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The Thought Column: Clayton Christensen

Clayton Christensen is a Professor of Business Administration at the Harvard Business School. His research and teaching interests center on the management issues related to the development and commercialization of technological and business model innovation.

He is the author of *The Innovator´s Dilemma*, which received the Global Business Book Award for the best business book published in 1997. He has followed with *The Innovator's Solution* and *Seeing What's Next.* A two-time winner of the McKinsey Award for the year´s best article to appear in the *Harvard Business Review*, Christensen ranks as one of the world´s foremost business thinkers on issues of technological innovation and renewal.

Interviewed by Doug Berger, Managing Partner, INNOVATE LLC. doug@innovate1st.com

Doug: What are the new lines of thinking on which you are now working?

Clayton: I have three families of thought. One relates to our work on segmenting markets **by jobs that people are trying to get done**, rather than segmenting markets by product category or by customer category. If we can articulate the concept and the methods for using this concept well, it will be a bigger, higher impact idea than my original work on disruption.

Associated with that is the **concept of a purpose brand** and a methodology for building a valuable brand. Both of these concepts are predicated upon the conclusions that the reigning paradigms of segmenting markets, understanding customers and building brands are just fundamentally flawed, causing hundreds of billions of dollars to be wasted. It's a big deal.

My second line of thinking regards the tools of financial analysis that we teach in all MBA programs. The tools of financial analysis have a systematic bias that prejudices innovation, and makes it very difficult for a company whose growth is stalled to begin again. So, second is the development of **new tools of financial analysis that are not biased against innovation**.

Thirdly, I'm thinking about the optimal shareholding structure of a company. The whole idea that management is responsible for maximizing shareholder value actually isn't carved in stone. It was an assumption made by economists in the 1960s. They had to make the mathematics of building models about corporations tractable – their calculus had to maximize some objective function. So they assumed, for the purposes of making the math work, that management was responsible for maximizing shareholder value.

The concept was actually not erroneous back in the 1960s, because the typical shareholder held a company's stock in their portfolio for an average of six years. In 2006, however, 40% of the trading volume on the stock exchange is accounted for by hedge funds, whose average holding period is 60 days. 80% of the shares in the public markets are held by mutual and pension funds, whose average holding period is ten months. So, we're beginning to think that these people ought not to be viewed as shareholders. Rather, either as speculators or investors who temporarily find themselves in possession of the shares of a company. **Maximizing shareholder value is just another broken paradigm**. And because the drive to maximize shareholder value is so intense among some managers, it causes them to under-invest in innovation.

These are the three lines of thinking that we are trying to push and I have outlined them according to the depth in which we have begun to explore these concepts.

Doug: Let's revisit your first point - the jobs that need to get done. You used the terminology 'purpose brand.' Please elaborate on that.

Clayton: If you are in a company looking out to the market, it appears as if the market is structured by product category and by customer category. Almost all market segmentation schemes segment markets along those lines, and then collect the correlating data. They'll measure the size of markets and the market share by product category or by customer category. And that, indeed, is how the market appears, if you're in the company looking out.

But, if you are in the market, looking at the market, that is not how the market is structured. The market appears, from the customer's point of view, as a job which they need to get done. They hire products or services to get the job done for them. If you really want to understand how a customer will respond to a new product or service, you need to segment the market, not by product or customer category, but by the jobs that arise in their lives for which they might hire a product like yours.

Then, when you've developed a product that does the job well, you need to give it a brand that will pop into the customer's mind at the exact point in time when they realize they need to hire a product to do the job. We call that a **purpose brand**, because it tells you for what purpose you ought to hire that product. A job that needs to get done, for example, is … I need to get something from here to there as fast as possible and with perfect certainty. When that job arises in your life, what brand pops into your mind?

Doug: FedEx.

Clayton: Yes, exactly right. FedEx is a purpose brand. That job was there forever, and there really wasn't anything to hire to do that job well until FedEx came along. They created a system to do that job as well as possible. That brand was tied to that purpose.

Customers think in three steps. Step number one, "I need to get this job done." Step number two, "What can I hire to do the job?" Step number three, a brand which has done the job very well pops into their mind and at that point, they hire that particular service or product to do the job. If there is no known product or service to do that job well, then customers will either engage in compensating behavior, because there is nothing to buy, or they will wander around searching. If nobody has created a service or a product which is positioned right for the job, and they haven't given it a brand, the customer is confused. FedEx is a great purpose brand.

So you get a sense for what I mean by purpose brand. Almost every valuable brand actually started out as a purpose brand. QuickBooks and TurboTax for Intuit are incredibly powerful brands. Interestingly, these brands are not built through advertising. They're built when somebody develops a product that does a job well. People hire the product, find that it does the job well, come to trust that brand because it does the job well, and then they spread the word. Starbucks is positioned on a job. Google is positioned on a job that people need to get done. Because of that one-to-one association between a product designed to do a job and that brand, these almost become verbs in the language of business.

Doug: Let's move on to the second topic - the tools of financial analysis and the systematic bias that prejudices innovation.

Clayton: There are two analytic tools in widespread use. The first is Discounted Cash Flow (DCF). It appears in different ways. You either look for an internal rate of return or some hurdle rate on net present value. All of those manifestations of the fundamental concept of discounting a future stream of cash or earnings are based upon an assumption that the status quo in the business will maintain itself into the future.

You're comparing the upside generated by this innovation with the present state of affairs. But the present status quo does not maintain itself forever. In fact, the status quo is on a declining trajectory of performance which will accelerate over time. So, if you were drawing a graph where the vertical axis is the financial condition of the company, DCF implies a straight horizontal line. Then you compare the upside created by the investment with that straight horizontal line. In reality it is not a straight horizontal line, but a declining line that accelerates downward over time. Therefore, if deteriorating performance over time is the baseline, many more investments in innovation than companies think, when they use that DCF tool which is biased against innovation, would appear to be mandatory.

Doug: You mentioned a second primary tool for financial analysis which you are also questioning?

Clayton: Yes - marginal cost analysis. I will describe it in the context of two industries – steelmaking and retailing. In my research, I've used the example of the steel mini-mills which put the integrated steel companies in North America on the ropes by starting out making rebar and just moving up market.

We have a great case about U.S. Steel, which is being disrupted by mini-mills. The mini-mills started with rebar. Then they went into angle iron and bar and rod, and then they integrated up into making structural beams. The next step was to attack sheet steel. For the mini-mills to get into sheet steel, they had to build a new greenfield mini-mill with a new technology called continuous strip processing. The integrated mills had the very same opportunity to implement this new continuous strip processing technology and Nucor Corporation showed interest. The revenues per ton would be about $350. The cost per ton would be $285, and so the profit per ton is the difference. It was a very attractive investment for Nucor. For U.S. Steel, if they built a new mill, they would have faced the very same economics. But their financial department looked and said, “Wait a minute. You’re telling me we ought build a new mill and lay out $250 million to build this new mill? That doesn’t make sense, because we have excess capacity in our old mill, and the marginal cost of producing an extra ton in our old mills is only $13 a ton.”

Do the math. When you have excess capacity in an old technology, that marginal cost logic actually makes it very difficult to justify investment in a new technology or a new process, because it is much more attractive to just extend that old technology for one more year and then one more year and then one more year. And then the people with the new technology ultimately kill you.

Doug: So your thinking is going now in what direction?

Clayton: Well, we need to develop new tools. One tool we call **Discovery-driven Planning**. When you’re looking at an investment in what I call sustaining technology, that is, existing businesses, you develop a reverse income statement and focus on the assumptions that have to prove true. (Rita McGrath at Columbia and Ian Macmillan, Wharton) You make your decisions based upon whether or not these are valid assumptions. It’s a much better approach, because it doesn’t hide certain assumptions, such as, the status quo is flat.

For disruptive innovations, Discovery-driven Planning is accomplished by comparing the business plan with the pattern for the kinds of businesses which succeed. The pattern is laid out in the Innovator’s Solution. Because there are no existing numbers, you can only invest based upon the pattern of the kinds of companies that will be successful in a market like this.

Doug: Clayton, thank you for sharing your new thinking with our readers. I am sure we will be hearing more from you about these paradigm busting concepts.