Design Thinking

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I was attempting to edit the abysmal entry for Design Thinking on Wikipedia. I began to doubt the appropriateness of what I was writing – not for its validity but for its style. I finally decided to simply put what I would have wanted for an entry there, here.

Design Thinking leverages implicit elements of design practices, as a means to approach problem solving. It is a critical factor for innovation.

"Design thinking is a term being used today to define a way of thinking that produces transformative innovation." [1] The term has gained significance as it is being embraced outside of the normal realm for which it might have traditionally been applied.

Roger Martin, Dean of the Rotman School of Management, suggests that Design Thinking is central to value creation in the 21st century (see editorial "From the Dean"). It is not a matter of gaining an understanding of design, it's a matter of embracing design – a way of operating. Martin further suggests that success in the 20th century was defined by an ability to move through a continuum, from **mystery**, to **heuristic**, to **algorithm**, to **binary code**. In this way things are identified, a pattern is made, and exact replicas are generated. For a mass production economy this is an ideal model for operating success.

But as barriers to information are lowered (less expensive, more readily available/shared), the economics of competition change dramatically. The value of intellectual capital is now often greater when it is shared and allowed to evolve openly (a lot of lawyers suddenly become irrelevant). Fundamental business models rely on minimizing risk. Getting to binary code was an ideal way to lock down fluctuation and variance – both associated with risk.

New economic models embrace risk as reality, requiring a move back up the continuum to 'heuristic'. Roger Martin specifically suggests: *"I would argue that to be successful in the future, businesspeople will have to become more like designers – more 'masters of heuristics' than 'managers of algorithms'."* For classic business models this is uncomfortable. The idea of managing something squishy is foreign. Design Thinking is required to operate in squishy-mode.

It's not to be confused with a method – it's fundamentally a culture, a genotype to reshape methods of operating. Contemporary organizational structures are antithetical to this culture. Martin elaborates,

Whereas traditional firms organize around ongoing tasks and permanent assignments, in design shops, work flows around projects with defined terms. The source of status in traditional firms is 'managing big budgets and large staffs', but in design shops, it derives from building a track record of finding solutions to 'wicked problems' – solving tough mysteries with elegant solutions.

Whereas the style of work in traditional firms involves defined roles and seeking the perfect answer, design firms feature extensive collaboration, 'charettes' (focused brainstorming sessions), and constant dialogue with clients.

Design Thinking is critical to and at the same time relies on emergent structures. As such, it is central to all aspects of 2.0 design.

Design Thinking is a specific concept (the significance between specific and general use of a term is illustrated in the reference to complexity). While common methods of thought include deductive and inductive reasoning, Design Thinking embraces these but adds abductive reasoning. Abductive reasoning is effectively embracing a posture of "Why not?", but with a layer of rationale.

Random trial and error is expensive. Rationale is too often replaced by random opinion. While predominantly driven by profit-motivation (e.g. search engine optimization, transactional growth), there is clear professional growth in the discipline of web analytics. To be most effective, Design Thinking must be informed by Design Research (transactional analytics, behavioral analytics, feedback loops, usability studies, and ethnography). I call this evidence-based design, Jeffrey Pfeffer calls it evidence-based management.

Another differentiating element of Design Thinking is a focus on synthesis rather than analysis. Claudia Kotchka notes:

Designers problem-solve holistically, not in a linear fashion. While the scientific method for problem solving uses problem focused strategies and analysis, designers use solution focused strategies and synthesis. They start with a whole solution rather than break it down into parts.

Good Design Thinking is the ability to see things not readily apparent to others (that's where market differentiation can occur). Thus my favorite Schopenhauer quote:

"Thus the task is
not so much to see
what no one yet has seen,
but to think
what nobody yet has thought
about that which
everybody sees"

It's the ability to see the 'edges' of something, to find shape and form in a mass of stuff. It's the ability to see things differently – to see the implicit and make it explicit