

## How Cisco Built a Global, Cross-Functional Architecture Community

Architecture Center of Excellence centralizes knowledge and content sharing, brings architect experts together, and showcases the value of architecture from a customer perspective.

**Cisco Case Study / Collaboration / Social Network for Enterprise:** To raise the overall knowledge of Cisco architecture among people in multiple business functions dispersed throughout the company globally, Cisco created the Architecture Center of Excellence (ACoE) community, an “enterprise social network.” With a growing membership of more than 2000 and approximately 300 unique visitors per week, ACoE runs on a platform called Cisco Quad, the result of several years of experimentation and piloting within the company. Cisco customers can draw on Cisco’s real-world experience implementing a virtual community and a social network for enterprise that is helping to meet the strategic business objectives of a global technology company.

### CHALLENGE

A key element of Cisco’s sales philosophy is to focus on architecture and end-to-end solutions, when appropriate, not on individual products. Raising the overall knowledge of architecture among relevant groups throughout the company will

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**Sean Worthington, Vice President of IT, Operational Excellence and Service Enablement, Cisco**

enable Cisco to engage customers and partners at a more strategic level with greater added value. To accomplish this, Cisco must create a bridge between siloed architecture experts and customer-facing staff in diverse groups across Cisco.

Selling end-to-end architecture solutions is not simple, and the required knowledge and expertise is mostly held by a relatively small group of individuals scattered across multiple organizations and geographies. In addition, the word “architecture” itself was not uniformly understood within Cisco.

Cisco needed to spread the knowledge throughout the workforce, providing sales engineers, account representatives, and other customer-facing groups with the information they need to position Cisco solutions and services effectively from an architecture perspective.

To execute its architecture strategy successfully, Cisco had to overcome several technology, process, and cultural challenges. These challenges include:

- Architecture content is typically spread across various repositories (e.g., document control systems, wikis).
- Architecture experts are not readily identifiable. Many do not have “architect” in their title.
- Architecture content is not always up to date.
- Content and expertise tend to remain among architects within their own teams and locations. Adding value and sharing expertise is limited.

Underlying these challenges are several root causes:

- The tendency for architects to work in functional or regional silos.
- Multiple content repositories and systems that do not easily enable exchange of information or efficient content updates. Even within a single group, collaboration and document tools might not interoperate.
- Information overload, making it difficult to know what information is important or relevant.
- Over-exposure, exacerbating time constraints. Being identified as an expert and contacted frequently makes it difficult for the best architects to get their work done efficiently.

## SOLUTION

“We had become accustomed to using email aliases, WebEx Spaces, and the intranet, but rapidly realized we needed a consolidated solution,” says Eric Laprelle, the architecture community organizer at Cisco. “We realized that we needed to create a single environment that would allow the free and open spread of architecture knowledge, where Cisco architects could find, organize, and share information; participate in learning events and training; and have conversations with and relate to the architects and other users of the environment.” Cisco’s solution, the Architecture Center of Excellence (ACoE) community, runs on an enterprise social platform called IWE Powered by Quad (IWE PbQ). The community is cross-functional and cross-geographic, relying on broad, diverse input to help address client problems and drive innovation.

In the ACoE community, members can:

- Learn, collaborate, and share information about the topic of architecture.
- Easily find information and expertise about architecture topics.
- Organize information according to their needs.
- Participate in ongoing discussions and debates.
- Develop relationships with others who share the same interests and expertise.
- Become recognized as a domain expert.
- Leverage the “wisdom of crowds,” a concept about the aggregation of information in groups, resulting in decisions that are often better than could have been made by any single member of the group.

“This growing community of self-identified architects are from organizations across Cisco globally, including IT, services, sales, marketing, and engineering,” says Irene Sklyar, ACoE community organizer. “The community enhances learning opportunities for technical people new to the architecture approach, provides a platform for sharing and collaborating about customer-focused architecture issues and solutions, and provides architects with a central forum to add value and help the salesforce support Cisco customers and partners more effectively.”

Cisco had to ensure that the community is supported by the appropriate technology, process, and culture requirements:

- **Technology**
  - A single workspace (community) focused on sharing information (including documents, files, and videos) about architecture
  - Intelligent content stream
  - Customizable home page / dashboard
  - Ability to post original ideas or ask questions
- **Process**
  - Making contribution to the global community an integral part of being an architect at Cisco

- Providing incentives for participation through rewards and recognition for sharing and collaboration (e.g., integration with performance reviews and incentives for content producers)
- **Culture**
  - Willingness of subject matter experts to share knowledge
  - Recognition for sharing knowledge in the virtual community
  - Acceptance of ideas from non-traditional sources
  - Movement from a command-and-control organization to a collaborative culture (communicated and supported in company messaging from the top down)

The ACoE community has become the gateway to "all things architecture" across Cisco, a one-stop shop for architecture information and content such as case studies; knowledge sharing for experienced and new architects; and integrated collaboration and communication tool for users.

### **Technology**

Powering the ACoE community is Cisco Quad, a single software platform that integrates social networking and content management in a customizable, secure, enterprise-ready environment.

"Several out-of-the-box features were required for the rollout of the community to be successful," says Laprelle. "Among these features were a document repository; collaboration and information-sharing tools such as blogs, discussion forums, wikis, and videos; and a customizable dashboard." IWE PbQ satisfied all the initial requirements (see Figure 1).

Before IWE PbQ, architects used a combination of random, mostly uncoordinated tools for sharing and storing content. Attempts were made to centralize all the tools into one wiki, but this method was disjointed and not widely adopted. In addition, the process for requesting a wiki or forum space was not intuitive or immediately available. Email was the primary mode for architecture discussions. With IWE PbQ, tools within the community are fully integrated, which makes users more productive and architects' life easier.

ACoE was one of the first communities to be provisioned on the IWE PbQ platform, and the provisioning time has shortened significantly since the ACoE rollout. About a year ago, five to seven communities were being provisioned in three-month spans. Today about three communities are provisioned each week, according to Laprelle.

Figure 1 Architecture Center of Excellence Community Home Page on Cisco Quad



## Culture

Community organizers encourage feedback from architects and other ACoE members to determine which tools and features they like best and get their suggestions for improvements. Organizers conduct value surveys periodically, and post results in the community.

In a value survey conducted in February 2011, more than half of respondents reported using the community daily, weekly, or monthly. They also cited architectural case studies as the most useful content in the community, followed by events such as architecture tech talks and architect blogs. From a behavioral perspective, blogging is not a default activity in the community. For a community such as ACoE, blogs give architects a greater forum to share their knowledge and solicit comments, which creates strong visibility and a much bigger audience than the multiple, disparate blogs that sprung up independently throughout the company.

Since moving onto IWE PbQ, some architecture discussions are initiated in the community; however, discussion forum adoption is still low because many architects remain tied to the traditional mode of sharing their information primarily via email.

## Regional Teams and Executive Sponsorship

Long before the launch of ACoE, community organizers worked earnestly to establish several groups who would help to support and communicate ACoE across multiple business functions and geographies. They included a core team, regional teams, and executive sponsors:

- Core team.** Decision-makers vested in the business vision for ACoE, the core team helps develop and implement processes, oversees membership activities and communications, and handles high-level strategic, community roadmap and organizational issues. Before the launch of ACoE, the core team met two or more times a week, and continues to meet monthly.

- **Regional teams.** Composed of people from the functional areas targeted for community membership (global sales, services, IT, engineering, and marketing) in different geographies, each regional team had ten to twenty people in preparation for the phased launches of ACoE.

Regional team members who had a stake in architecture were asked to support the community effort by starting conversations and spreading messages about the community benefits and usage to their peers and targeted architects within their organization. The regional teams started to assemble in May 2009. By February 2010, they were helping to evangelize the ACoE community and fine tune messaging in their respective regions and functional areas.

- **Executive sponsors.** Regional team members sought sponsorship from vice presidents and other executives within their organizations and regions. The importance and effect of top-down sponsorship and peer communication should not be underestimated, not only during the community launch but on an ongoing basis.

“ACoE is one of the best examples of a global, cross-functional community leveraging the Quad platform,” says Sean Worthington, vice president of IT, Cisco Operational Excellence and Service Enablement, and an ACoE community sponsor. “In the true spirit of community, those directly responsible for or interested in architecture are naturally congregating in ACoE to share knowledge, communicate and collaborate more effectively than ever before.”

**Content Advisory Group.** Formed by the core team members, the content advisory group is composed of architect experts with the regional and organizational knowledge to make recommendations and decisions about content in their particular segment. Introduction of new syndicated content is typically shared with the content advisory team first, which helps to ensure that the information will be correct, high quality, appealing, and useful to the targeted users.

### Communications and Training

How do you get a group of busy architects to change the way they work? By raising awareness through viral communication, targeted training, and persistent persuasion. Before the community rollout, organizers spent much of their time building regional teams that would help evangelize the community, organize training, and deliver messaging specific to their functional areas within Cisco.

The aim of the training was to:

- Introduce users to the ACoE community as it relates to their functional area or region.
- Make them aware of the benefits of ACoE.
- Provide them with insight into the community’s capabilities, and how it can be used to improve their productivity, enhance their collaboration with architects, and enhance their customer-facing relationships.

Regional teams also set up communication waves that focused on targeted users in different Cisco theaters. The regional teams were instrumental in helping develop the communication matrix, gather the right stakeholders, and ascertain the best mode of communication in their functional areas and regions. This type of communication continues but at a much slower pace than in the early stages of the community. Membership growth today tends to be more viral than formal.

Accurate, consistent, and timely communications with community members is crucial. To ensure effective communications, community organizers applied the following guidelines:

- Create an overall communications plan that spans the duration of the program.
- Identify key messages, audience, and cadence of communications (What are you saying? Who are you saying it to? When are you saying it?).
- Keep content concise; include a call to action, and educate and inform the audience on the specific topic.
- Seek input and approval of communications content from key stakeholders.

- Inform key stakeholders of the communications plan, cadence, and timing of communications to avoid sending multiple or redundant information.

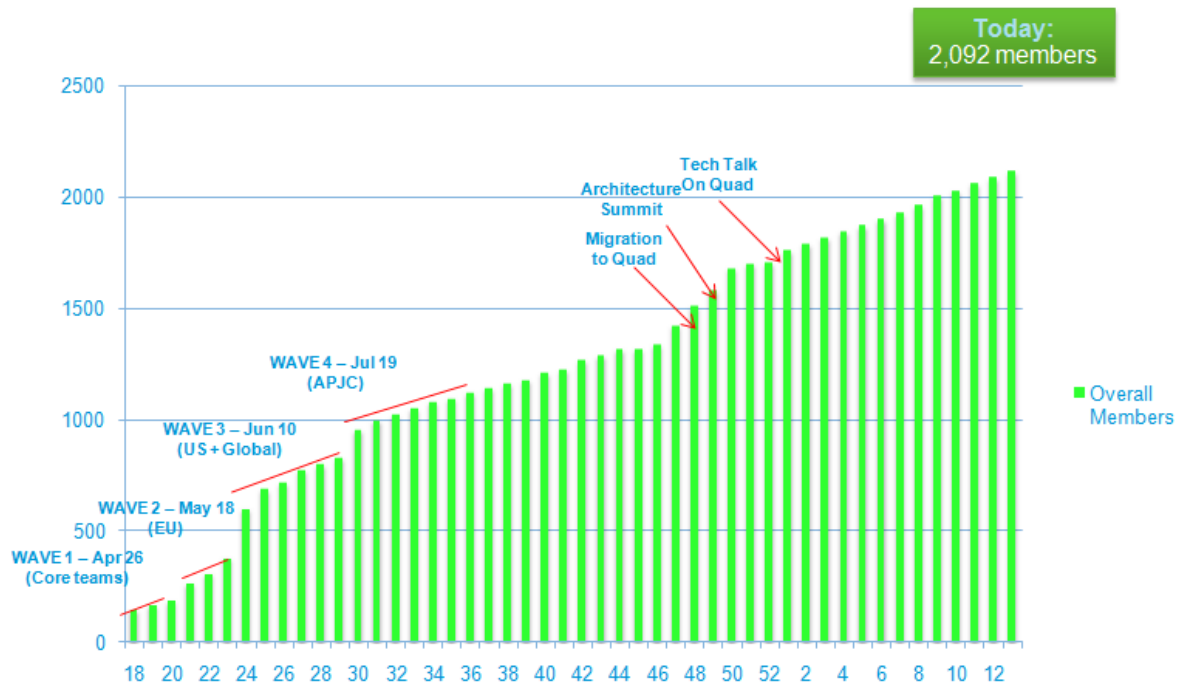
An example of consistent, timely communication with community members is the biweekly ACoE snapshot. Every two weeks community organizers email members a brief description of recent activity within the community, such as the most downloaded blog. Every time a snapshot is sent out, there is a spike in the number of visitors, visits, and general activity within the community.

Building relationships with marketing communications people at Cisco is also important, to stimulate interest in the community through write-ups in internal newsletters, on the intranet, and social networking forums; publicity at events; and inclusion in other corporate communication vehicles.

## RESULTS

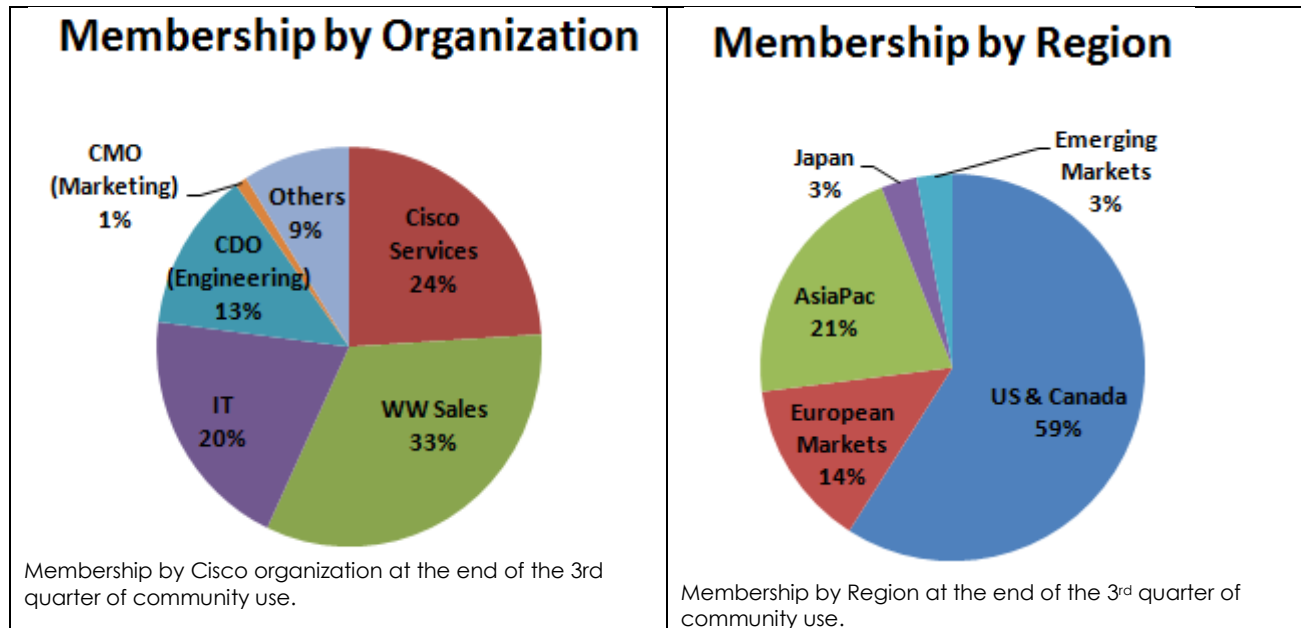
Monitoring the increase in community activity, measured by usage statistics, provides organizers with information on what areas of the community are providing the most value. Significance lies in the change in numbers over time, so that trends can be identified. Figure 2 shows the growth of the community over 48 weeks beginning April 26, 2010. Other metrics show that the site gets about 300 unique visitors per week; that each visitor visits an average of 1.5 times per week; and that each visit brings them to an average of five different locations (posts) on the site before they leave.

**Figure 2** ACoE Community Membership: Weekly Growth Beginning April 26, 2010



Snapshots in time can also measure value, particularly when percentages show relative positioning and relationships. Figure 3 shows the diversity of members in the community. Cisco believes that interaction among diverse groups throughout the company helps to drive innovation.

**Figure 3** ACoE Community Membership across Diverse Cisco Organizations



Success is also evaluated through qualitative methods such as surveys, focus groups, and scorecards. Other yardsticks of success include content-centric ratings built into the community, such as the most downloaded blog or highest rated document by members.

The following are examples of specific outcomes resulting from the community:

- A single architecture glossary that is used across the entire company.
- The first “One Cisco” Architecture Summit, a three-day event bringing together architects from services, sales, IT, marketing, and engineering to collaborate, hear from Cisco thought leaders on critical topics, and make the architects’ voice (and the voice of the customer) heard by Cisco executives and decision-makers.
- Creation of Voice of the Customer Architecture Leadership sub-community, which provides ongoing dialogue and a unified voice between customer-facing senior architects and Cisco solution architecture leaders and the Cisco development organization.

A recent contest promoted and conducted within the ACoE community provides anecdotal evidence that ACoE is helping Cisco achieve some of its business value goals. Submitted through a community discussion forum, members were asked to recount the impact ACoE (a focus on architecture) had in a real-life Cisco customer situation. The summary provided with the winning case study involving a defense industry customer speaks to the value of the community:

*“Using the IWE Architecture Community of Excellence allowed all Cisco staff involved in the process to possess the necessary architecture knowledge to facilitate new customer conversations. It informed our approach to engaging the customer at the right level to create meaningful business relevance for Cisco. Had we not had a background in architecture, we might have jumped right to a product discussion. We might not have engaged with the broader stakeholder community to understand the bigger picture. Ultimately, we might have been just an IT vendor that they would call when they were ready to place an order. And maybe that order wouldn’t be as big or include Advisory Services. And we probably would not have secured the \$3 million to upgrade the core switches.”*

Community organizers are striving toward developing metrics that will demonstrate whether or not the ACoE community is contributing to Cisco's growth, productivity, innovation, or operational excellence. These business metrics are based on a three-pronged value proposition delivered by the community.

First, speed and scale will drive growth. The speed of moving architecture information throughout the company and the breadth of expertise to draw upon (scale) should lead to more informed client relationships and effective proposals, presented to customers more quickly. Ideally, this combination of better and faster will drive growth in terms of increased sales volume.

Second, the flexibility inherent in the ACoE community will drive innovation. Innovation often results from the cross-pollination of ideas and people that usually do not interact. Because the community does not rely on any given organizational structure, it is flexible enough to accept input and opinions from any faction of the company.

Third, replicability and re-use will drive productivity. The creation and use of common terms and concepts, such as the architecture glossary, and impact of architecture will save time and effort across the organization.

## LESSONS LEARNED

ACoE community organizers offer the following suggestions to enterprises interested in building a community (or "enterprise social network") of any type within their organizations.

- Obtain executive sponsorship, not just during the community launch but on an ongoing basis.
- Identify interested, enthusiastic supporters of the community that represent all the key functional areas and different regions.
- Communicate with community members at regular, timely intervals. Continuously stimulate their interest to return to the community.
- Identify areas of the company that the community has relevance to. Ensure that management in those areas is aware of the community and encourage participation.
- Conduct events for the community members (e.g., architecture webinars, technical forums on key technologies). Use the community to advertise the events and report outcomes and calls to action.
- Continue to hold regular meetings with core community team members, even if the meetings decrease in frequency. Input from the core and content advisory teams is invaluable regarding community content.
- Keep the community site regularly updated, current, vibrant, and fresh.
- Measure results and business value.

## NEXT STEPS

Throughout the next year, community organizers have several plans to grow and help measure the success of ACoE. Chief among them:

- Conduct additional campaigns to drive architect collaboration within the community (formation of "subject Interest groups") enabled by the community (Quad) features.
- Hold a second contest calling for real-life architecture case studies. This contributed content has been ranked the highest for value to community members.
- Work with a variety of architect teams to consolidate and refine the various "Architecture Glossaries" throughout Cisco into a single glossary published in the community.
- Continue to work with architecture teams across Cisco to align customer-facing architecture messaging and positioning, which currently exists across multiple communities and document repositories.



- Establish a regular cadence for community surveys and continue evolving the community roadmap based on user feedback.
- Hold a number of communitywide webinars on architectural topics of interest to members.
- Continue to identify activities within the community that can provide added value for members.

## FOR MORE INFORMATION

For information on the Cisco Quad, visit [www.cisco.com/go/quad](http://www.cisco.com/go/quad).

For additional Cisco IT case studies on a variety of business solutions, visit Cisco on Cisco: Inside Cisco IT [www.cisco.com/go/ciscoit](http://www.cisco.com/go/ciscoit).

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San Jose, CA

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