Chapter 10 Improving Decision Making and Managing Knowledge

Case 2: IdeaScale Crowdsourcing: Where Ideas Come to Life

This case has two videos. View the Introduction to Crowdsourcing video first. Then view the IdeaScale video.

(a) Introduction to Crowdsourcing

Tags: jeff howe; crowdsourcing

(b) Ideascale Crowdsourcing: Where Ideas Come to Life

Tags: crowdsourcing; IdeaScale; software; wisdom of crowds

Summary

" 'Crowdsourcing' is the application of the open-source idea to any field outside of software, taking a function performed by people in an organization, such as reporting done by journalists, research and product development by scientists, or design of a T-shirt, for example, and, in effect, "outsourcing" it through an open-air broadcast on the Internet. Crowdsourcing has already had an impact on big companies like Procter & Gamble, as well as start-ups like Threadless.com, which rapidly became the third largest T-shirt maker in the United States." L= 3:21

IdeaScale enables companies to build Digg style communities. IdeaScale is based on the simple model of crowdsourcing. It begins with an idea posted to your IdeaScale community by a user. Each idea can be expanded through comments by the community. The ultimate measure of an idea is determined by a voting system. Any idea can be voted to the top or buried back down to the bottom. It combines the "wisdom of the crowds" concept with Web 2.0 models like Digg. L= 3:11.

Introduction to Crowdsourcing

URL: http://www.youtube.com/watch?v=F0-UtNg3ots

Ideascale Crowdsourcing: Where Ideas Come to Life

URL: http://www.youtube.com/watch?v=SQMvg4vTMwY

Case

Are crowds really good sources of information? Is it possible that decisions, predictions, or estimates made by a large group of people are often far better and more accurate than decisions made by any individual, or small group of experts, in the group? In 2004 James Surowiecki wrote a book titled the "Wisdom of Crowds" exploring this thesis. There are plenty of precedents for the notion that large

aggregates produce better estimates and judgments than individuals or small groups of experts. For instance, one premise of democracy is that a very large number of diverse and independent voters will produce superior political decisions than a single dictator, king, bureaucrat, or committee. Economists have studied the problem of how to find the best restaurant in a strange town. Answer: the restaurant with the largest crowds (surely the locals know what is good food). In financial theory the best estimate of the current value of a firm can be found in free, open markets where millions of participants vote with their pocketbooks. In statistics, the best estimate of the value of a parameter is the mean or average arrived at by taking thousands of independent samples of the population.

In general, crowds are "wise" when (1) there are many decision makers who make decisions independent of one another, (2) participants come from diverse backgrounds, (3) where there is a mechanism (like a market) that can aggregate opinions to produce a single outcome or choice, and (4) the participants do not talk with one another or influence one another prior to making a decision. Participants need to be "disconnected" from similar influences, like the Internet.

There are many crowds which do not fit these conditions, and the result can be a failure of collective judgment. Mobs, herds, and runaway stock market bubbles are examples of where crowds can produce very bad estimates and decisions. In these cases the lack of diversity and independence among participants can lead to an "information cascade" which prevents independent judgments. Nevertheless, when the four conditions of wise crowds are met Surowiecki argues crowds produce superior judgments, forecasts, and estimates. In the eyes of many, the conditions for crowds to be "wise" are quite rare, especially so in a "connected" Internet world where millions of people are blogging, networking, and emailing. Being connected to others, millions of others, reduces the independence of participants and makes them more susceptible to manipulation and hysteria.

The idea of the social basis of wisdom and knowledge is reflected in many Web 2.0 applications. For instance, Wikipedia is based on the idea that millions of diverse contributors can produce an encyclopedia of knowledge which is superior to those produced by small groups of experts. Additional examples are:

Prediction Markets: peer-to-peer betting markets where participants make bets on specific outcomes of, say, quarterly sales of a new product, or outcomes of political elections. Participants make bets with their own funds that a certain outcome will occur. Others bet against that outcome. The result is that an asset is created (a contract for example) which reflects the markets aggregate value for that outcome. The worlds largest commercial prediction market is Betfair.com, founded in 2000, where you bet for or against specific outcomes on football games, horse races, and whether or not the Dow Jones will go up or down in a single day. The Iowa Electronic Markets (IEM) is an academic market examining elections where positions are limited to $500. You can place bets on the outcome of local and national elections.

Folksonomies and Social Tagging: the use of a large number of people to classify objects, which could be movies, photos, books, PowerPoint slides, or consumer products. Folksonomy is a play on the term "taxonomy" which refers to any classification schema for organizing a collection of objects. Generally, taxonomies are created by individuals or a group of experts. Folksonomies are created by groups

of people looking at a set of objects, and then tagging them (or bookmarking them) using their own criteria. Folksonomies are bottom up, self-organizing activity in which thousands of people classify objects. Social tagging sites allow millions of people to post their bookmarks or "favorite" content to a single site where others can review the links. If your Diggs become popular as other people Digg them, they will bounce to the top of the list of Diggs where millions more people can see and review them.

Social Shopping: Want to know what books, clothes, music, video, or digital gadgets your friends are buying? Many Web 2.0 sites think so. The idea is that consumers will tend to buy what their friends buy and recommend. At Yub.com, which has several patents on **social shopping**, users can view their friend's purchases and interests, click an image of the products, and link to a Web site where they can buy the products.

Collaborative Filtering (Recommender systems): Ever find your self in a video store wondering what video to rent? Or go online and spend an hour browsing titles? There are many occasions in life when you feel confused by a bevy of alternatives none of which are compelling. Put yourself in the position of a merchant like Netflix with over 70 million DVDs to rent, or Amazon, with over a million products to sell. How do you get customers onto the site, solve the problem of selection for them, and encourage a transaction? One answer to these questions are recommender systems (originally called collaborative filter systems) that keep track of customer behavior, find other customers with similar behavior, and then recommend choices to customers based on what other people "like themselves" purchased or rented. Rather than rely on expert reviewers, consumers are encouraged to listen to their fellow consumers for music, video, and product choice.

One of the most celebrated uses of crowdsourcing was Procter & Gamble's use of InnoCentive's crowdsourcing tools to create a new dishwashing detergent which could tell users when just the right amount of dish soap was added to a sink of dirty plates. This problem stumped P&G's experts. InnoCentive gave this problem to their network of volunteer problem solvers. Voila! An Italian chemist working in her home had already pioneered a new kind of dye that turns dishwater blue when the correct concentration of soap is added. An equally well-known counter example of outsourcing was Chevrolet's advertising campaign which allowed users to create their own Chevy commercials on YouTube. This resulted in a number of highly critical and negative ads, and Chevy stopped the effort. Sometimes the community, the crowd, can become downright ornery and hostile.

Howe and other acolytes of Web 2.0, who have little critical perspective, tend to forget all the useless and destructive aspects of crowd behavior throughout history. History is replete with mobs, herds, rumor mongers and creators, popular frauds, economic bubbles and momentum investors, to name just a few examples of where crowds have wrought harm. Wikipedia has numberless articles with ample falsehoods, and articles written by hate mongers, hackers, and trolls. Large corporations and individuals spruce up their entries regardless of their truth value. The hope is that large numbers of diverse users will correct these false documents. In practice, this does not always work out. Crowdsourcing campaigns can be hijacked by any of the above groups, including large Fortune 1000 firms. What can result on Wiki is a negotiated truth among the parties involved.

The employment implications of crowdsourcing, and its larger impact on society are also rarely considered. iStockPhoto.com (discussed by Howe in his video and book) may well have created a great deal of unemployment among the ranks of professional photographers who depend for their livelihood on selling professional photos at $300 a piece to Web sites. Threadless.com where users develop their own designs probably led to the unemployment of some professional T-shirt designers and graphic artists.

On the other hand there are limits to crowdsourcing which tend to protect professional expertise. We should not assume crowdsourcing will become the dominant form of obtaining professional services, products or advice. Few of us would use crowdsourcing to figure out if we needed surgery for an ailment. Neither would we want our surgeon to consult a crowd (as defined above) before deciding what to do. Most professions, including law, require difficult to acquire and expensive expertise that go far beyond what a crowd can call upon. And most professional photographers would argue the quality of photos on iStockPhoto does not on average meet the quality and diversity and shear numbers of photos on professional sites like Getty Images or PhotoSearch. The Sony Walkman was initially conceived and designed by one person and its replacement Apple iPod was created and designed by a small group of experts and professionals at Apple led by a single-minded entrepreneur named Steve Jobs.

So therefore, the use of crowdsourcing is like any tool: it has to be used carefully and with an understanding of its limitations and strengths.

Resources: Kenneth C. Laudon, 2009; Businessweek.com, 2008.

Questions

1. How would you define crowdsourcing?

2. Why does crowdsourcing require a large, "undefined community" to work? Why not a small, defined community of passionate people who you know and have worked with before or with whom you are already friends (think Facebook communities which are smaller, and defined)?

3. Can you think of other examples of crowdsourcing besides photography? Is photography a good example? What kinds of products or services might not lend themselves to crowdsourcing?

4. What is the impact of crowdsourcing on business? Can a "crowdsourced" business be profitable? Is iStockphoto.com profitable?

5. Why does the IdeaScale video criticize online surveys? What's wrong with online surveys? How does IdeaScale do any better?

6. IdeaScale claims to produce "actionable" ideas when compared to traditional market feedback mechanisms like online surveys, focus groups, and reviews of customer comments on Web sites. Do you think this might be true?

7. Pick an online product or service you would like to deliver as a business firm. Outline how you would use IdeaScale. How would you select the people for your

online community? How would you prompt them to participate? What new ideas would you propose to them, or what questions would you ask them to respond to?