Exploitation has diminishing returns: Roger Martin

By Vivek Kaul
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Once a company hits a winning formula, it tries to exploit it to the fullest. And therein lies the trap. "The problem is, exploitation has diminishing returns. And by focusing on what it already does, the company puts itself at risk of missing new opportunities and avoiding disasters that come from big changes in the environment. The folks at General Motors were focused on doing what they had always done and were almost destroyed by the changes they didn't see coming. They had lots of past data to suggest they should keep making pick-ups and SUVs through 2008. But the world changed, and they just missed it," says Roger Martin, a professor of strategic management and the Dean of Rotman School of Management at the University of Toronto. Martin, who recently authored The Design of Business— Why Design Thinking is the Next Competitive Advantage, spoke with Vivek Kaul recently about his concepts. Excerpts:

What is design thinking?

I describe design thinking as productively balancing analytical thinking and intuitive thinking to advance knowledge. Analytical thinking has tremendous sway in the business world today. In this way of thinking, the path to value creation lies in rigorous, quantitative analysis — to declare truths and certainties about the world. Judgment, bias and variation are eliminated at all costs.

The opposing school of thought embraces the primacy of originality, creativity andinnovation. In this model, the creative instinct—the unanalysed flash of insight — is the source of true innovation. Both approaches have significant drawbacks. It's impossible to generate any new ideas using only analysis. And innovation without rigour

is scattershot and unharnessed. So, it is in the combination of the two ways of thinking — blending analysis and intuition as a great designer does — that the real power lies.

Why do you say design thinking is the next competitive advantage?

This goes back to the way in which knowledge advances. In my view, there is a pattern to it.

We begin with a mystery, in which we don't really know anything at all but have a perplexing question we wish to answer. We spend time pondering and trying to make sense of that mystery until someone, somewhere is able to make some headway, devising a way of thinking about that mystery that brings it down to size and makes it manageable. They develop a way of thinking about the problem — a heuristic (or experience-based techniques that
help in problem-solving, learning and discovery) or rule of thumb — that cuts out some of the mystery and enables us to think and act with some level of assurance. Then, again over time, that heuristic is honed and refined.

Finally, through some enterprising person pushes that heuristic ahead to become a well-defined rule for understanding the problem — cutting down the heuristic to become an algorithm (or a precise set of rule/s specifying how to solve a problem) that produces a reliable answer. That's the pattern — mystery, heuristic, algorithm.

Can you give an example?

Consider an example of McDonald's I use inthe book. When the McDonald brothers started out with a few drive-in restaurants in California, they were staring into a mystery. In the new post-war, baby-boom culture in America, what experience would customers want when they went out to eat? After time and some trial-and-error, McDonald's developed a successful heuristic — a loose notion of a new type of restaurant — the quick service restaurant with a limited menu and a service window rather than a drive-in. And using that heuristic, they were successful in a fairly modest way.

Then along comes Ray Kroc, who looked at that McDonald's heuristic and saw the potential for something much greater. He bought out the brothers and set out to turn

the loose heuristic into a precise algorithm. He built a business model in which every burger was exactly the same, every employee was trained in exactly the same way, all locations were planned, designed and executed in exactly the same way. He cut out enough complexity that the chain could grow from a handful of southern California outlets to the largest restaurant chain in the world, creating a new category — the fast-food restaurant.

Because so many companies get stuck in one knowledge stage, honing and refining the heuristics and algorithms they already have, I believe that enormous benefits will accrue to the
companies who are able to advance knowledge from one stage to the next. It will separate the really great companies from the rest, and allow them to maintain a long-term competitive advantage.
And the way to move from one stage to the next is design thinking.

A point that you make throughout your book is that it is not possible to prove any new idea in advance. Can you elaborate on this?
Absolutely. The problem here is the way in which we define proof. In business, proof means rigorous data derived from analysis of the past. For a new idea, there is no past data — no rich pool to analyse, no general rule to apply. Typically, new ideas come from hints of changes in our environment that can't yet be quantified or from anomalous bits of data that don't fit with our general understanding.

At Apple, Steve Jobs could not have proven in advance that the iPod would be successful.

He had a product he really liked and some hints that consumers might respond well to it. But until he really got it into the hands of consumers, until he launched iTunes and shipped out the iPods, he couldn't have known for sure that it would work.

The main reason why companies are not able to come up with new products or services, seems to be that a successful company does not want to focus on new technologies or ideas away from its core money making operations…

Companies get trapped into doing what they are good at. Continuing to hone and refine, to exploit what they already do, produces reliable results and looks a lot more straightforward that exploring new problems. Exploration is hard, with potential dead-ends and frustrations. Exploitation is predictable. So it is very seductive.

The problem is, exploitation has diminishing returns. And by focusing a company on what it already does, it puts that company at risk of missing new opportunities and avoiding disasters that come from big changes in its environment. The folks at GM were focused on doing what they had always done and were almost destroyed by changes they didn't see coming. They had lots of past data to suggest that they should keep making pick-ups and SUVs through 2008. But the world changed, and they just missed it.

Would it be fair to suggest that companies that do hit pay dirt through innovation are plain lucky given that most corporations do not see the future coming?
Some companies — the one-hit wonders of innovation — may be lucky. But I don't know. Think about big innovation companies that succeed in producing new products again and again over time — Procter & Gamble (P&G) or Research in Motion (which makes the Blackberry phones). I don't think either of these companies is lucky per se. I think both companies have created a space for design thinking that enables them to do both — to exploit their current products and businesses while exploring possibilities for the future. Truly great companies work really hard at seeing the future coming.

Would you say as companies become bigger it becomes difficult for them to practice design thinking and as a result they become less innovative?
I wouldn't say it is a question of size. Instead, I'd say that as companies develop heuristics and algorithms that seem to work, they can be trapped by them. As knowledge advances, information and judgment are paired away. This presents a tremendous gain in efficiency — there is less information to consider and shift through — but it means that you leaving a lot out. And what you leave out can come back to haunt you.

Think of McDonald's again. McDonald's grew exponentially exploiting its algorithm with burgers, fries, and shakes. But by the 1990s, it had lost touch with its consumers and

what they wanted in the way of fast food; its original solution to that mystery had grown stale with time. The company's management was so busy running its algorithm that it missed the evidence that many consumers wanted fast food with different or healthier options. Many other chains from Taco Bell to Subway explored the mystery of what those consumers wanted, and their solutions drove McDonald's into a tailspin.

There are multiple paths out of virtually any mystery. McDonald's chose one route out of the mystery and drove it to an algorithm. But when it settled at that algorithm, it gave its rivals an opening to develop alternative solutions to the mystery. Subway, for example, retained the quick-service component, but replaced burgers and fries with submarine sandwiches and fresh, healthy ingredients.

How can they hope to break though this block?
It's possible to incorporate processes, structures and norms that promote design thinking into a company. But it takes substantial work. For a company like P&G, it took the CEO to say it was one of his most important tasks — a part of his planned legacy — to jumpstart it. And then, it took a number of years to really bring design into the lifeblood of the company.

Bringing design thinking into an organisation can happen in big and small ways. P&G's former CEO A G Lafley did both. He created an important design organisation within P&G, which was tasked with spreading the gospel internally. But he also signalled a shift away from the primacy of exploitation and a balance with exploration in much smaller ways.

For instance, he changed the process for annual strategic reviews. Traditionally, each category president had come to his or her review with a thick deck of slides and a single right answer for the coming year, including all the data and proof needed to back it up. The goal was sign off by senior management, plain and simple. The strategies needed to be airtight, so risky creative leaps and intuitive insights were out of the question.

Lafley recognised that this process was a recipe for focusing on the past instead of the future and so devised a new process.

Presidents were told to submit their slide decks two weeks before the meeting. Lafley would read the materials and issue a short list of questions that he wanted to discuss. The meeting, he emphasised, would be a discussion, not a presentation.

Presidents were allowed to bring only three more pieces of paper—charts, graphs, notes — to the meeting. Only by more or less forcing category managers to toss around ideas with senior management in this way, he reasoned, could they become comfortable with the logical leaps of mind needed to generate new ideas.

It was a shock to the system, but before long the category presidents embraced it. They were invigorated by the chance to engage in dialogue about what could be rather than what was. Freed from the demand to come up with the single right answer and prove it, they started to work out bigger bets with the corporate team.

Would you say a company like Google is a good example of a big company which successfully follows design thinking?
I haven't studied Google extensively, but it looks to me like design is very much a part of their culture. The 20% policy — where engineers get to spend one day a week working on the problems that interest them — strikes me a really smart way to get employees engaged in moving knowledge ahead. My bet is that some of Google's most successful ideas come out of that policy.