Crowdsourcing: Save Money and Improve Time to Market

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Do you want to save money and get your products to market faster? Clearly the answer is yes! Crowdsourcing is helping businesses do both. This article shows how crowdsourcing can help your product initiatives and how you can best implement it.

In a global economy with ever-present competition, successful companies get to market quickly, deliver the right products, and focus on profitability. This balancing act between time to market, meeting customer needs, and profitability forces companies to continually innovate. Leveraging the internet and crowdsourcing can help companies strike the correct balance.

With crowdsourcing, you present a business or technical problem to a community. This community then submits solutions. With social media breaking the barriers of geographical boundaries and providing the largest platform for people to collaborate, IT organizations can leverage the knowledge and power of people to get results that build customer loyalty. Crowdsourcing can also help you create faster feedback loops and initiate transparent dialogs that can lead to strong business partnerships and sales.

But can we rely on the crowd to design, write, or test software? Can they drive marketing, create content, and even localize documentation? Do projects exist where designers and developers from all over the world can contribute and get paid? And if they exist, what are the benefits and risks of using the crowd and how does an organization solicit participation?

Crowdsourcing across Functional Teams

In this article, we identify typical crowdsourcing projects, provide real-world examples for crowdsourcing different functions, and offer risk mitigation and implementation strategies. The following topics are covered in this article:

- IT Projects for the Crowd
- Crowdsourcing different functional areas:
  - Marketing
  - Product Design
  - Content
  - Translation
  - Risks and Mitigation
  - Implementation Recommendations

IT Projects for the Crowd

Crowdsourcing.org lists over 2000 sites that offer opportunities for workers to connect with projects around the world. The sites represent over 40 languages from Afrikaans to Yiddish. Not all of these sites and projects are IT-related. Some focus on fundraising, others request feedback on product design for consumer goods such as automobiles and beverage containers. One of the most well-known sites, Amazon Mechanical Turk, is updated hourly with human interactive tasks (HITs). As of the writing of this article there were over 153,000 HITs available. HITs range from simple tasks like describing an image or clicking...
a button on a web site to transcribing audio to data entry. When we reviewed
the site for this article, the fee for completing the HITs ranged from $0.10 to
$53.00 for the outstanding tasks. Generally the due dates for the tasks range
from several hours to a few days. Many require no skills; others require the
prospective worker to complete a brief questionnaire or complete a test. Other
sites such as Freelancer.com, Elance.com, or Scriptlance.com put programmers,
designers, and writers in contact with employers. Prospective employers can
post the project and request bids for candidates or post assignments for a
specified rate. The rates on these sites range from $20 to a few hundred dollars.

As you can see, the cost of reaching out to the crowd is very advantageous to
the requesting organization. Additionally, if structured properly, huge amounts
of low-level tasks can be accomplished in a relatively short period of time,
improving the time to time-to-market.

Marketing

Social media has changed the Marketing industry, giving companies the ability
to communicate directly with customers and get immediate feedback on
products and brand awareness. For example, Lay’s is running the LAY’S® Do Us A
Flavor™ Contest (http://www.fritolay.com/lays/index.html) and will award one
million US dollars to the person who suggests the new potato chip flavor that
garners the most votes from their Facebook followers. Used in this manner,
many companies have determined that crowdsourcing Marketing functions can
be a cost-effective way to quickly get a large number of creative ideas and
increase brand loyalty. In fact, many of the top global brands, such as Coca-Cola,
IBM, Microsoft, and Google have all used creative crowdsourcing. To generate
interest and increase participation, companies typically sponsor monetary
incentives, contests, or rewards like in the case of Lay’s.

Crowdsourcing lets customers feel personally invested in shaping the direction
of the brand and increases satisfaction by having them drive new product
decisions. Given the cost and risk involved with developing new products in a
traditional way, the benefits of using crowdsourcing for Marketing can be hugely
impactful by increasing customer engagement, calling attention to the brand,
and generating new ideas in a comparatively quick and cost-effective way.

Product Design

Crowdsourcing is a cost-effective method to have prospective users define the
user interaction model and the interface environment. Your company can crowd
source a simple UI design or the complete software design. Additionally, you
might have the crowd create several designs in parallel. This model helps
the product team spend less time reviewing designs and you build what prospective
users want.

For example, Volkswagen recently concluded a contest called App My Ride
(http://www.app-my-ride.com/) where they requested a prototype application
for a future car infotainment system. They solicited application ideas or
completed applications for their system. In fact, they provided a software
development kit to help the designers build and test their application.
Volkswagen awarded 1st, 2nd, and 3rd places prizes for best application.
Winning applications focused on social media and gaming. It appears that
Volkswagen met their goal of identifying innovative prototype apps for a future
infotainment system. Time will tell if any of the winning apps make it into the
infotainment system.

Information initiative to increase the relevancy of content and delivery of
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Content

With the rise of social media, users no longer rely only on the traditional user guides, online help, screen captures, video tutorials, and knowledge base articles that are provided by manufacturers. Consumers regularly obtain guidance from content posted in sources such as user groups, forums, and even more open sources such as Facebook and Twitter. They build their own communities and create their own, often more useful, content.

Crowdsourcing content means letting your users or community members contribute to content based on their knowledge and experience with your product. The contributor can be anyone – from a novice to an experienced user. Crowdsourcing content internally and externally helps organizations to meet the challenge of providing the right kinds of content for a variety of users. The crowd can help with the generation of content and maintaining the same.

One of the most popular examples for crowdsourcing content is Wikipedia. Community members can start a topic, edit, or comment on a topic. The content is then edited, refined, and maintained by the community members. Wikipedia is a true example of leveraging the power of crowd. Isn’t that why we have almost everything on earth on the Wikipedia page, right from rocket science to movie information?

Here are some crowdsourcing techniques that you can leverage:

**External Blogs, forums, and communities**

Organizations cannot create and own all of the content for their products because there’s no end to the demand for content. The popularity of blogs, forums, and communities are a testimonial of this fact. While blogs generate content for a specific real-world use case, forum and communities help users solve each other’s questions and issues with the product. You can post links to these external sources on your website, newsletters, or blogs to encourage and recognize the external contributors.

**Company-Hosted Crowdsourcing Platform**

You can initiate and promote content generation by providing a crowdsourcing platform:

- **Communities**: Create user communities for your products and let your users to collaborate and solve problems; ask questions and get answers; write blogs; Like/share/tweet the content from where they are. Adobe’s Community Help invites people to share tips, tutorials, videos, cook books, and so on. It has a forum where users can collaborate. Similarly, CA Technologies has an active user community on MyCA.

- **Documentation on Wiki**: You can host the documentation on a collaborative platform such as Wiki, and let your user community maintain the documentation. For example, Eclipse has crowdsourced their Application Life Cycle Management project (Mylyn) documentation using a wiki-based platform.

**Content from Social Media**

Social media provides a great opportunity to engage with customers and show the world what your company really stands for. Most companies have a company profile on popular social media sites such as Facebook, LinkedIn, Twitter, and so on. It helps companies to reach out to a larger group, including customers and potential customers and establish an informal connection.

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Customers use social media to provide feedback about the product, support, or documentation. For example, the ARCserve user group on LinkedIn has a very active community that’s moderated by CA and participated by 400+ users. This makes it easier for the user to share and like the information and makes the activity visible to the user’s network.

Translation

With only a fifth of the world’s population speaking English, the possibility to attract more users to your site increases with the offering of translated content. Crowdsourcing can be a strategic approach to efficiently provide translated content while keeping the translation cost to a minimum.

With crowdsourcing, you reach out directly to the translators; the costs could be lower than if you had to approach a vendor. In certain non-critical jobs such as translating a blog or a community site, you can also leverage the language enthusiasts and get the job done for free or for some non-monetary recognition like certification. A note of caution: Not all services are equal so the quality of your results may vary from one crowdsourcing project to the next.

Smartling, Gengo, Fox Translate are some of the companies that use crowdsourcing to provide a team of pre-tested translators for a project. If you can find your people for translation, companies like Get Localization can provide you public workspaces to manage your translation projects.

Here are some examples of companies leveraging translation crowdsourcing:

• As part of an innovation initiative at CA Technologies, CA Labs is developing a Translation Platform to enable translation crowdsourcing. The Translation Platform connects the Content Management System with standard translation pre-processing tools: translation memory systems and machine translation engines to process the files for translation before they are sent to the crowd. This platform also offers crowd-based quality evaluation through Action-Verification Units (AV units). In the Action phase, a single worker performs a specific action such as translation. In the Verification phase, a set of workers verify the quality of the output generated. If the quality provided is below a certain threshold, the first worker is asked to repeat or improve the action. This process may be repeated iteratively until the output has reached a certain level of quality.

• Facebook has an app for translation and it has used this app successfully to crowdsource translation of Facebook’s site in 60 different languages. Not only does it support translation of text strings using crowdsourcing, it uses crowdsourcing to check for quality as well. The community can translate text, vote for the best translated text or add their own translated version. The translated text with the maximum votes gets accepted and goes live. Anyone with a valid Facebook account can join as a translator. Facebook now aims at leveraging its volunteer translators on other sites or apps by using a set of APIs from Facebook called Facebook Connect. Any website or application that uses Facebook Connect can now open up their translation project to the entire Facebook community to get their site translated in any language that Facebook supports.

Risks and Mitigation

Although crowdsourcing can offer significant benefits to all areas of the organization, you must consider and take action to mitigate crowdsourcing-related risks. Following are some of the risks that you may want to consider but...
there may be more depending upon the specific needs of your project:

- **Supervision:** Organizations cannot supervise the work or have any guarantee that the task will be of required quality and completed by the due date. In the case of paid crowdsourcing, the fee should not be paid until the organization accepts the work. Therefore, the organization needs to devote considerable amount of time and effort to ensure that the work meets the criteria specified in the posting. You can either have the crowd vote for the best work or employ people for supervision.

- **Legal:** There can be legal risks to the organization if the work provided by the crowd worker is not original. Not only can ownership issues lead to costly litigation, it can also damage the reputation of the organization. However, you can reduce this risk. For example, ask the participants to accept a legal contract and terms and conditions of the work. In this contract, explain that you can exclude any entry for any reason. Doing so gives you the power you need to use the crowd-sourced content as is best for your company and clients. For more information about crowdsourcing legal issues, see http://www.crowdsourcing.org/.

- **Screening:** Establish the rules or guidelines for screening the candidates. The guidelines could include the skills required, geography, eligibility, and so on. Engaging the crowd for tasks that require finer skills is always tricky as you may not know if the candidate has the required skills or intent. Conduct prequalifying tests to confirm that the candidate can perform the task with the expected quality. Similarly, in the case of crowdsourcing for contests or rewards, which are often used in Marketing, employees must invest time reviewing thousands of entries. By establishing the evaluation criteria and clearly laying out the goals, you can reduce the time spent on reviews.

- **Continuity:** The durations of the tasks are short and the workers who take assignments quickly move onto their next job. If a worker executes a task well, it is often difficult to engage that individual again. Similarly, there is little opportunity to form teams to enable the crowd workers to collaborate with each other on a project. You can create a collaboration platform for your crowd workers and encourage them to interact and collaborate. This also helps crowd workers to stay connected with the company and possibly be available for the next assignment. Moreover, crowdsourcing is also great way to identify the right talent pool and engage them for permanent employment.

- **Quality:** In the case of crowdsourcing content, possible quality issues may arise due to contributions from novice or inexperienced writers. There are also risks involved with exposing Intellectual Property and losing control over them. There can also be negative feedback and influencers and loads of content leading to too many search results. You can employ content curators and moderators who can monitor the content and address them appropriately.

**Implementation Recommendations**

You must establish a well-defined strategy, including risk mitigation, before you embark on a crowdsourcing exercise:

1. Identify your crowdsourcing goals
   Consider the factors listed below to understand the goals for crowdsourcing and clearly communicate your problem statement and expectations to the crowd contributors.
- Quality— Is quality highly desirable? For projects with high legal implications and projects where quality is critical, ensure that stringent quality checks are in place.
- Complexity— Can you consider breaking larger requests into smaller work items?
- Business Critical—Are deadlines business critical? For projects that are very critical and have shorter project cycles, you may prefer in-house implementation or outsource it to vendors.
- Frequency— How frequently do you want to approach crowdsourcing for your projects? Determine if you want to do crowdsourcing as a one-time process or as an ongoing one. Setting up a system and process for one-time crowdsourcing may not be effective because crowdsourcing gets better with time and you may not realize the benefits right away.

2. Establish the infrastructure:

   Define a workflow for reviewing and posting the content and plan for the following:
   - Content Management System—How are you planning to host different versions from the crowd? Is there a possibility to save work in progress?
   - Secure environment—Are the transactions safe and secure? What security measures you want to put in place to ensure files uploaded by one crowd contributor are not accessible to others?
   - Protocol to share the files—Which mode or format of file transfer works best for you? For example, you may prefer emails over FTP.

   Implement a system for handling micropayments. As much as it eliminates the need for middle men and vendors, crowdsourcing adds administrative and financial overhead in terms of making direct payments to workers and maintaining the accounts for the same. By implementing an effective payout mechanism, this overhead can be efficiently managed.

3. Prepare for Implementation

   Ensure the content is error-free and follows the pre-processing steps required to deliver the source content in a standard format. It would not be efficient to spend time in answering queries related to source content.

4. Set Expectations

   Clearly state the goals of your exercise. For example, define a problem you are trying to solve, define the submission criteria, and include a schedule with timelines to set expectations. You can also plan on having a training module to educate your contributors.

5. Check for quality:

   You must plan for in-house quality checks as contributions may be from people who are new or inexperienced. Define a process to perform a quality and legal check after you compile the crowd sourced content.

6. Reward:

   Devise a reward mechanism to incentivize the contributors and publish your reward system, whether monetary or recognition-based, on your site. Companies interested in the enormous potential of crowdsourcing must invest time and resources to find the right contributors and motivate them to contribute. At the same time, devise a mechanism to detect and address malicious activities and fraudulent or inappropriate behaviors.

   For example, CA Champions is a badging and awards program for
contributions to the CA Community. The top champions are highlighted on the Wall of Champions and on the Communities page. The contributors get a sense of belongingness to the community and are motivated to contribute more. The badges also prove their expertise in the subject and add value to their profile. By recognizing genuine contributions, companies keep the users engaged and encourage them to help each other. Any incentive must directly generate the type of behavior that you expect. Beware; wrong incentives can lead to wrong behavior.

7. Advertise

Identify creative ways to advertise and attract more and more folks to work for you. Leverage social media when you post a call for crowd contributors.

8. Manage and monitor

Maintain a database of input as well as your regular contributors. You may consider some best practices for engaging the contributors:

- Establish a communication channel
- Publish the results
- Celebrate milestones

9. Measure and Maintain

Devise an audit mechanism to measure the effectiveness of crowdsourcing, revise your strategy as required, implement the new strategy, and audit it to ensure higher returns on investment.

By following these points, you can position yourself for an optimal crowdsourcing experience where you can get solid input. Additionally, you build a foundation for future crowdsourcing projects.

Conclusion

Crowdsourcing lets companies save money while also engaging customers and professional peers. Companies must invest time and resources to find the right talent pool of credible contributors and keep them motivated with a recognition program. Companies must also engage them to contribute for free at the time of need. With the internet and social collaboration, crowdsourcing is trending upward. How will you use it to help your company build profitable products and get them to market quickly?

Disclaimer: The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of CA Technologies.

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