' and just get on with things, this is when the magic happens'.

The conceit of the closed door of the workshop only goes so far. In working with a client on any form of innovation, DCA will endeavour to make risk as transparent as possible. One of the key aspects of any innovation strategy is to make risk transparent so it can be mitigated. It is key to communicate risk so that different types of stakeholders can understand it. "One of the biggest challenges large organisations have around innovating is the communication of risk," says Mival. "People from different functions have different understanding of the risks and challenges in innovations. Take prototyping for example. People who don't understand the idea of iteration and prototyping are often concerned that a prototype 'does not work'. It needs to be communicated that a prototype is an experiment which you learn from, they don't always 'work'. So any innovation strategy needs to integrate how risk and even processes are communicated. We even get involved in educating senior management on the innovation process so to avoid risk or results being misunderstood and whole programmes being shut down."

Whilst no design consultancy can truthfully claim to be able to predict the future, teams like

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DCA's insight and strategy teams do have a set of skills and processes to help a client anticipate the future and make better informed decisions about the trajectory of product development. "No-one can tell what the future is going to be and if they do tell you that they are lying," admits Mival. "We were researching and designing something between 2005 and 2007 for example with no knowledge that the financial crisis would come along and impact the success of a premium product we were developing."

Perhaps what is more valuable than spurious clairvoyance, is the designer's aptitude to always keep any innovation strategy or development project human centred and appreciate how people interact with products or services. "We start with inquisitive observation," says Mival. "We are people watchers. Great design stems from empathy and successful innovation strategies are underpinned through empathy for what humans' value."

Innovation strategy is one aspect of today's design consultancy's toolkit, albeit a very important element in guiding the overall design process. As Mival acknowledges by way of conclusion: "Designers are perfect partners to help develop successful innovation strategies. From my own experience and personal approach to design thinking I find myself and our teams constantly switching between three modes; inquisitive observation, creative speculation and learning through prototyping. An innovation strategy is not a static plan, it is constantly evolving picture that anticipates the future. It needs to be built with a team who thinks like this. A design team."

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