

BUILDING A TECHNICAL COMMUNITY

Angelique Finan and Grady Bryant

The first years of the twenty-first century were a period of tremendous growth for VeriSign, a provider of Internet infrastructure services. By late 2006, the company comprised 15 business units operating out of 73 locations globally. This growth was in part the result of 47 acquisitions. VeriSign, originally focused on digital certificates, took on a variety of Internet and telecom businesses, including Internet-based payment processing, management of the .com and .net registries, international mobile phone roaming services, mobile phone payment services, management of customer premise security devices, Voice over IP (VOIP) services, SS7 signaling services, and distribution of digital content.

Forming a coherent company out of all those acquisitions was a challenge. It's a simple matter to sketch out a new org chart but much more difficult to align cultures, loyalties, goals, and operating processes, and to capture the hearts and minds of employees. Many of VeriSign's acquisitions had operated in the fast and loose startup environment and so were accustomed to autonomy. Especially for very young, very small companies, it's difficult to give up your identity to become part of a larger, more mature organization.

We at VeriSign knew that to accomplish our mission—developing, securing, and operating some of the world's most critical electronic infrastructure—we had to maintain the trust and confidence of the public. That, in turn, meant that employees needed to be well connected and engaged. Unless we made a concerted effort to develop connections among people representing acquired companies, we would be unable to leverage talent across the organization, develop standards for problem solving and for system architecture and software, formulate and adopt

best practices, share new ideas and technologies across the organization, and achieve operational excellence. Also, if our employees did not come together in some sort of community, we would be unable to develop a strong brand identity, and we would risk losing our most talented employees, who might not feel they had anything at stake in the company's mission or any important relationships within the organization.

VeriSign's Goals for a Technical Community

To engage employees and build connections among them, we needed a program that would cross organizational boundaries to help the globally distributed workforce meet the company's mission. The program we launched was called the VeriSign Technical Community. This community included all technical employees, representing all engineering disciplines as well as technical project management and technical management, who came together both face to face at an annual symposium and virtually, through an online platform called the Matrix.

The VeriSign Technical Community program had several goals:

Improve employee engagement, professional development, and job satisfaction. Engaged employees feel a sense of purpose and connection with the corporate mission. They invest their free time in the company and increase morale by exciting others. They are also less likely to leave and more likely to care deeply about their work. To feel a sense of engagement, employees need opportunities and a platform to share their ideas, accomplishments, and plans. And those who truly excel need rewards and recognition.

Foster a culture of knowledge sharing, collaboration (within and across projects), joint problem solving, and innovation. People may be naturally inclined to work together, but the company must help employees find one another, form lasting connections, and, perhaps most important, develop trust in one another. Trust is especially essential for innovation; employees will not share their new ideas unless they feel safe doing so.

Better integrate newly acquired, geographically dispersed companies. When new groups show up on an org chart armed with nothing more than a press release, a new set of benefits, and a new logo on their paycheck, there are many more questions than answers. Legacy employees may not seem interested in the new acquisition, and the new employees may feel isolated, unsure how they fit in and what to do to fix the situation. Giving all employees ways to connect and share is essential to a more complete and functional integration.

Strategy and Approach

The goals and objectives for the Technical Community program didn't occur to us overnight. They were deeply informed by our experiences in an earlier initiative to develop a common software framework for engineering teams. Because use of the framework was optional, we needed to involve the teams in the development process. We started small, first with a cross-functional steering committee to guide the framework, and later with a group of the company's elite engineers to widen the net.

The group of elite engineers met face to face every six months at what we called the VeriSign Software Engineering Summit (VSES), a two-day event that featured an external technology speaker, typically an author or the developer of a well-known technology. The summit involved a recreational activity that afforded networking time and an opportunity for attendees to deliver a presentation on their work area.

As we witnessed the level of engagement of the attendees and the increasing popularity of the event, we realized that we were on to something. People who may have otherwise never met were now reaching out to one another for help and advice. They looked forward to upcoming summits and played an active role in the planning. E-mail was flowing.

Although e-mail is a very useful tool, we envisioned something more. Our goal was to organize the discussion about the software framework in a way that could engage all software engineers in the company, not just those who attended the VSES. This goal sparked the idea of an online community for the company's technicians. We also started thinking that if the VSES could provide many benefits to a relatively small number of people, maybe there was something we could do on a much larger scale, perhaps with as many as 250 participants. This thinking led to the VeriSign Technical Symposium (VTS).

The VeriSign Technical Symposium—Bringing People Face to Face

The VTS is a key element of the VeriSign Technical Community program. It's a multiday, multitrack annual event at which representatives from all organizations with technical employees meet face to face. Attendees have the opportunity to network with their colleagues and learn more about best practices, proven technologies, latest projects, and innovations throughout VeriSign.

In building a technical community, we want to provide all of our technical people with both face-to-face and online opportunities to share, connect, and collaborate. We see great value in bringing employees together to network and build relationships, and then sustaining those connections and conversations in an online community in which a broader audience can participate.

The First Symposium In 2006, we held our first VeriSign Technical Symposium to promote discovery, discussion, and knowledge transfer within the technical community. A gathering of this size requires considerable investment, and that can happen only with the full support of an executive sponsor. With modest success under our belt in engaging software engineers at the VSES, we were fortunate to gain the support of the company's CTO. We soon learned, however, that we had more selling to do. Getting lower-level management to commit the time of their people to attend an unknown event was more difficult than we had expected. And employees themselves were reluctant to leave their busy jobs for a few days. To overcome this, we targeted mid-level and upper-level management and enlisted Corporate Communications to get the word out. This helped seed the first event, after which the word spread virally. From then on, there was a healthy demand for attendee slots.

The agenda was packed with presentations from all levels of the organization. From keynotes by our CEO and CTO, attendees gained valuable insights into the company's strategy and vision. Through several panel presentations, they heard about projects and technologies used in different technical organizations. During presentations by their peers, they could take a deep dive into various topics.

In addition to promoting knowledge sharing, we wanted attendees to network with their colleagues from other parts of the organization. We developed various activities to encourage this. In one networking game, each attendee received cards with the names and photos of two attendees from different parts of the organization and were given a few questions to ask, such as "What do you like best about working at VeriSign?" and "What are your hobbies and outside interests?" Attendees who tracked down their assigned people and collected answers were entered into raffles for high-tech gadgets. Attendees also participated in recreational activities such as golf and kayaking, which helped them get to know one another in a more relaxed environment.

Symposium attendees also enjoyed watching the live finals of our annual Code Fest competition. For several months leading up to the symposium, we held a series of online coding competitions, powered by the company Top Coder. Employees from all over the company competed in these online matches, and the winner of each match advanced to the onsite finals. During the symposium, computer stations were set up on stage in the center of a large room, where the finalists were given a limited amount of time to code solutions to three problems in Java, C++, or C#. Computer monitors were located around the room so attendees could watch the finalists at work. They cheered their colleagues on as results were tabulated and winners were announced.

During the Code Fest finals, tables were set up around the room manned by various organizations and individuals. This gave attendees a targeted yet informal opportunity to get to know about initiatives other than their own.

Feedback and Modification Following the first symposium, we surveyed attendees, many of whom noted that the event helped them connect with colleagues in different parts of the company and develop a better understanding of the many kinds of technical work performed within VeriSign.

Fortunately, attendees at the first symposium carried their positive experience back to their colleagues, and we never had a problem filling the slots again. For future symposiums, we received more and more submissions to present technical presentations, and being invited to the symposium is now considered a big perk.

Based on the feedback we received, we made modifications to the symposium format. Due to the incredible interest in presenting, we added more technical presentations, tracks, and Birds-of-a-Feather (BoF) sessions—90-minute informal discussions on a topic led by a knowledgeable facilitator.

We also formalized the role of the symposium Planning Committee, which is made up of representatives from all of the company's technical organizations who play an active role in promoting VTS participation. They encourage employees to submit presentations and assist them with their submissions. They also have the tough job of reviewing submissions for technical presentations and BoF sessions, and ultimately selecting them. Committee members then work with presenters to prepare for the symposium, provide feedback, and facilitate their sessions onsite.

Today, the annual VeriSign Technical Symposium is a cornerstone of the technical community. The two-and-a-half-day event is attended by about 200 employees representing all technical organizations, including sales and customer support. Our senior leadership provides the keynote. Multiple tracks of technical presentations focus on the various disciplines in our community, such as software engineering, database engineering, security, and quality engineering.

The technical presentations showcase the talents of our engineers, who receive considerable recognition for being selected. Presenting at the symposium is a great developmental opportunity for our technical people. They put a lot of effort into preparing their presentations and get lots of support from their teams. Several of our engineers have taken their technical presentations to national conferences, such as JavaOne and Independent Oracle Users Group (IOUG).

Each VeriSign Technical Symposium concludes with an awards ceremony announcing winners of CTO Awards, which recognize employees for their outstanding contributions to the company in the areas of individual technical excellence, team technical excellence, and technical leadership.

The event seems to have helped achieve one of our goals for the community program: engaging employees. As one attendee wrote on a feedback form, "I was more energized about the company and my role in the success of it than I have been in the past two years I've been with the company."

Building an Online Community

The other central component of our community is an online platform and suite of tools, called the Matrix, which lets community members connect, share, and collaborate. The name captures what we aim to do: connect globally and organizationally distributed people with similar skills and interests and enable them to better collaborate and share information.

Launching the Matrix The Matrix initially consisted of blogs, forums, an event calendar, tags, RSS feeds, comments, and user profiles that display members' photos, skills, expertise, and personal interests. We used the open source software Drupal to provide these capabilities. We added the Vault, a central metadata repository for reusable assets, such as code components, white papers, best practices, and scripts to promote reuse and knowledge sharing.

Before we launched the Matrix, we introduced it at the first VeriSign Technical Symposium. The 100 attendees were our beta users. During a general session, we gave demonstrations of the Matrix and tried to excite people about contributing to it so that there would be some interesting content when the online community was officially launched. We held raffles to get VTS attendees to complete their online profiles, and we asked them for feedback. We hoped that they would be our evangelists for using the new tool.

After we had some interesting posts, such as trip reports from technical conferences and blogs discussing building effective teams and announcing the availability of technical resources, we launched it to the broader technical community. We teamed up with the company's internal communications group, which was enthusiastic about fostering grassroots communications in the company. The group promoted the Matrix and tech community events on the intranet and in targeted newsletters and e-mails.

In the ensuing months, we held three open houses in our Mt. View, Dulles, and Bangalore locations. We invited people to enjoy some afternoon refreshments, network with their colleagues, and learn more about the Matrix. We demoed the Matrix and talked about the goals of the technical community. We set up stations around the room, where attendees could complete their profiles and enter into raffles. At this point, more than one-half of our technical community had completed profiles. We also received support from the many managers who encouraged employees to complete their profiles and contribute content to the Matrix.

Maintaining and Improving the Matrix The online community continues to grow both in participation and in its ability to foster collaboration and transparency. We made a giant leap forward with the addition of a wiki to the Matrix toolset.

We selected Confluence as the wiki software. Due to its flexibility, extensibility, and ease of use, it's been widely adopted within our technical organizations, especially in product development. Project teams use it for team workspaces. Technical writers love it for collaborating on technical documents. Project managers maintain dashboards to monitor and publish project status. Program managers publish information to market their programs. Development teams integrate it with other development tools for issue tracking and continuous integration.

Not only is the wiki a great collaborative tool, but also it does a superb job allowing people to stay in touch with projects, programs, and groups across the company. When we added the wiki, we decided to implement it in a way that would promote transparency in the community. We wanted people to be able to learn about other projects, technologies, and organizations by browsing other groups' wikis. So unless there was a need to keep information confidential, we encouraged space owners to keep their spaces open.

We've found that such cross-functional transparency is a vital part of knowledge building and sharing within the company. One senior technical leader said that browsing the Matrix is a key resource for her to keep up to speed with what's going on in many of our projects. Community members see the value and promote openness.

To keep our tech community coming back to the Matrix, we must keep talking about it and making people aware of what's being shared on it. We reach out to subject matter experts to get answers to questions in the forums. We also use e-mail newsletters to keep community members informed of discussions and information being shared in blogs and forums. Contributors to the Matrix are entered into monthly raffles and recognized for their contributions. We use an RSS feed to integrate into the community platform content from the wiki that would be of interest to the whole community.

We also need to ensure that the tools we provide continue to meet the needs of our users. At VeriSign, we have a small team of engineers who promote the development and adoption of common components and best practices, and support the technical community toolset, its advancement, and adoption. We also provide training and orientation for new employees and consult with groups on how to best use the wiki.

Enhancing and Expanding the Community

We constantly seek feedback from the community. We use that feedback, which comes in a number of forms, both solicited and unsolicited, to shape our future actions. We also use the feedback and metrics collected from the online

community as a measure of success. You have to know your community to keep it vibrant and engaged. We believe that both the Matrix and VTS have increased knowledge sharing, collaboration, and networking capabilities among VeriSign technicians. We've also witnessed the launch of additional subcommunities in the areas of quality engineering and software architecture.

We've enhanced the social networking and community-building capabilities and improved the usability of our platform. We wanted to provide more Facebook-like features to allow employees to make connections and form interest groups. Jive Software's Social Business Software, which we've selected as the platform, supports multiple communities, groups, blogging, user customization, forums, and "friending."

We have recently implemented these capabilities companywide in the belief that all employees can benefit from improved knowledge sharing. When we upgraded the technical community platform, we allowed people to test it before we rolled it out to the entire company. We hope the platform will promote greater cross-functional transparency and allow employees to make more connections with their colleagues throughout the company.

The VeriSign technical community still maintains its own presence on the Matrix but so do the customer support and web properties communities. And we expect other communities to form. In addition, numerous collaborative groups and social interest groups have been created, a greater number of thought leaders are blogging, and employees are connecting with each other and enhancing their profiles. Our ability to roll this out companywide has been bolstered by an executive leadership team that values hearing from its employees, is committed to building a culture of trust and employee empowerment, and supports multiple communication channels—top down, peer-to-peer, and bottom up.