User-Generated Content White Paper

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Introduction

In late 2013, the Center for Information-Development Management (CIDM) conducted a survey of the solicitation, management, and incorporation of technical content developed by customers. Usergenerated content has become increasingly important to corporations who want to take advantage of the knowledge that customers have about their products, particularly knowledge accumulated from actual field implementations. They believe that user-generated content will be beneficial to the entire customer base, as well as the internal product and information developers. However, organizations understand that pursuing user-generated content is difficult and complex:

- many customers are reluctant to devote time and energy to contributing content to the organizations from whom they purchase products
- customers may already be contributing content in places that are not readily monitored by the internal information developers
- customer content may not provide the best methods for solving a problem or using the product or may contain errors
- information developers may lack scheduled time to monitor user information contributions
- information developers do not know what methods or avenues might be best to encourage high quality content from customers

Forty-two individuals took part in the CIDM study, including individual interviews with selected survey respondents. Although the small number of participants reveals that soliciting user-generated content is still an emerging activity, the rich information that the study revealed provides best practices for managers thinking about starting an initiative.

Through the study, we learned much about

- how companies are incorporating user-generated content into their informationdevelopment environment
- what tools/applications/websites are currently being used by organizations to solicit and receive user-generated content and incorporate it into their information-development processes
- what tools/applications/websites are currently being used by organizations to solicit and receive user-generated content and incorporate it into their information-development processes
- what impediments exist and how they are being addressed
- what motivates customers to participate in user-generated content initiatives for the companies whose products they use
- what best practices have emerged that may be emulated by others

METHODOLOGY

The survey consisted of 20 questions. Participants were asked to identify the industry for their company or product and then were asked if they had an active user-generated program and what goals, metrics, mechanisms, software, and processes they had established for that program. The survey was hosted online and invitations were distributed through several social media channels, including Facebook, LinkedIn, and email.

In-depth follow-up phone interviews were held with organizations that have ongoing user-generated content initiatives in place. These interviews explored the goals of each initiative, best practices and pitfalls, the trends seen in the survey, and any activities that were unique to the organization interviewed. The interview notes were combined and reviewed, and the aggregated discussions were associated back to the questions and comments in the survey and the objectives for the report.

We also examined relevant studies on user-generated content conducted in the past three years. The results of those studies were aggregated and associated back to the questions and comments in the survey, the aggregated comments from the interviews, and the objectives of this report.

Survey Findings

PARTICIPATING ORGANIZATIONS AND COMPANIES

The forty-two participating organizations in the user-generated content (UGC) survey represent a strong cross-section of industries, corporate sizes, and business goals. The top four industries represented were enterprise software (63%), consumer software, (24%) telecommunications (21%), and enterprise hardware (18%). Respondents represented both major enterprises and small companies.

Q1 What industry is your company or product? (check all that apply)

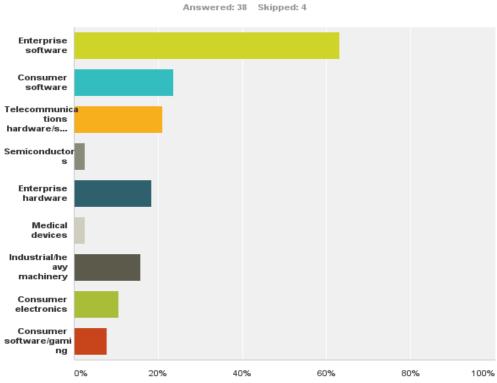


FIGURE 1: INDUSTRIES PARTICIPATING IN THE STUDY

Nearly one-third of the respondents have an active program to solicit content from product user. Nearly 50% are researching the possibility of a program. Interestingly, 5% of respondents indicated that they had tried to implement a user-generated content program but it did not produce the results that they had hoped for. These responses suggest that UGC is in the early adopter phase of implementation.

PARTICIPATION RATES AND REASONS FOR SOLICITING USER-GENERATED CONTENT

Ninety-five percent of the organizations with an existing user-generated content (UGC) program indicated that they implemented their programs because they believe that many technical questions can be answered more quickly and accurately if customers participated in the process. Building customer loyalty and developing more up-to-date and accurate content were also cited as important reasons for soliciting user-generated content. Notably, cost savings was the least important factor.

Q4 If yes, why does your company solicit UGC? (check all that apply)

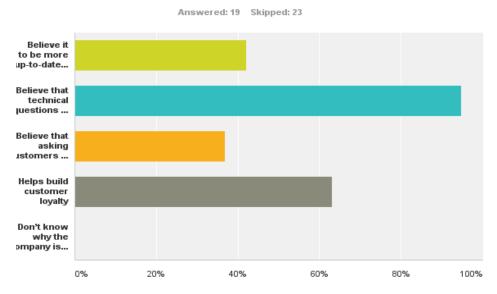


FIGURE 2: REASONS FOR SOLICITING USER-GENERATED CONTENT

The stated reasons for companies not to have a user-generated content program are also telling. Over two-thirds indicated that they either did not have the resources needed to monitor and incorporate user content into technical materials or they did not have a technical mechanism to do so. Note that money is the least important factor in deciding to implement a UGC program, a pattern is reinforced in the responses to other questions. Finding appropriate software may overcome some of these obstacles, particularly since money appears not to be an obstacle.

Q3 If no, why are you not asking users to generate content? (check all that apply)



FIGURE 3: REASONS FOR NOT SOLICITING USER-GENERATED CONTENT

METHODS FOR SOLICITING USER-GENERATED CONTENT

The organizations in the survey use a variety of resources to gather user-generated content, often centered around the corporate website and the help site or wiki to which the technical content is published. Twenty-three of 29 organizations that are capturing UGC use multiple mechanisms. One-third of respondents also solicit video content from users, which is consistent with contemporary social media practices (e.g. using Vine and YouTube) and may suggest a technically astute user base. However, the majority of content contributed is instructional text and recommendations.

Q5 What mechanisms is your company using to solicit UGC? (check all that apply)

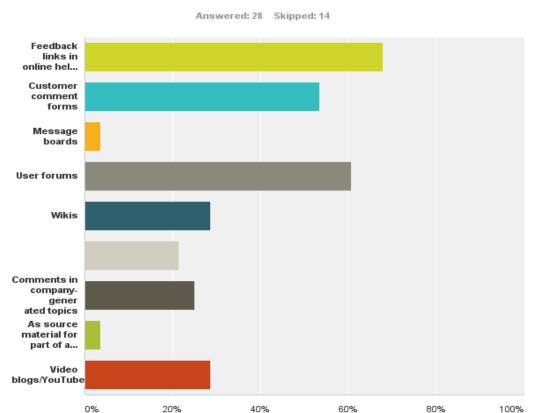


FIGURE 4: METHODS OF SOLICITING UGC

User participation rate is cited as a challenge to gathering UGC and emphasized in the response to question #10 below, which clearly indicates that fewer than 10% of users actively participate. Eighty-six percent of respondents reported fewer than 2% of customers contribute content. However, it is reasonably consistent with the well-known 90-9-1 rule, which postulates that 90% of users on collaborative sites are "lurkers" (non-contributors), 9% of users edit existing content, and 1% actively contribute new content. An active community is an important measure of a social sites' success but a majority of technical content users are there to read, understand, or find an answer.

CUSTOMER MOTIVATION TO PARTICIPATE

Customers appear to be motivated by altruism or self-interest. Fully a third of the respondents report that customers look for recognition as experts among their peers and among the product developers. Twenty-three percent want to help build a user community that is active in exchanging information. Another 23% hope their contributions will give them special access to the documentation team, or perhaps to the product developers themselves.

Q10 What percentage of customers contributes content?

Answered: 30 Skipped: 12

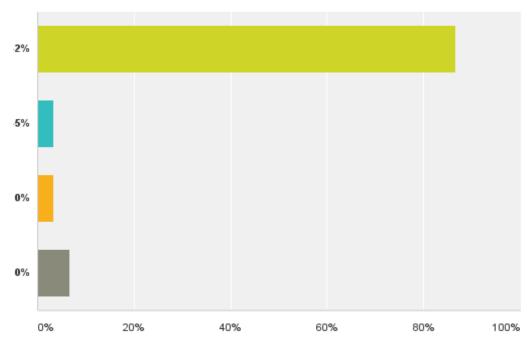


FIGURE 5: PERCENTAGE OF CUSTOMERS CONTRIBUTING CONTENT

A little more than 20% of the respondents report that their UGC sites have a rating system with ratings provided either by the company or by peers. Another small percentage provide monetary rewards or recognition such as Most Valuable Contributor. However, the majority (78%) provide neither rewards nor recognition.

SOCIAL MEDIA USE

Social media plays a part in gathering UGC but is not the most important resource, according to the survey. Thirty organizations identified the social media sites and applications they use to receive technical information from customers. Only 20% of them actively gather content from well-known public tools such as Facebook, Twitter, YouTube, and LinkedIn. Feedback and content gathered directly from wikis and community help sites were both more common and considered more useful by the organizations. Email from users was the most widely used, and the second best, resource.

METHODS USED TO REVIEW AND EDIT USER-GENERATED CONTENT

The majority, or 53%, of respondents reported that they incorporate user-generated content into their technical publications. The biggest challenge was generating sufficient interest for continued contributions and ensuring the technical accuracy of the content, although slightly less than half of the responding organizations asked their information developers to monitor user contributions. A

follow-up question in the social media study confirmed that few organizations ask their engineers or subject matter experts to monitor user content. Once UGC is collected, a majority of companies conduct a technical review of the content and many perform a substantial edit as part of their internal workflow.

Mitigating spam is not considered a challenge, perhaps due to the nature of the resources used to gather content. Help sites and corporate wikis often require a valid user login and actively monitor user etiquette. Moderating user comments and content is a notable current trend on the Internet, particularly on magazine and news sites.

METHODS TO MEASURE PROGRAM EFFECTIVENESS

Customer satisfaction with technical content is the preferred mechanism for measuring the effectiveness of efforts by 43% of respondents. Increasing brand promotion among potential customers (21%), increasing traffic to the social networks (21%) and reducing the number and cost of support calls (14%) are additional sources of data about the success of programs. Customer happiness with good content is, of course, an important motivator for any content-development effort.

Q18 How do you measure the effectiveness of your UGC program?

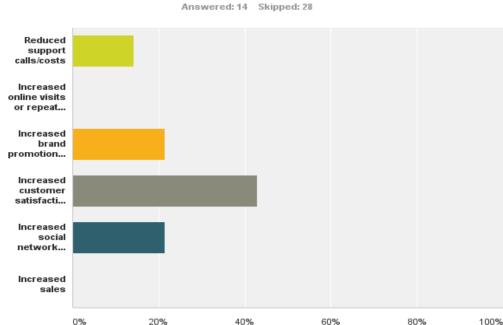


Figure 6: Methods of measuring effectiveness of a UGC initiative

Existing Studies

We reviewed studies of user-generated content that were performed within the past three years. Those studies focused on API and Android developer documentation and are summarized below.

GEORGIA TECH UNIVERSITY STUDY ON ANDROID OS DOCUMENTATION

A 2013 study by Chris Parnin at Georgia Tech University examines the official user-generated documentation for the Android OS and two user-generated content sites: Stack Overflow and the developer.android.com/guide. The report can be found at http://blog.ninlabs.com/2013/03/api-documentation/.

The introduction to the study cites these prior studies and examples:

- "Software companies, such as Microsoft, create documentation for millions of topics about its APIs, services, and software platforms (MSDN). Creating this documentation comes at a considerable cost and effort. And, after all this effort, such documentation is rarely consulted (Lethbridge)."
- "API documentation is especially difficult to create (Robillard), because only a few writers must create documentation that teaches concepts and that maximally covers the many ways the thousands to millions of developers may be using an API."

Parnin and team collected 1,316 days of Android developer history (average 11 weeks per developer) and found 9,234 visits to Stack Overflow and 2,547 visits to developer.android.com, which is the official documentation site for Android. Parnin also analyzed the code examples they found in the Stack Overflow data dump and developer.android.com/guide.

Parnin found the following:

- Android developers got as much as 50% of their documentation from Stack Overflow.
- There were more examples in Stack Overflow than in the official documentation.
- ♦ Coders visited Stack Overflow two to ten times more often than the official documentation.
- Stack Overflow content had more code examples.

If you are interested, read the comments appended to their article, especially if you produce API documentation. The comments very clearly articulate what users are looking for when they try to get answers to coding questions. One comment says "documentation without examples is useless."

GEORGIA TECH UNIVERSITY STUDY ON CROWD-SOURCED DOCUMENTATION

Another study by Chris Parnin, in 2012, also examined Stack Overflow (http://stackoverflow.com/). Parnin aims to answer these questions: "But a burning question remains, can we trust crowd documentation? Will it be complete, will it be fast, will it be authoritative? What type of content is created by the crowd and who contributes?" A summary of the report can be found at http://blog. ninlabs.com/2012/05/crowd-documentation/ and the complete technical report can be accessed at

Crowd Documentation: Exploring the Coverage and the Dynamics of API Discussions on Stack Overflow http://www.cc.gatech.edu/~vector/papers/CrowdDoc-GIT-CS-12-05.pdf. Parnin found that unlike traditional documentation, crowd documentation has to rely on a functioning crowd to provide questions, answers, votes, and comments. The availability of such a crowd and its good dynamics are essential for crowd documentation.

Crowd documentation often includes many more examples than traditional documentation, but the examples must be checked for accuracy. Many of the examples given in Stack Overflow apparently have errors.

API designers cannot completely rely on the crowd to provide questions and answers for an entire API. The crowd tends to document the most frequently used classes of the API. Of course, it would be useful for the developers of the traditional API documentation to know which classes people use frequently. It might sugget that the infrequently used classes should get more rather than less coverage in the traditional documentation.

Questions tend to come from a wide distribution of users but answers come only from a very small group of "power users." To encourage more contributions, the crowd needs to be offered incentives like awards for contributing a high number of valuable answers. Of course, many contributors are also consultants so that contributing helps their businesses.

Writers should be able to mine crowd sources for valuable insights about the needs of the user communities. The crowd sources may provide a valuable resource of good code examples, which are often difficult for technical writers to obtain internally from busy developers. If certain areas of the product generate many questions and answers in the crowd source, those areas are likely to require special attention and quality and coverage improvements. Key contributors might also be identified as potential resources, including paid contributions to the documentation.

STACK OVERFLOW RESEARCH BY COLUMBIA UNIVERSITY, BARD COLLEGE, THE UNIVERSITY OF CALIFORNIA AT BERKELEY, AND THE UNIVERSITY OF WATERLOO

This work examined the Stack Overflow question and answer format and was presented at the IEEE CHI Conference in 2011. The presentation materials can be accessed at Design Lessons From the Fastest Q&A Site in the West http://www.cs.berkeley.edu/~bjoern/projects/stackoverflow/stackoverflow/stackoverflow-chi2011-slides.pdf. The study looked at the success of Stack Overflow in comparison to other question-and-answer sites. Prior research had shown that question-and-answer sites "often turn conversational and perform poorly on technical questions" (Nam; Rodrigues; Harper – all CHI'09) and that "social network question-and-answer is best suited for opinions and subjective answers" (Morris CHI'10; Horowitz WWW'10). Despite this research, Stack Overflow was found to have a consistently good reputation in the developer community and that reputation was found to be deserved. Particularly indicative of success, Stack Overflow had an answer rate of 92.6% for all questions asked. And the answers come fast. The median first answer comes in 11 minutes, with most answers given in the first four hours.

The researchers stated that Stack Overflow's success is due to these attributes:

- The users prioritize information exchange over social networking
- It has an impressive track record (percentage of questions answered, time to answer)
- It has gained prominence and popularity in the community
- ♦ Infrequent users ask questions and active users answer them
- Users are personally identified and become well known if they contribute frequently and effectively
- Contributors are offered incentives

However, researchers also found that Stack Overflow is not perfect and will need to evolve to face these challenges:

- ♦ There is a high entry barrier for novices and less experienced users
- ♦ Contributors are lost as they master their craft and direct their attention elsewhere
- Answers to questions persist even when the answers need to be updated because of a changing code or product base

Microsoft's Curah

In October 2013, Microsoft launched a new website www.curah.microsoft.comto solicit information about content from its audience of IT professionals, particularly those who use the TechNet Library. The new curah site focuses on curating content rather than gathering new user-generated content. Both Microsoft employees and customers can produce curations of content. The site has a very simple interface and model. The authoring is through simple text boxes. To contribute content, an individual must have Microsoft ID (Hotmail, Outlook). Curations are pointers to other content, not new content. The participants and the information-development team are looking for questions that many in the community want answers about.

Using curah, the community is able to help determine what the most important user questions are. Then the curation process helps to assemble various people's answers and provide links to those answers. In some cases, they point to existing content, such as technical documentation, but they also link to user communities with blogs, and content outside of Microsoft.

There is a lot of duplication of information in the user community and curah aims to use a light hand to point to the right answers, whether pointing to external user-generated content, the Microsoft library of information, or other support organizations. The answers are validated and tested. In the community, the community decides what is the right answer. Each product area and user community might have engineers, consulting services, community all creating content. The result is a huge body of content, in fact, too much content for users to figure out what they should be looking at.

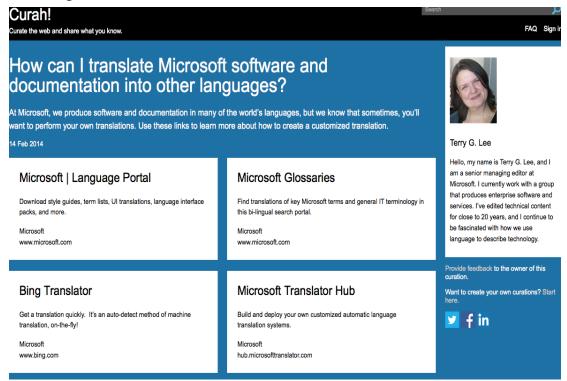


FIGURE 7: TRANSLATION CURATION

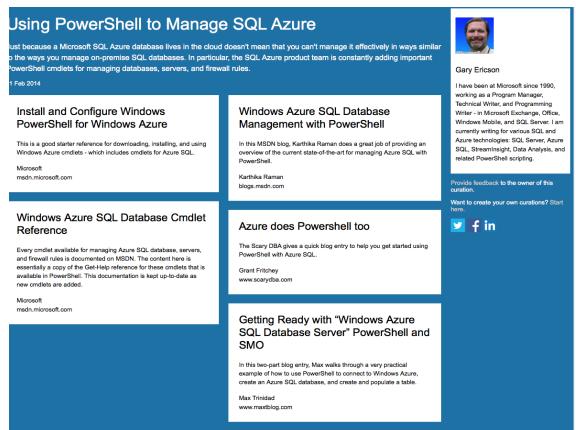


FIGURE 8: TECHNICAL CURATION

What's the motivation of the customers to contribute? Most customers want to participate in the community and are genuinely altruistic. On its technical wiki, Microsoft has a Most Valuable Person (MVP) program. And, many of the contributors are industry consultants who want to be better known.

Staff content developer responsibilities include actively curating content, as you can see in both examples. The Translation curation has been done by a technical author at Microsoft. The curation on PowerShell is also handled by a writer who specializes in SQL Azure. Writers are creating curations to seed the community and providing a critical mass of starting content.

CIDM member, Matt Abe of Hewlett-Packard, provided a useful curation on Gamification, as well as a page curating the concept of curation.

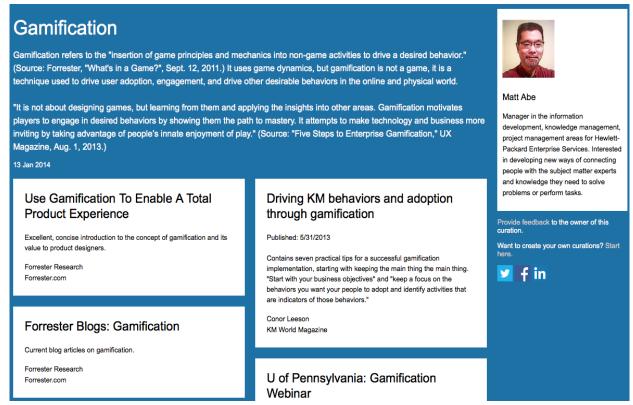


FIGURE 9: MATT ABE ON GAMIFICATION

How do customers use community content versus Microsoft content? At Microsoft, the technical authors see themselves as the experts in the technology up to the point of shipping products. Afterward, the customers become the experts. Many customers build platforms and tools that other people modify and customize for their business requirements. Microsoft relies on partners to understand the customer specializations. Customers have the real world experience about implementing the technology. That's who customers go to when they want advice on implementation. Customers answer questions like: How do I solve an engineering problem? Customers provide solutions and scenarios that provide real case studies.

Conclusions

Many companies are implementing user-generated content initiatives, but with a variety of goals and practices, and they target different categories of contributors. The companies participating in the study solicit content from two distinct categories, customers and internal subject matter experts (SMEs).

ESTABLISHING GOALS

Companies that get the best results have clearly defined goals and a strategy for achieving them. Companies engage customers through user-generated content to discover customer goals and better understand how customers use technical information to perform tasks, learn about, and troubleshoot the products. By providing direct feedback that associates technical information directly with customer needs, user-generated content has the potential to build customer loyalty and increase customer satisfaction.

The most common goals we found are these:

 Building customer loyalty and customer satisfaction by engaging customers in prioritizing technical information:

Over 60% of survey respondents and all of the companies interviewed use customer feedback to help prioritize the content they develop, and over 46% of respondents gauge the effectiveness of their user-generated content initiative through increased customer satisfaction with technical content and with the product. Many formalize customer content into information-development initiatives and then allocate resources to address them.

Closing the feedback loop quickly by addressing customer priorities and integrating rough user-generated content into company-supported content helps build customer loyalty and trust.

Reducing customer support costs and building customer loyalty by increasing the speed and accuracy of information:

Almost 95% of survey respondents indicated that they believe that technical questions can be answered more quickly and accurately by customers than by internal resources. The survey results are corroborated by recent studies showing that response times of effective user Q&A sites can be extremely fast, sometimes as fast as 10-11 minutes after the question is posted, and the content is effective for about 80% of the questions answered. One organization finds that the majority of customer questions are answered by other customers in less than an hour.

Establishing requirements for future product releases:

Based on the interviews, organizations used the feedback offered by customers to direct future development projects. One company is investigating having customers contribute

content directly into their information backlog. Others recognize that user-generated content is an ideal channel to gather and prioritize customer requirements. The two-way communication facilitates clear agreement regarding requirements and provides a way for customers and companies to jointly set priorities for new releases benefiting the market.

AFFECTING COSTS

Reducing the cost of providing information was not indicated as a goal by those respondents who were engaged in user-generated content. Those who have embarked on a user-generated content initiative realize that its highest value is customer satisfaction and loyalty resulting from higher quality and more timely technical content. They acknowledge that the proper review, monitoring, and curation of that content takes significant resources, and they plan accordingly.

Rather than decreasing costs, carefully promoting and managing user-generated content may actually increase costs by requiring additional resources. Organizations might evaluate the role play by user-generated content in the content mix, perhaps allowing them to decrease some information-development effort. However, most organizations find that customers focus on scenarios of use in their exchanges, at least once the user-generated content initiatives gains traction. Since customers are increasingly interested in scenario-based content and that content is often difficult for information developers to produce, using customers to produce this content can become a significant benefit.

In one case, executives thought at first that user-generated content would permit them to decrease the number of professional technical writers. However, it quickly became apparent that user-generated content focused primarily on troubleshooting and addressed specific product configurations. It was clearly not a replacement for the foundational content provided by the information-development staff.

GAINING MANAGEMENT SUPPORT

High-level management support is a requirement for success. Management must believe in the value of user-generated content initiatives and must dedicate adequate resources. Companies with successful programs have provided the personnel, tools, and time needed to see results. Other grassroots efforts, such as one company's pilot program, failed due to a lack of resources, even though customer feedback was positive. A lack of adequate time and resources was the number one reason survey respondents were not actively engaged in a user-generated content program.

DEVELOPING MEASUREMENTS

The benefits of soliciting user-generated content may be quantified through a business analysis, but satisfaction and loyalty metrics take time and effort to gather and require a baseline for comparison. Finding compelling metrics linking user-generated content to customer satisfaction is important for success. Such metrics make it possible to obtain funding for tools and incentives. For example, one open-source organization rewards expert contributors by paying travel expenses for book sprint activities, creating and fostering a social community of experts who gather periodically to write technical content together.

Recommendations

As your organization embarks on a user-generated content initiative, we make these recommendations based on the findings of the user-generated content study.

ESTABLISH CLEAR GOALS

Establish clear goals for the user-generated content initiative and how it will benefit your company and its customers. Successful programs link user-generated content to the strategic direction of the company, division, or business unit. For example, user-generated content can help increase the adoption rate of a product or technology, assist the company in being more responsive to an emerging marketplace, and support branding activities by projecting a warm, responsive company persona.

Have a stated purpose for the information that is generated by the user community. Develop a strategy that establishes if you will incorporate some or all of user-generated content into the company-generated deliverables or keep it separate. Determine whether your information development teams and SMEs will review, test, and support the information contributed by users. Define a process and an acceptable response time for addressing comments and integrating feedback.

Best practices in the industry suggest this set of possible goals:

- Have customers set requirements and priorities for new products, features, and companygenerated content
- Improve company-generated content by incorporating comments and suggestions
- Supplement company-generated content for highly configurable products with a wide variety of customer-generated examples, scenarios, and best practices
- Use user-generated content to support specialized content such as APIs, software commands, and system integrations that has very detailed and specific information challenges
- Provide more interactive and timely troubleshooting for customers
- Answer customers' basic product-use questions more quickly and accurately for new products and those that have a niche market

Determine how will you measure success. The most successful measurements are customer satisfaction, customer loyalty, and customer engagement and participation. While these measurements can be time-consuming to gather, having a baseline and showing improvement is often necessary to continue or expand funding, and can be extremely useful in determining future courses of action.

CREATE A BUSINESS CASE

A business case that quantifies the benefits of user-generated content is essential. Establishing the value of user-generated content activities encourages decision makers to dedicate sufficient resources to the initiative. One of the most common benefits is reducing customer support costs. Online customer communities that generate content serve as robust, responsive, and satisfying self-support sites. As the community matures, more and more customers will first access the collective knowledge

of their peers rather than traditional company-provided support, allowing customer support teams to focus on unique and high-value information.

The capability to communicate directly with customers and to monitor conversations about the company, its products, and the marketplace in general are extremely valuable. Having immediate feedback on new features and improvements allows both engineering and information development teams to move quickly and decisively to address the most important priorities. User-generated content also allows the company to appeal to customers in a way that is directly relevant to their needs and preferences by offering individualized and interactive content.

However, other benefits, while real, are somewhat intangible and difficult to quantify. Best practices in branding have evolved to project warmth and competence, putting a human face on the company. Soon after Microsoft rolled out its TechNet, many customers commented that they finally felt like they were dealing with real people, not a faceless corporation. Customers who feel a personal connection with the company or brand are much more likely to be satisfied and promote the brand to friends, colleagues, and acquaintances.

Meeting evolving customer expectations is also important to prevent being perceived as a laggard in the marketplace. Over 75% of the survey respondents either had an active user-generated content program or were planning one. While the long-term cost-benefit of having a user-generated content program may be difficult to measure accurately, many customers are influenced by the increasing number of these initiatives and may come to expect them. Not having one has the potential to put a company at an immediate disadvantage.

PROVIDE ADEQUATE RESOURCES FOR THE CRITICAL SUCCESS FACTORS

Critical success factors to ensure a good start and a thriving community include adequate staffing and funding for

- dedicated SME resources to contribute initial content and provide support for difficult questions
- incentives for customer contributions
- information development resources to monitor, edit, and incorporate content into companygenerated content
- easy-to-use tools for authoring
- easily accessible sites for hosting information
- tools to provide analytics on use, search, and contribution

ACTIVELY SOLICIT CONTRIBUTORS AND PROVIDE INCENTIVES

Successful user-generated content sites organize around a community of customers, whether that community is based on customer personas, a particular customer goal or functional area, or the use of a particular product. After deciding how the communities should be organized, success depends on recruiting customers to contribute. A proven best practice for establishing initial content is to make internal company experts responsible for initial posts to the community. Leverage the professional relationships of those internal subject matter experts and have them contact respected peers and customers directly. Other potential starting points for identifying customers who are passionate enough to contribute are the customer support organization, marketing and sales, user groups, and professional societies.

Incentives are important to help stimulate contributions. During the launch of a community, provide recognition and publicity for contributors along with prizes and reimbursement if necessary. From the launch through maturity, provide incentives to quality contributors using programs like user ratings, Most Valuable Contributor recognition, sneak peeks at planned releases, and direct access to company experts.

SELECT AUTHORING TOOLS THAT ARE EASY TO USE

The survey and interviews suggest using multiple tools to gather content. While the corporate website, including user forums and wikis, and email are the most used, social media sites may be useful for reaching a broader audience of potential contributors. Tools include feedback links in company-provided content, user forums, customer comment forms, wikis, and video and social media sites. Customers are more likely to contribute content through tools that are easy to learn and easy to use.

Take action to gain the trust of customers

All user-generated content sites require trust to be effective and thriving. Critical success factors to engender trust are as follows:

- Ensure the technical accuracy of the content posted.
- Contribute content from company-sponsored experts on a regular basis.
- Adopt an open and honest corporate persona.
- Verify and protect the identity of contributors.
- Set a policy for Approval/Denial of users (validating the identity of users) and enforce programatically.
- Respond to, edit, and curate posts on a regular and timely basis.
- Remove spam and unprofessional posts immediately.

The requirement for trust and continuity makes it very difficult to conduct a pilot with user-generated content. Customers expect such initiatives to be long-lasting and evolving. Companies must commit to making the communities work and must give the community time and resources to reach critical mass. An alternative to conducting a pilot is to limit the scope to a particular product, market space, or user community.

SELECT TOOLS TO MANAGE CONTENT AND FACILITATE USER COLLABORATION

The effective monitoring, maintenance, and incorporation of user-generated content requires the following:

- development of scalable processes for gathering and collating comments
- assigning specific tasks to company information developers and SMEs to read, review, and incorporate comments
- site monitoring to remove and normalize duplicate content and remove spam
- regular, systematic review of content usage measurements and Key Performance Indicators (KPIs)

The table below contains a brief description of the tools used to engage customers in technical content. It focuses on enterprise tools whose social capabilities include instant messaging, user profiles, content reviews and ranking, comment monitoring and social media monitoring.

Tool	Description	Metadata (Category)
Jive	Jive is primarily focused on enterprise portals with collaboration, Instant Message-like communications, knowledge sharing, blogs, virtual meetings. It monitors the traffic and usage of content and communications. Similar to Basecamp, though seemingly far more powerful. Connects to CM tools and Outlook. Partnered with TemboSocial (for Community building) and Visible Technologies (high-quality SocialMediaManagement (SMM) tool).	SMM + engagement, enterprise collaboration, publishing
Fluid Topics	Fluid topics is a web solution for publishing online documentation produced with structured content authoring tools and gathering user-generated comments, suggestions, and notes through a social interface.	Help sites, publishing, content commentary
MindTouch	Software as a Service (SaaS) software that creates a wikilike help site. It allows collaborative publishing in an organization, including SMEs in either approval or authoring. Provides contextual help content to users based on what they are viewing and allows users and employees to rank content (called HelpRank). Tracks page usage, trends, and search analytics and permits answers to customer tickets to be converted into knowledgebase articles. Well documented APIs for integration with Component Content Management (CCM) tools.	Help sites, how-to documentation, knowledge base

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SuiteShare	Knowledge-based site design. Good search tool with faceted breakdowns for help subjects. Social aspects built into repository (reviews, likes, ratings). Accepts user articles and videos and allows personalized lists after a user log-in. Customers can build their own output based on chosen topics (PDF from personalized list, for example). The tool uses DITA topics and maps as a model. Compatible and responsive with mobile users.	knowledge base
Mekon DITAweb	DITA-based publishing of source content. Allows customers to rate, provide feedback on, and bookmark content. Users can mix topics to create their own output which is compatible with and responsive to mobile platforms.	CCMS + SMM, content commentary
Zendesk	Customer service software, particularly focused on tickets and collaborative responses to them. Partnered with MailChimp and SurveyMonkey and integrated with SalesForce. Collects user responses and queries from multiple channels and tracks responses across all of those channels.	customer service, help desk
Confluence	Collaboration software used to create a wiki, either on- premise or SaaS. Its strengths include integration with JIRA project management system for internal ticketing, social network monitoring, and permissioning for external (non-employee) users.	Help sites, how-to documentation, knowledge base
SDL LiveContent & SDL CCD	LiveContent is a DITA-based CCMS with the ability to output to multiple formats and a "lite" editor to permit non-XML subject matter experts to provide or enrich content. The Customer Commitment Dashboard (CCD) monitors the usage and conversation in social media platforms about the technical documentation produced in LiveContent. It monitors usage patterns and clickthroughs in the documentation itself, as well as mentions on tools such as Facebook, Twitter, and Google+.	CCMS + SMM, content commentary
Telligent	Telligent combines a web content management tool, collaboration tools, and social media monitoring. Users have profiles based on a single sign-on and can perform several "social interaction" functions, such as friending, polls, group forums, and IM. Supports REST APIs and integrates with Customer Resource Management (CRM) products. Not specifically DITA or XML based.	Blogs, wikis, discussion forums, Web CM

BEWARE OF COMMON PITFALLS AND POTENTIAL MISSTEPS

User-generated content initiatives are susceptible to certain pitfalls. Pay close attention to these areas and take steps to mitigate them:

- Time and resource commitment: Soliciting, monitoring, tracking, and editing user-generated content can be extremely time-consuming, especially when done manually. Without adequate tools to handle workflow and integration, information development teams can struggle to keep up with the workload.
- Lack of focus and follow-through: User-generated content requires commitment and regular participation from all involved. Without dedicated resources and continued involvement of the sponsoring company, the community will fall apart.
- Poaching of employees: Some customers may want to protect the identities of their employee experts who contribute in a public or semi-public forum.
- Companies that don't want their employees spending time contributing content. Investigate customer policies about employee contributions ahead of time through surveys or interviews. Provide incentives to the customer companies to help encourage participation.