Chapter 5
Respond Externally: Co-creation

"There is a tide in the affairs of men, which, taken at the flood…" The famous lines of Shakespeare are just as relevant here as they were in his play "Julius Caesar". Listening and engagement provide the momentum. But that momentum still needs to be converted to value that will benefit both the customer and the company. The mere desire to collaborate with customers does not guarantee co-creation of value. How do companies harness the creativity and energy of customers? How do they marry this creativity with their own knowledge and resources? Are there specific processes, tools, and technologies that enable and expedite value co-creation?

Collaboration and co-creation are relatively new business practices. Like all new business practices, they are weaving their way through the various stages of diffusion and adoption. While it would be difficult to pinpoint exactly where they are in this cycle, the number of companies using co-creation for new product development, marketing, and innovation has grown steadily over the past 10 years.[1] Answers to the questions posed at the end of the previous paragraph can be found by examining how two companies, Audi and Blizzard Entertainment, convert the momentum they generate through their listening and engagement to innovate and create new value with their customers.

Co-creation Praxis

Audi

Audis are like potato chips with a twist — once you've owned one, you want to own them again, and again. It's not unusual for people in their thirties to be on their second or third Audi. This attachment to the brand has given the company an excellent platform for engaging its drivers, and for its owners to connect and bond with one another. Examples include sponsorships of sports preferred by its customer base, like soccer, alpine skiing, regattas, and golf. The brand has also been very responsive in catering to

the driving passions of its owners by sponsoring motor clubs in several countries, like Audi Club – Taiwan, Audi Club of North America, and Audi Club of South Africa.[2]

The opportunity for co-creation presented itself in the form of an important Innovation by a competitor that required a response. In 2001, BMW introduced the driving world to an innovative computer-aided vehicle control system, called the iDrive, in its seven-series model. The market was not impressed, and the response to the iDrive was extremely disappointing.[3] Drivers complained of being over-whelmed; there were too many features, it was difficult to learn, and complicated to operate. The iDrive did not make driving more fun, which was the original goal. Instead, it introduced an unnecessary source of frustration, reducing the overall quality of the driving experience.

Audi needed to respond. But it needed to do something different if it was to avoid repeating the same errors made by BMW. One thing was immediately clear to Audi: designing a competitive console driven solely by its technological prowess was not the way to go. That's what BMW had done, and they had gotten burned. The iDrive may have been an engineering marvel, but was not user-friendly. Audi reasoned that a customer-driven approach would work much better. It would allow the company to address two issues simultaneously:

- What features should be built in to the intelligent drive console?
- How could the console best be designed so that it was perceived to be user-friendly and easy to operate?

Audi created *Virtual Lab*, a walled digital arena, to spark and facilitate the collaboration with a select community of passionate car drivers. The goal was to design and develop a multi-media console that would debut in Audi's new A8 series. The company used several channels, including its website, chat rooms, and social networking sites (autospiegel.com and audiworld.com) to invite collaborators. For passionate Audi owners, the invitation to collaborate with Audi to co-create a new infotainment console was a dream come true. Over 1,600 drivers from Germany, Japan, and the United States volunteered to sit in the proverbial driver's seat, and work with Audi employees to help design the new console.[4]

The company assembled a team of engineers and marketing professionals to work with the community of customer collaborators. The initial design prototype was developed by the Audi team and was presented as a stimulus to the customers to ignite their creativity. Using virtual technologies, customers could introduce their own feature requirements, and modify the initial suggestions of the Audi team. To make the experience as realistic as possible, Audi used visual and auditory aids such as high caliber graphics and sound sequences. These tools gave sensory feedback to the collaborators. Through this sensory feedback loop, customers could see and hear the consequences of their design choices. Simultaneously, thanks to the technologies available in the Virtual Lab, customers could also observe and experience the evolution of the console's design. Based on features selected or rejected by individual collaborators, Audi was able to constantly update its understanding of the needs and preference of its collaborators, and reflect this understanding in new designs of the infotainment console.

The new A8 debuted on November 15, 2002. A key feature of the new car was the brand new Multi-Media Interface (MMI), an infotainment console to rival BMW's iDrive. The MMI innovation offered incremental value to Audi owners, allowing them to select several options previously not available, such as customizing suspension setting, checking tire pressure, determining if the car needed to be serviced, tailoring the internal climate of the car for both front and rear passengers, and customizing audio entertainment settings. Unlike the iDrive, drivers felt more in sync with the MMI. They perceived it to be instinctive in its operation and design. Most Audi drivers were able to achieve a high degree of operating familiarity and proficiency with the interface in no more than 10 to 15 minutes, leading critics and experts alike to hail the MMI as an industry leader.

Blizzard Entertainment

There is nothing more damaging to the reputation of a video game manufacturer than glitches, especially if gamers discover them first. Gamers are a tough bunch. They are passionate about their games, intolerant of defects, no matter how small, and have no qualms shouting out their approval or disapproval of a game to the rest of the world. A nod of confidence from marquee gamers can give a significant boost to the sales of new video games. Conversely, thanks to the Internet, chatter about "lame" games, and complaints about slow response on the part of the company to fix problems, can spread like proverbial bush fire in chat rooms, blogs, and rating sites, killing potential interest in the game.

Blizzard Entertainment, makers of World of Warcraft (WoW), the best-selling "massively multiplayer online role-playing game" (MMORPG), is no stranger to the tough, unforgiving world of gamers. Since the early 2000s the company has actively engaged with its brand community to protect the image of its brand and improve the value of its games. Though the company started developing and marketing video games in the early 1990s, it was not until gaming chat rooms and review forums mushroomed on the Internet that Blizzard Entertainment began to actively listen to gamers' conversations.

Blizzard was quick to catch on that for the heavy gamers, MMORPG games are like religion. Players are deeply involved in both the life and the after-life of the game. They actively debate and discuss their likes, dislikes, and preferences for features and characteristics that are cool and awesome. They have ideas, and are vocal in discussing what the next incarnation of the game should look like. To appease the passion of its die-hard gamers, Blizzard organizes annual gatherings called "BlizzCon." Gamers from all over the world flock to the Anaheim Convention Center in Anaheim, California, where BlizzCon has been held since 2005.

At first glance, it may appear that BlizzCon is nothing more than an over-attended jamboree. The 2009 conference attracted more than 20,000 people. But BlizzCon is no jamboree; it's serious business. The attendees come fully armed to take on the establishment on serious issues, such as the status of the gaming industry,

emerging technologies, and the future direction of the game, its plot, and characters. Full of vim and vigor, they are a fascinating source of ideas and creativity. Most importantly, they are a failsafe sanity check and a fertile source for co-creation of value for the gamer world and for Blizzard.

At events like BlizzCon and through broadcast invitations on its website, Blizzard Entertainment recruits *heavy hitters* who form the core of the company's co-creation effort. Heavy hitters are expert gamers, who are walking-talking encyclopedias on the game, its history, WoW's worlds, and winning tactics. They are blessed with fatigue-free derrières and can play for hours on end with intense concentration. Blizzard calls its army of collaborators "Beta Testers." This group has one overriding objective — to find glitches and shortcomings in the game's design and the gaming experience, so that the company can fix them before new versions of the game are released. The Beta Testers are provided with video game "keys" with which they access the Beta Testing portal — a specially constructed secure site for playing the game, observing gamers reactions, listening to their feedback, fixing glitches, and refining features of the game. At various times, over 300 players may be interacting with one another in this MMORPG environment. Meanwhile, Blizzard's development team is all eyes and ears as they observe the Beta Testers' many complex moves and listen to the gamers' reactions, comments, and wish lists.[5]

Co-creation helps Blizzard optimize the overall value and gaming experience. Without help from the Beta Testers, delivering on the game's overall promise and gaming experience would be very difficult, if not impossible, for Blizzard's internal development team. Solutions to questions that follow can be found only through collaboration with gamers.

- Is it challenging enough, or can it be made more challenging?
- Is it complex enough to get the adrenalin flowing or too complex for all but the expert gamers?
- Are the winning strategies too plain and obvious, or do they keep the gamer scrambling and hustling?
- Is the diversity and balance of characters, races, and worlds appropriate, or does the game need more diversity?
- What about possible extensions and augmentations: which direction to go, what next, what to add, what to leave out?

Structure of Co-creation

Audi and Blizzard operate in distinctly different market environments. The value and experiences they offer their customers are poles apart. However, despite these obvious differences, the co-creation case studies presented above share common characteristics. For instance, both companies had a concrete co-creation objective. Both deliberately recruited certain types of collaborators to work with. In both cases, collaborators worked with the company's representatives in environments specifically created for the purpose of co-creation. Together, the company and its
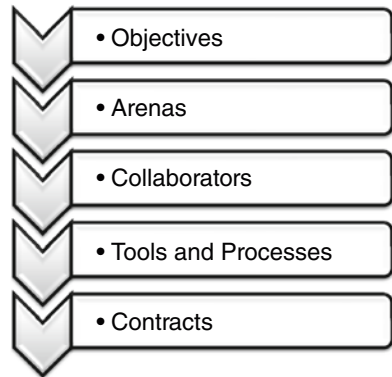
Fig. 5.1 Structure of Co-creation

collaborators followed a systematic co-creation process. Finally, in both cases, the contract between the collaborators and the company was clear — all rights to the outcome of co-creation would belong to the company, and collaborators would not receive any monetary payment for their efforts. Being selected to participate in the co-creation exercise was reward enough for the customers.

This section discusses these characteristics of collaboration and co-creation more formally. Collectively, these elements will be referred to as the structure of co-creation. They are presented in Fig. 5.1.

Objectives

Unlike engagement, which can revolve around either general issues (financial security) or specific ones (purity of drinking water), co-creation is always focused and specific. Companies engage in co-creation projects because they want to co-create value with their customers, or other stakeholders.

Most co-creation goals can be classified into one of three categories:

- Generation: Here the company's objective is to solicit ideas, suggestions, and/or designs, from customers, through contests or open-ended appeals, for later use in the design and development of products and services. Selection, or the short-listing of ideas to develop further, is subsumed under this objective.
- Refinement: In this case, collaborators work with company representatives to refine one or more features or aspects of a target product or service to help enhance the customer's overall experience.
- Creation: Collaborators and the company's professionals work together to develop a prototype of an entirely new product or service. In almost all cases, the prototype needs additional refinement and improvement before it is ready for commercialization.

Case studies illustrating the three categories of co-creation objectives follow.

Generation

Electrolux is a global leader in household gadgets and appliances, selling more than 40 million products to customers in more than 150 markets every year. According to its corporate website, the company bases its innovations on extensive consumer insight, and designs them thoughtfully to meet the real needs of consumers and professionals.

One of these innovations is the Electrolux Design Lab (www.electroluxdesign-lab.com), a forum for generating ideas for new products and services.[6] Established in 2003, Electrolux Design Lab is an annual global design competition open to undergraduate and graduate industrial design students, who are invited to present innovative ideas for household appliances of the future. Over the years, the competition has featured different themes. The contests always culminate with an international press event held in a major city. Previous themes and venues have included:

- Designs for the next 90 years, London, 2009 (to coincide with the company's ninetieth anniversary)
- Designs for the Internet generation, Zurich, 2008
- Green designs, Paris, 2007
- Designs for healthy eating, Barcelona, 2006.

The theme for the 2010 competition, which closed on May 1, and was once again scheduled to culminate in London, was *The 2nd Space Age.* The official brief reached out to potential collaborators with the following appeal:[7]

> Your ideas will shape how people prepare and store food, wash clothes, and do dishes in the homes of 2050 when, according to the UN, 74% of the world's population are predicted to live in an urban environment. Growing populations living in concentrated areas dictate a need for greater space efficiency. This year, special consideration will be given to designers that submit a design within the context of a range or suite of solutions/appliances. Your design ideas should address key consumer requirements; being green, adaptive to time and space, and allowing for individualization.

Refinement

In the Blizzard Entertainment case study, Beta Testers were confronted with a single co-creation objective — to suggest improvements and refinements that would produce a game that, in gamer parlance, would evoke the reaction — "awesome, mind blowing, dude!"

Refinement is also the goal at Nokia's Beta Labs (www.betalabs.nokia.com). Nokia is in the business of connecting people; the company views itself as much more than just a cell phone company.[8] Its website welcomes visitors to a world of mobile music, games, maps, photos, email, and conversations. Nokia built the Beta Labs for shaping the future. It uses the site for two-way sharing with its multitudes of collaborators. The first leg of the sharing takes place when Nokia shares exciting new ideas that the company has been working on with its customers. The second leg

of sharing occurs when Nokia invites customers to suggest refinements and improvements to make Nokia's products better.

> We welcome you to suggest ideas that would make existing products better. So if you have an idea of a killer feature that is missing from an application, do share that with us.

To illustrate how refinement is implemented, consider Nokia's Ovi, its main desktop application for synchronizing content between an individual's cell phone and PC, such as downloading maps, backing up data, and updating software. Collaborators can download the Ovi suite, test run its many features, and then provide feedback by taking part in a discussion, writing a review, reporting a bug, or making a suggestion in the space reserved for Ovi on the Beta Labs website. The site is refreshed periodically to provide the latest feedback, updates, and information on key new features to Ovi's community of collaborators. For example, an update posted on the Ovi site on January 21, 2010, for the Nokia Ovi Suite 2.1 version shared the following refinements, new features, and performance improvements with the community:[9]

- Contacts sync with Ovi.com: Keep your contacts safe online
- Video support: Transfer, play, and share your videos
- Get new device applications (Independent Application Delivery, IAD): Keep your device applications up-to-date
- Windows 7 support: Extended support for new operating system versions
- Download Ovi Share library: Get a copy of your Ovi Share content to your computer
- Contacts sync with Mozilla Thunderbird: Support for new, popular desktop PIM applications
- Error fixes and performance improvements
- New languages (Hindi, American English, and Ukrainian).

Creation

In the Audi case discussed at the beginning of the chapter, the co-creation efforts focused on developing physical and tangible value, namely the MMI. But what about the development of services and other intangibles like advertising and customer education materials? Can similar co-creation approaches be used effectively in those cases as well? Let's examine how Frito-Lay used co-creation to develop a ratings-topping, award-winning commercial to crash the Super Bowl ad party.

The season-ending championship game of America's National Football League (NFL), the Super Bowl, is not just a sporting event; it is a pilgrimage. Broadcast live to millions of people in the United States and around the globe, it's a time for partying and rooting for one's favorite team. Without exaggeration, the Super Bowl is really two contests. The first contest takes place between the two football teams in the stadium. The second contest occurs between a multitude of advertisers and their advertising agencies on the TV screen, and on the Internet. Each year advertisers showcase louder, more spectacular ads than the previous years.

So much so, that it is not uncommon for viewers to remember the commercial, but not the brand or advertising company, or to ask in a slightly apologetic confused way, "What was that ad trying to say?" While every company wants to win the jackpot on Super Bowl Sunday, the table stakes are high, and requires deep pockets. *Advertising Age* reports that in 2009 a thirty-second TV spot sold for $3 million! In all 67 spots were sold, netting a grand total of $206.5 million for National Broadcasting Corporation (NBC), which aired Super Bowl XLIII.

In this ferociously aggressive, big spending world of Super Bowl advertising, Anheuser-Busch (Busch), the largest brewing company in the United States, stands like a colossus. For 10 consecutive years, from 1999 to 2008, the self-proclaimed king of beers was the publicly acclaimed king of Super Bowl advertising.[10] It kept topping the ratings charts with memorable hits featuring the famously funny "Frogs," its one-of-a-kind stable of "Clydesdale Horses," and "Hitch Hiker." During these years, USA Today's AdMeter #1 prize, for the best Super Bowl ad was a fixture in the trophy case at Busch's corporate headquarters. The question was not who would win; it was more like who would come second, third, and fourth.

Then Frito-Lay appeared and crashed Busch's Super Bowl party. Everybody knew Busch's winning formula: do all the right things — research the market to death, work with only the best advertising agencies, throw in dollops of humor, and back it with a deep cavernous budget. It was no secret, just very difficult to emulate. Frito-Lay didn't want to emulate Busch – much like Audi didn't want to emulate BMW. The company wanted to do something different. An early adopter of social media, Frito-Lay was very impressed by the talent and creativity of everyday consumers. It decided that the best way to crash the Super Bowl party was by engaging its consumers, and collaborating with them to co-create advertising.

Frito-Lay debuted in the Super Bowl advertising bullring in 2007. The company invited participation by promoting the event on both traditional and social media, like MySpace. Appropriately, it called this initiative, "Crash the Super Bowl." Consumers who wanted to participate and create a "Crash the Super Bowl" video could download a variety of tools from the "Crash the Super Bowl's" toolbox, like Doritos's logos, stock photos of the brand, animations, and even music clips. With these tools, participants could create more polished, professional-looking videos. The company gave "Crash the Super Bowl" some serious legs by making company personnel available for ongoing conversations and ad development assistance. The outcome of the experiment exceeded the brand's expectations. Expecting no more than a few hundred entries, the brand received more than 1,000 thirty-second videos. The company honored its end of the bargain, and aired the winning ad during the Super Bowl XLI.[11]

The contest was repeated in 2008, for Super Bowl XLII, with equally impressive results. Frito-Lay entry generated a great deal of brand buzz. All this momentum generated by Frito-Lay would culminate in the brand achieving the unthinkable in 2009, winning the Super Bowl ad contest. For Super Bowl XLIII in 2010, Frito-Lay upped the ante. The company announced that the contest winner would take home $25,000, and an additional $1 million if the ad won USA Today's Admeter #1 prize. Frito-Lay received more than 2,000 entries. Among them was

an entry from two unemployed brothers, Joe and Dave Herbert. They called their commercial, "Free Doritos." Using peer voting, "Free Doritos" was ranked among the top five entries. From this pool of finalists, Frito-Lay selected "Free Doritos" and one other commercial, "Power of the Crunch," as its two official entries to Super Bowl XLIII.[12]

The rest, as they say, is history. "Free Doritos" made viewers laugh, it created a palpable buzz in the e-world, and a huge explosion in the ad world when the next morning it received the first prize based on USA Today's Super Bowl AdMeter ratings. Not only did Frito-Lay soar above every other advertiser, most notably Busch, on Super Bowl XLIII Sunday, it legitimized user-generated content (UGC) as a valued source of advertising material (Box 5.1).

Box 5.1 User-Generated Content Crosses the Chasm with MOFILM

Robert Redford is more than an actor. He is what the business world calls an out-of-the-box thinker, an innovator and entrepreneur, committed to artistic experimentation. Best known for his role in *Butch Cassidy and the Sundance Kid*, he is also the founder of the Sundance Institute, a non profit organization dedicated to the discovery and development of independent artists and audiences, which he helped create in 1981.

What he is not as well known for is MOFILM (www.mofilm.com). Started in early 2007 as an artistic project, MOFILM has grown into a global community of filmmakers working with world's leading iconic brands to create and distribute made-for-mobile content. The organization's mission is to allow creative people from anywhere in the world, with any background, to *get creative, get noticed, and get famous*! Currently, MOFILM works with mobile operators in over 50 countries around the world to distribute content to mobile devices from within the MOFILM community, sharing revenues 50–50 with filmmakers.

MOFILM also runs the world's largest annual mobile film festival in Barcelona, Spain in conjunction with the GSM Association (Groupe Speciale Mobile, a confederation of European Posts and Telecommunications agencies). So in 2009, when the Cannes Lions International Advertising Festival welcomed MOFILM with open arms, it signaled the crossing of the chasm for user-generated content, and its increasing impact on the world of mainstream marketing.

With Frito-Lay's user-generated ad displacing ten-time winner Anheuser-Busch as the king of Super Bowl ads, other members of the M50 (an exclusive fraternity of Chief Marketing Officers — www.w50.com) banded together to tap into the power of UGC. They launched a competition that was chaired by acclaimed director/producer Spike Lee, and culminated at Cannes, the Oscars of the advertising world. Participating brands included AT&T, Best Buy, Doritos, HP, Kodak, Nokia, Unilever's Omo, Philips, Marriott's Renaissance,

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Box 5.1 (Continued)

Telstra, Visa, and Vodafone. The competition gave interested individuals an opportunity to gain exposure to 10 million video, Internet, and mobile viewers worldwide and win more than $120,000 in prizes, and a chance to be on the set of Spike Lee's next production.

The MOFILM website runs user-generated video ad contests to coincide with major film and advertising festivals like The Tribeca Film Festival and the Cannes Lions International Advertising Festival.[13]

Arenas

Just as with engagement, co-creation can also occur in physical or in digital arenas. Several examples shared in this chapter depict co-creation in digital arenas. Audi invited collaborators to Virtual Lab, a digital arena specifically created to help co-create the multi-media interface (MMI). Similarly, Blizzard's Beta Testing portal, the Electrolux Design Lab, and Nokia's Beta Labs are all examples of co-creation occurring in digital spaces. Given the ubiquitous reach of the Internet, and the ever-increasing use of digital technologies ranging from bedside alarm clock radios to the dashboard displays in automobiles, it would be tempting to conclude that all co-creation takes place in digital arenas. However, the world of brick and mortar also offers excellent opportunities for shaping co-creation, as the following example from Pitney Bowes illustrates.

Pitney Bowes: Co-creation in Physical Work Environments

Some companies are so successful in dominating the category in which they operate that they become synonymous with it. For example, when people think of aspirin, they think Bayer, when burger lovers think of ketchup, they think Heinz, and when companies think of postage meters, they think of the industry leader, Pitney Bowes (PB). Founded in 1920, PB is more than just postage meters. Today it is a global leader in mailstream technology, operating in 130 countries, with a portfolio that comprises a wide range of mail and document management solutions and services.

Innovation is one of PB's core competencies and has contributed significantly to the company's growth. The company's approach to innovation is customer-centered, meaning that customer needs and solutions lead the way, not technology. The bulk of PB's collaboration and shared value-creation with customers occurs in real work environments. In 2001, Advanced Concepts & Technologies (AC&T), a division of PB, was reorganized and charged with leading customer-centered innovation. Its mission was to help PB benefit from emerging business opportunities by peering into the future.

Collaboration and co-creation projects at PB always begin with a strategic question.[14] The strategic question that launched *Project Mail Creation*, the case

under discussion, was phrased as follows: "How can PB provide value to untapped segments in the low volume batch mailer market, companies mailing less than 50,000 pieces of promotional and informational material per year?"

A two-person team from AC&T, comprising an anthropologist and a software engineer, with assistance pulled in from across the organization as needed, initiated the innovation process by observing customers in their natural work environments. Working with over a dozen companies, both customers and non-customers, PB organized the observation sessions to coincide with mailing activities. During these sessions, PB observers paid special attention to people, processes, tasks, and the flow of the mailing materials to better understand customers' needs.

Following the listening phase, AC&T was able to generate over a dozen different solutions, a mix of products and services. PB approached the customers again, this time to engage them with prototypes of the potential solutions. The prototypes were rough and rudimentary. The main goal at this stage was not to converge on a single solution but to ensure that PB had accurately identified and understood the customer's problems related to batch mailing, and to give the customers an opportunity to suggest refinements to both PB's understanding of the customers' problems and the solutions being offered. The focus was on imagining and estimating the potential effectiveness of the proposed solutions in the actual work environment. Several iterations later, AC&T was ready to take the next step: collaboration with PB's engineering team and its customers. The project was ready to move from imagining to using and testing, to experiencing and refining the proposed solutions in real work environments.

But innovation is messy, and projects rarely move from ideas to finished solutions in straight unbroken lines. PB knows that. For several months while the company worked to refine the customer value proposition, the solutions that had percolated to the top were put on hold while PB waited for its options to mature. A few months later the project was resurrected under a new name: Mail Master. Ideas and prototypes generated by the previous engagement and refinement stages were extensively use-tested with real mail, in real mailing environments. Positive results and learning from the use-testing stage played a significant role in influencing and shaping a new addition to PB's portfolio of solutions and services named AddressRightNow™. The new offering adds value to low volume batch mailing operations through features such as address verification, which results in less returned mail and lower overall mailing costs.

This section has presented examples of co-creation in both digital and physical arenas because both are viable options that can be used depending on the nature of the co-creation task. While it is true that physical environments can't compete with digital spaces on dimensions such as reach, interactivity, connectivity, and scale, there are times when the ability to actually witness customers in action is not a luxury, but a non-negotiable necessity. Consider the following cases:

- Customer teams trying to solving nagging work flow problems
- Managers trying to simplify customer facing tasks to minimize the incidence of service failures
- Parents or teachers interacting with young children to help them learn how to draw.

In instances like this, where the ability to watch context-bound behavior is especially important, the opportunity to be present as an immersive participant is vital, making physical spaces more relevant for collaboration and co-creation.

Collaborators

To say that all customers are not equal in terms of their needs or their consumption potential is to be boringly obvious. But in the context of collaboration and co-creation, the inequality of customers takes on a different meaning. All customers are not equally creative, nor do they have the same desire to collaborate with companies, which raises an interesting question: With whom should a company collaborate? Which customers, or types of customers, should a company recruit for its collaboration and co-creation programs? A discussion on the choices and options available to companies follows.

Companies essentially have two options. The first option is to collaborate with end-users, or customers (hereafter referred to as customers for convenience), who are creative, who have ideas, passion, and energy, but who are not formally trained in the co-creation task. Audi's drivers who collaborated with them in developing the MMI would fall in this category. They were not professionally trained in automotive electronics. The second option is to collaborate with professionals and specialists, people who are formally trained, like scientists, engineers, and computer specialists. TopCoder, a company that will be discussed later in this chapter, falls into this category. Its army of professional software programmers, engineers, and developers collaborate with its clients to help co-create software, systems, and design solutions.

Collaborating with Customers

How does a company or brand decide which customers to select for participation in its co-creation programs?

Brand passion: Most companies prefer to collaborate with customers who have extraordinary passion for their brands. Marmite co-created XO by collaborating with a small group of ardent Marmite lovers (Chap. 2). Harley owners and HOG are more than just motorcycle enthusiasts, they have obsessive love for their bikes and for the life-style that owning a Harley represents (Chap. 4). Earlier in this chapter, we described how Audi collaborated with passionate Audi drivers to co-create the MMI and how Blizzard's WoW aims to deliver an *awesome* gaming experience by collaborating with fanatical gamers.

Customer/segment demographics: Companies also use target audience demographics of attractive or untapped market segments to select participants for collaborative innovation projects. In the Hallmark and Kraft cases, the preferred demographic group is moms, with and without kids (Chaps. 1 and 3). For Mercedes Benz, it is Gen Y customers (Chap. 3). For Electrolux, discussed earlier in the chapter, it is

undergraduate and graduate industrial design students. Choosing collaborators based on market segment affiliation is a frequent occurrence in business to business (B2B) settings. Project Mail Creation, described earlier in the chapter, was launched by Pitney Bowes to determine how it could provide value to untapped segments in the low volume batch mailer market.

Lately, experts have recommended that companies also consider the innovation behavior of customers and select only those customers that exhibit a high co-creation potential. In all product categories, there exist a group of individuals who are far ahead of the rest of the rest of the population in terms of their aggressive and early adoption of innovations and their obsessive desire to develop and create solutions where none exist. These individuals are perceived to have high co-creation potential. The general thesis is that by collaborating with high co-creation potential customers companies can improve the overall effectiveness and productivity of their collaborative innovation activities.

Two different, but related, approaches are recommended to determine the co-creation potential of collaborators. Both are based on The Diffusion of Innovation literature, popularized by Everett Rogers, who classified customers into five non-overlapping categories based on their speed of adoption of an innovation.[15] Figure 5.2 depicts these categories, their relative relationship with one another, and their approximate proportion in a population to which an innovation is targeted.

Innovators and early adopters: Innovators and early adopters, as the labels suggest, are most aggressive in seeking out new products and services. They exert a disproportionate influence on an innovation's subsequent diffusion in the rest of the population. To illustrate, consumers who buy new products like Apple's iPad or Google's Android phone within the first few days of their market launch are most likely to be innovators and early adopters. By relying more heavily on their inputs in the value-creation stage, companies hope to pre-build an adoption edge in their innovations, thereby aiming to accelerate post-launch performance in terms of sales and market share. Blizzard was extremely selective in handing keys to its Beta Testing portal to heavy hitters, or Beta Testers for this reason. As described previously, not only are the heavy hitters among the first to buy and try a new game, they are also the most influential in determining the response of the rest of the gamer market. Positive reviews from heavy hitters can lead to an exponential surge in sales; negative recommendations, on the other hand, generally cause sales to limp along.

Lead users: Eric von Hippel is credited with pioneering the concept of lead users.[16] Just like innovators and early adopters, lead users are also ahead of the majority,
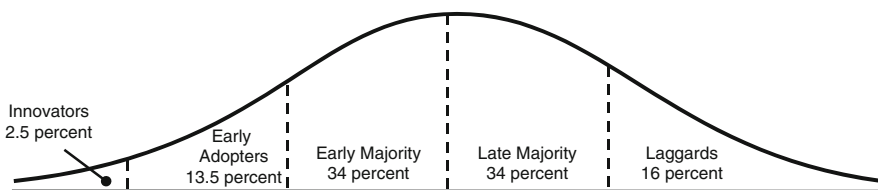
Innovators
2.5 percent

Early
Adopters
13.5 percent

Early Majority
34 percent

Late Majority
34 percent

Laggards
16 percent

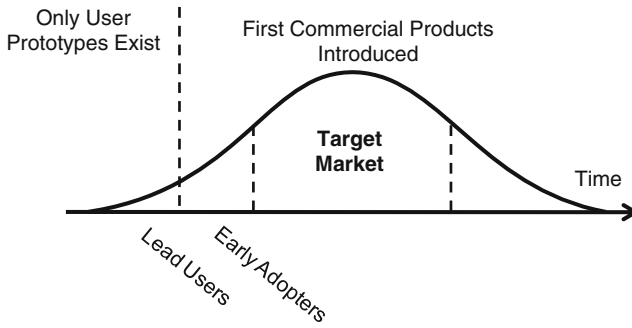**Fig. 5.2** Diffusion of Innovation Categories

Fig. 5.3 Lead Users and Early Adopters

but there's a twist. The two key differences between lead users and early adopters are that lead users are ahead of the majority with respect to an important trend and they have a vested interest in finding a solution to their need because no solution yet exists! Despite the elegance of the preceding explanation, identifying and recruiting lead users for collaborative innovation projects continues to be a challenging proposition. Figure 5.3 depicts the position of lead users relative to early adopters on the diffusion of innovation continuum.

Lead users are a highly attractive co-creation resource because they are always looking to develop solutions to solve their own needs. Viewed from the perspective of innovation adoption, this behavior is invaluable, as it lowers the probability of market failure. The mountain biking case study discussed in Chap. 1 is an excellent example of lead users at the leading edge of a yet-to-be formed mass market. Nokia Beta Labs, discussed earlier in the chapter, also wishes to collaborate with lead-users. Here's how it announces its intentions on its website:

> Nokia Beta Labs is a lead-user community. While this site is open for all, it is not intended for everyone. Let us do a quick quiz:
>
> Which of the following applies to you?
>
> - I own a relatively new and advanced Nokia device
> - I'm willing to tolerate rough edges, – to get my hands on bleeding edge cool stuff
> - I often get ideas on how to improve the gizmos I'm using
> - I want to make a difference — and I am not afraid to share my opinions
>
> We do not turn anyone away, but if most of the list items didn't fit you, this community might not suit you particularly well. Don't get us wrong, we're happy to see you here — we are just not sure you would enjoy it.[17]

Collaborating with Professionals

As mentioned earlier in this section, an alternative to collaborating with end-users or customers is collaborating with professionals — who may or may not be end-users or customers — but who are formally trained and qualified to contribute to the goals of the co-creation exercise.

Recaro: When aircraft manufacturers and airline operators like Boeing and Lufthansa embark on co-creation programs to develop aircraft cabin interiors, they work with companies like Recaro and its team of professionals. Recaro is a top-notch aircraft-seating manufacturer that has won several awards for its quality and innovative designs.[18] The company and its staff of engineers and designers are formally trained in disciplines that drive effective and aesthetic design, such as material selection, structural integrity, and ergonomics.

Topcoder: The website of Topcoder, the world's largest community of competitive software developers, proudly proclaims, "We've been *crowdsourcing* since before there was a name for it." And they are right. Topcoder's clients – companies like AOL, ESPN, Ferguson, Geico, and LendingTree – collaborate with the company's worldwide freelance software development community to co-create software ranging from something as simple as a webpage to full-blown complex enterprise resource planning (ERP) systems.[19]

When companies engage with TopCoder, they engage with a global community of thousands of programmers, developers, software architects, graphic artists, and other talented individuals who are formally trained in their disciplines. Depending on the task, different groups of TopCoder professionals collaborate with the company's clients to co-create unique solutions and experiences. For example:

- If a client has a programming need, it collaborates with professional coders.
- If its need is component design and development, TopCoder's best developers battle it out.
- If a company or an individual wants to create logos, webpages, banner ads, flash animations, and application UI's, then they collaborate with Topcoder's army of professional graphic designers.

Tools and Processes

Co-creation doesn't just happen. It must be organized, managed, and facilitated. A group of customers or professionals — their passions, interests, and energy notwithstanding — are at best mere potential for value-creation. In order for this potential to materialize, collaborators need tools and processes to convert their creativity to tangible value. While both tools and processes are necessary, the relative emphasis between them will vary depending on the co-creation challenge.

In certain cases, tools may be easily available, resulting in processes taking center stage. To illustrate, members of TopCoder's global development community are professionals, and as such have easy and open access to tools for building software or applications, such as Linux, Java, Visual C++, VM Ware, PHP, and Dreamweaver. Consequently, TopCoder spends its energies on managing the process of co-creation, rather than worrying about providing tools to its collaborators.

In other instances, providing collaborative tools may take priority because without them the co-creation event would remain grounded. In the Audi example, it was the right mix of tools, such as visual and auditory aids, high-resolution graphics, and realistic sound sequences, that enabled the collaborators to become more effective co-creators. Frito-Lay's "Crash the Super Bowl" contest drew a large number of contestants and entries, mainly because the company made it easy for customers to submit an entry, even if they had no previous video-making experience. Customers wishing to participate in the "Crash the Super Bowl" contest were provided with a full range of video-making tools, such as brand logos, stock photos, and sound clips.

Co-creation Processes

A sample of co-creation processes inherent in the various cases presented in the book until now is presented in Table 5.1. Despite the different names used to describe them, these processes often overlap and share the same conceptual and methodological foundations. Some of them, like the lead-user process, have been discussed explicitly. Others, like empathic design, have been presented implicitly through the value-creation dynamics of select case studies.

One specific process not yet discussed is Innovation Jams.[20] Pioneered and made popular by IBM, Innovation Jams are large-scale Internet-enabled brainstorming events that focus the creative energy of participants on complex issues, such as:

- Identifying business opportunities for placing future strategic bets
- Building businesses around customer solutions rather than technologies
- Transforming an organization's culture.

Table 5.1 A Sample of Co-creation Processes

Process description	Case study
Lead-user design: Collaboration and co-creation fueled and driven primarily by lead users	• Mountain biking • Nokia Beta Labs
Contextual/user design: Co-creation relies on processes that incorporate deep ethnography, contextual observation, and the use of prototypes	• Pitney Bowes • Audi's MMI console
Participatory design: Similar to user design; co-creation emphasizes involving all relevant stakeholders to ensure the end result meets their needs and is usable	• Recaro, Boeing, and Lufthansa: Aircraft cabin interior design
Empathic design: Similar to user and participant design; co-creation emphasizes observation of the emotional aspects of user-product relationships	• Blizzard Entertainment, World of Warcraft
Crowdsourcing: The crowd or the market is the main contributor to co-creation	• Top-coder; Frito-Lay, "Crash the Super Bowl" contest

The concept of jamming, whether at IBM or at other organizations is not new; John Kao's book on business creativity and innovation is called *Jamming*.[21] What is new is the magnified scale on which effective collaboration can occur, due to the Internet. Taking inspiration from jazz jams, which value listening, improvising, and pushing boundaries as much as they do raw skill with an instrument, innovation jams attempt to push the boundaries of current solutions by unleashing the collaborative imagination and creativity of jam participants. An example of a jam conducted in early 2010 follows.

- Global eco-efficiency: From January 27 to 29, 2010, IBM conducted a by-invitation-only jam to generate a dialogue on energy, the environment, and sustainability. The web-based event provided an unrivaled opportunity for thousands of public and private sector sustainability leaders from around the world, to pool their knowledge and experiences through a series of focused discussions and exchanges of best practices with one another, and with acknowledged subject matter experts. The jam focused on topics like Green IT, Smarter Industries-Smart Cities, and the New Work Place.

Naming conventions for jams tend to be quite simplistic; their names often broadcast their mission. For example, culture jams brainstorm on issues related to organizational culture, and green jams brainstorm on issues related to the environment. Of late though, several organizations have started to use the word "jams" quite loosely. So we feel a friendly warning is in order. For example, when the U.S. state of Vermont organized Vermont 3.0 Innovation Jam on October 26, 2009, what it was really referring to was a one-day event featuring exhibitions, technology demos, learning workshops, and career advice. Collaboration and co-creation, in the way we discuss it in this book, was not on the menu![22]

Co-creation Tools

The Audi and Blizzard Entertainment case studies discussed at the beginning of this chapter illustrate the value of tools in enabling effective implementation of co-creation programs: Virtual Lab in the case of Audi, and the special portal for Blizzard's Beta Testers. The relevance and applicability of different tools will vary depending on the co-creation objective being pursued. Co-creation tools help a company play three key roles; connect with customers' ideas, select which ideas to pursue, and then convert the selected ideas into tangible customer value.

At the front end of the co-creation continuum, the emphasis is on generation and selection of ideas. Consequently, tools like listening (Blizzard, Pitney and Bowes), dedicated websites (Nokia Beta Labs), and contests (Frito-Lay, Electrolux) are frequently used to help companies connect with customers' ideas.

Once ideas are generated, the task of selecting which ones to pursue for development remains. Companies will usually rely on a mix of collaborator input, like voting, and their own judgment to determine which ideas to take to development. An interesting forum for jointly addressing the generation and selection of ideas is

prediction or idea markets. In these markets, collaborators bid up or down the value of ideas based on their attractiveness, very much like traders bid up or down the prices of stocks on a stock market. These markets have existed outside the corporate world for more than two decades. For example, since 1988, the Iowa Electronic Markets has predicted presidential election results more accurately than many high profile pollsters.[23] Hollywood Stock Exchange (HSX) is another prediction market that operates like a stock exchange, bidding up or down the value of a picture or an actor. HSX traders (collaborators) were virtually flawless in picking Oscar winners in March 2010 (Box 5.2). In recent years, several companies like HP, Motorola, IBM, GE, and Nokia have experimented with these markets to improve the quality of their internal forecasts and decision-making. However, the full potential of these markets in co-creating value with customers has yet to be realized.

Once ideas are selected, the focus shifts on development, refinement, and commercialization. The focus, therefore, is on tools like simulation, experimentation, toolkits, and prototypes that allow the company to move speedily from idea to the development of the final value proposition. A brief discussion on each of these tools follows.

Simulation: These technologies have been instrumental in transforming innovation from a *show and tell* world, to a *show, ask, and suggest* world.[24] Imagine the reaction of collaborators if Audi would have merely described its MMI console, rather than let its collaborators experience it in the Virtual Lab. The majority of customer responses would probably have been: "great, cool, hmm, stinks, or nothing here that really wows me." Not enough for Audi to build a winning MMI. Simulation technologies allowed Audi drivers to experience the MMI in a virtual environment and make productive suggestions on how it could be refined and improved.

Play and experiment: Approved collaborators can download Beta applications like Ovi, from the Nokia Beta Labs website, and play with it. It is only after they have had sufficient time to experience the software and its features through play that the collaborators can help Nokia refine, improve, and re-create specific aspects of the software. How effective would Blizzard's heavy hitters be if the ability to play were omitted from the co-creation agenda? Without the ability to play and experiment with the actual game in the Beta Testing portal, Blizzard's Beta Testers would be seriously handicapped in helping improve the gaming experience of World of Warcraft; their contributions would hardly be game changing!

Toolkits: These uniquely featured technologies and design kits allow companies to effectively share the responsibility of value-creation with customers. International Flavors and Fragrances (IFF) is an accomplished user of tool kits. The company has developed a Consumer Fragrance Thesaurus (CFT), which is an easy-to-use, interactive perfumer tool for refining and creating new fragrance ideas. The CFT is a database of fragrances that allows the company's creative staff and its clients to collaboratively determine which fragrances to develop further, based on the product's ability to create a specific mood experience for the customer. Following this, IFF's creative staff can focus on refining the fragrance

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Box 5.2 HSX Traders Sizzle at Predicting the Oscar Winners

The 82nd Academy Awards, better known as the Oscars, was not just a big night for Katherine Bigelow; she became the first woman ever to win the Oscar for the Best Director. It was also a big night for traders in the Hollywood Stock Exchange (HSX). They picked six of the eight winners correctly, demonstrating yet again the wisdom of crowds and the power of collaboration.[25]

Best Picture
Winner — *Hurt Locker*. HSX traders picked correctly; initial trading favored James Cameron's *Avatar*, but late trading put *Hurt Locker* over the top.

Best Director
Winner — Katherine Bigelow. HSX traders picked correctly; traders were betting on history being made.

Best Actress
Winner — Sandra Bullock for *The Blind Side*. HSX traders picked correctly; the race between Meryl Streep and Sandra Bullock was close.

Best Actor
Winner — Jeff Bridges for *Crazy Heart*. HSX traders picked correctly; no contest.

Best Supporting Actress
Winner — Mo'Nique for *Precious*. HSX traders picked correctly.

Best Supporting Actor
Winner — Christoph Waltz for *Inglourious Basterds*. HSX traders picked correctly.

Best Original Screenplay
Winner — Hurt Locker. HSX traders picked Inglourious Basterds.

Best Adapted Screenplay
Winner — *Precious*. HSX traders picked *Up in the Air.*

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for market launch, and suggesting additional commercial applications. The result of using this toolkit is increased speed to market, and a better, more interesting fragrance that can be used by clients and their customers to co-create a variety of fragrance experiences, such as perfumes, bath gels, room and air fresheners, and laundry detergents.

Prototypes: These are the lingua franca of development and innovation. They do for innovation what horns (saxophones, trumpets) do for music; they give innovation a voice. Since people always react better to things that evoke their senses, prototypes, no matter how crude or one-dimensional, help make the migration from ideas to solutions more tangible. Prototypes played a key role in helping the Pitney Bowes team respond to a very general strategic question: "How do we add value to low volume batch mailers of information and promotional materials?" Prototypes also enabled Marmite's ardent lovers to converge on the final formulation for XO, its packaging, presentation, and labeling.

Contracts

There are very few situations in life where the "what's in it for me" rule does not apply. Collaborative innovation is no exception — What's in it for the collaborators? Why should they part with their effort and time? The picture painted by popular books, blogs, and media depicting customers stampeding to participate in collaboration and co-creation programs doesn't help. True, sometimes there is a stampede. In certain parts of the world, like China, electronic queues begin at least two weeks before Blizzard starts awarding Beta Testing keys to heavy hitters. But this should not mislead us into believing that customer collaboration operates independent of incentives.

Customer passion notwithstanding, collaboration and co-creation is a formal business process that requires contracts if it is to function effectively. As Charles Leadbeater emphasizes in his book *We-Think*, hippie communes is not an apt metaphor for collaboration and co-creation.[26] Collaborators need incentives and promises to part with their effort and time. Clay Shirky makes the same point when he declares that the promise is the essential piece that convinces a customer to become an active collaborator.

> Everyone already has enough to do, every day, and no matter what you may think of those choices ("I would never watch that much TV," "Why are they at work at ten p.m.?") those choices are theirs to make. Any new claim on someone's time must offer some value, but more important, it must offer some value higher than something she already does, or she won't free up the time.[27]

Consequently, the naïve belief that collaborators are driven by altruistic motives needs serious refinement. Jumping to the other end of the spectrum and boldly declaring that collaborators are only in it for the money is also not correct. Reality lies somewhere in between, and is more nuanced than either altruism or financial gain. A variety of contracts, some explicit and some implicit, some benefiting the individual, others benefiting an organization or cause they support, have proved to be strong incentives for customers to part with their time, effort, and creativity, as illustrated by the examples that follow.

Self-image: Moms don't participate in Hallmark's Circles of Conversation communities for monetary or material gains. In fact, they sign a legal document giving away any and all rights to ideas and monetary gains that materialize as a result of their interaction with Hallmark. Moms participate in Hallmark's communities because of how it makes them feel about themselves. Being asked for advice and opinions, being heard and taken seriously, and seeing their ideas implemented fills them with a sense of pride and accomplishment.

Belonging: Sometimes the mere ability to belong to a group and be affiliated with its activities is reward enough. Certain groups, like the Harley Owner's Group (HOG), Audi drivers, and Blizzard gamers wear their group identity as a badge of honor. The act of being invited to collaborate and co-create is incentive enough to participate.

Consumption: The reward of being the first to try new products and emerging technologies should not be underestimated. It is this desire to be the first to try, and subsequently own, new products, that drives customers to websites like Nokia Beta Labs and to co-creation clinics for the Mini Electric. The reward of early trial, adoption, and ownership is a powerful incentive for innovators to offer their effort and time.

Need for a Solution: The need for a solution is a potent motivator for collaborating. Lead users are attractive resources for innovation precisely for this reason. They are looking for solutions before actual markets come into existence. It was the need for a solution that led bikers speeding downhill on fat-tire bikes to pool their resources and develop a specialized mountain bike. It was also the need for a solution that led users and developers to collaborate with Sun to refine and improve the Java platform, which ultimately led to the co-creation of Java 5.

Supporting Causes: Supporting a cause, whether it is finding a cure for breast cancer, or fighting global warming by buying green products, is a powerful incentive to offer time and effort. In the Susan G. Komen for the Cure® case study discussed in Chap. 4, individuals experienced multiple rewards, like increased self-worth, the reward of affiliation, and the knowledge that they were offering time and effort for a noble cause, namely finding a cure for breast cancer.

Monetary Rewards: Money has been and continues to be an important motivator for participating in collaboration and co-creation activities. TopCoder winners receive prize money, as do winners in the Electrolux design lab contest. Even companies like Hallmark, where the rewards for collaboration are mainly psychological, offer some form of monetary rewards in the form of coupons and sweepstakes prizes. Dr. Peter H. Diamandis, a key figure in the development of the personal spaceflight industry, is a staunch believer in prize-based competitions. His X Prize Foundation is built entirely around prize money. According to the organization's philosophy, radical breakthroughs for the benefit of humanity are best brought about by contests driven by prize money. McKinsey & Company agrees with Dr. Diamandis.

In a special report dedicated to the subject, McKinsey recommends that prize-based competitions be part of the toolkit of many of today's philanthropists. They believe that prize-based competitions are unique and powerful in producing global change because of the way in which they simultaneously mobilize talent and capital.[28]

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