Rapid Prototyping: Iterating for Financial Inclusion

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Award-winning innovator Tom Wucej had a challenge. He gave groups of CEOs, entrepreneurs, MBA students, innovators and kindergarteners 18 minutes to build the tallest structure possible using strands of dry spaghetti, string and a marshmallow on top. Who won? Believe it or not, it was the kindergarteners.

Surprising though it may seem, kindergarteners consistently outperformed their graduate school and boardroom rivals. Their success, Wucej argues, stems from their ability to embrace iteration: while MBA students prioritized planning and left little time to test their designs, kindergarteners jumped straight into construction, learning from failure and picking up the pieces to try again. Wucej’s Marshmallow Challenge demonstrates the potential power of Rapid Prototyping (RP), the latest craze in product development.

Creating a product using Rapid Prototyping involves developing a series of prototypes that are gradually fine-tuned to reflect user preferences. Developers begin with inexpensive and disposable prototypes, such as sketches or mock-ups. Next, as consumer feedback is incorporated into successive prototypes, they become more polished and complete. This incremental approach responds to potential issues early on, thus avoiding the need for drastic changes later in the development cycle. What sets RP apart is its focus on the user. By encouraging customer interaction and early failure, RP allows product developers to tap into innovation.

In recent years, the RP model has taken the product development world by storm. Google has fully embraced the technique, and had used RP to develop a working design for Google Glass – their futuristic “smart” glasses. Apple is following suit. RP lives at the heart of the innovative work of design firms such as IDEO, Frog and Continuum. Some even promote RP as a life philosophy.
Our Round Table will explore how RP can be used to improve financial services at the Base of the Pyramid (BoP). The Consultative Group to Assist the Poor (CGAP) has incorporated RP methods into financial product design in its work with partner organizations in Mexico, Brazil and Uganda. Using storyboards, role-playing games with fake money, and even mock ATM machines, in partnership with expert design firms, CGAP is learning from the poor in order to craft products that better meet their financial needs.

Still, it is not clear whether or not RP can be used effectively to develop financial services. Unlike chairs or Google Glasses, financial services are largely intangible. They involve long-term relationships between client and provider. As a result, financial services prototypes often take the form of hypothetical scenarios like board games and role-playing.

Can these hypothetical prototypes truly replicate real-life financial behavior? Of course, games and simulations cannot capture the emotions and risks associated with money: Monopoly is probably not a good reflection of most players’ spending behavior or risk aversion. Customers may also be asked to estimate their spending beyond their typical planning horizons. This is particularly true at the BoP, where most households survive and make financial decisions on a day-to-day basis. However, these simulations allow people to open up about their financial practices, when conversations around these topics are usually uncomfortable and tricky. Getting people to feel comfortable when talking about personal finances, particularly at the BOP, is already a big step in the right direction.

RP has already proved itself in the world of finance. Bank of America (BoA)’s “Keep the Change” program is one of the most famous examples of using RP to develop financial products. In an effort to promote greater debit card use, BoA hired the firm IDEO, which used RP to create a service that allows customers to round their debit card purchases up to the nearest dollar, with the difference transferred to their savings account. “Keep the Change” proved to be hugely successful, and provided value to both customers and BoA alike.
RP is part of a much bigger design process called Human-Centered Design (HCD). As its name rightly points out, this process’ main approach to product and service design is constant interactions with the end-user or customer. Applying HCD and RP to design process to the BoP can uncover new, more effective approaches to financial inclusion. The customer feedback component of this process is crucial to designing effective and appropriate financial services. HCD and RP forces executives and researchers to get out of the office and into their clients’ living rooms, providing the consumer with a greater voice in product development. By combining inventive product design with customer-driven features, HCD allows for a synchronization of ideas between producer and client. This fusion sparks innovation.

With HCD and RP gaining in popularity, it is important to consider the potential benefits and drawbacks to applying these to financial product design at the base of the pyramid. RP is no panacea, and may face some challenges when used to design financial services. However, it also holds the potential to change how financial services providers interact with and understand their clients. Because it offers new insights into the financial behavior of the bottom billion, RP is a welcome and much needed approach to increasing financial inclusion.