AUTODESK UNIVERSITY

DP22112-R

The Power of Communities of Practice—*Inside Look at How Knowledge Sharing Happens*

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Learning Objectives

- Understand the potential value of participating in communities of practice.
- Gain an understanding of why people participate and their motivations.
- Share insights & ideas on how to make communities of practice more effective.
- Network with professionals who share interest in communities of practice.

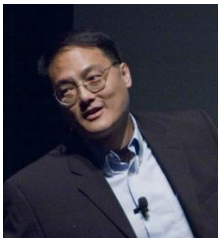
Description

Communities of Practice have existed for a long time, helping users share knowledge by exchanging best practices, answering questions, and exploring new practice areas. Autodesk has its own forums, but there are many communities not run or sponsored by Autodesk. We will share insights into non-Autodesk communities of practice—ranging from small to large sized communities—to understand their strengths and challenges. We'll also explore how Autodesk's internal culture helps or hinders its ability to nurture user communities, and what Autodesk can (and can't) do to help communities of practice.

We'll take a look at the different forms these groups take and how members can be motivated. We'll look at value propositions and dive into the ways communities of practice can help you move your industry, your project, or your company forward.

The goal of the session is to have a collaborative and interactive conversation that will deepen the insights and understanding related to communities of practice as a strategy for sharing knowledge.

Project Communitas Research Authors



Douglas G. Look, Senior Business Solution Architect for the Autodesk Knowledge Platform, currently leads strategic planning, research, and design efforts to discover and create ways to help customers optimize their productivity through the acquisition, creation, and sharing of knowledge.



John Wallace is a User Experience Architect with the Autodesk Knowledge Platform. His current focus is on learning and knowledge sharing.

Roundtable Participants



Rebecca Arsham, Global CADD Applications Training Manager at **WSP | Parsons Brinckerhoff**, is a results-oriented management professional offering 30 years in the AEC industry with the last 20 years of progressive leadership experience.



Christopher Crowe, Associate AIA, AECOM
Christopher is an architectural designer who excels at identifying latent connections within organizational knowledge. He has been instrumental in guiding AECOM's San Francisco studio in their adoption of BIM as both a design and information visualization tool.



Michael Hall, Principal Customer Success Manager, Autodesk.
As a Customer Success Manager (CSM), Michael works with some of Autodesk's biggest customer to ensure they are maximizing the value of their Autodesk investment. He is using Praxis with a number of Autodesk's most influential customers to redefine the way they look at workflow and process engineering.

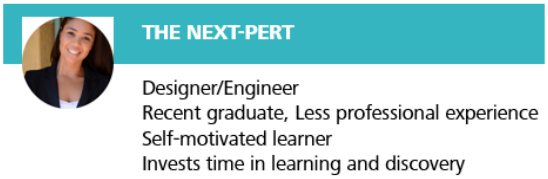


Robert Palioca, President at Ideate, Inc. has built a career prioritizing customer success above all else. He has been a pioneer for design technology, education, and implementation solutions for nearly three decades.

INTRODUCTION

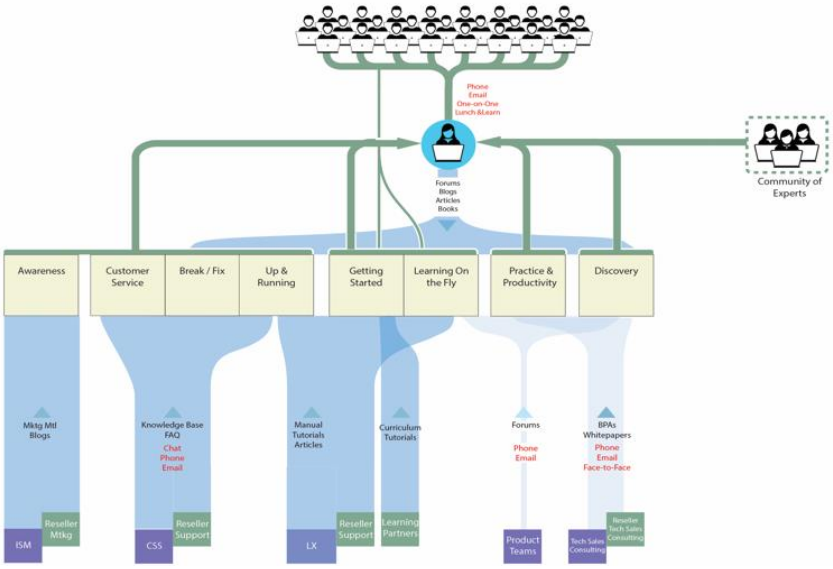
Project Communitas builds on cumulative Autodesk Knowledge Network research on learning, training, and support. The target research participants included customer Experts and Next-perts as well as internal Autodesk employees who engage with these communities. We concentrated our investigation on external, non-Autodesk-sponsored communities of practice, with a focus on the areas of sharing knowledge around practice and productivity.





Key questions we sought to answer:

- What role do Communities of Practice (CoPs) play in the Autodesk ecosystem?
- What are good, relevant examples of CoPs in action?
- What are key experience/guiding principles that can guide communities of practice?
- How might we identify tangible actions that can influence internal Autodesk teams and their engagement with communities of practice?



WHAT ARE COMMUNITIES OF PRACTICE?

> *"Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly."* –Etienne & Beverly Wenger-Trayner

Three crucial characteristics: Etienne Wenger is generally credited with originating the term communities of practice, which he defines as having three crucial characteristics: [1]

- **Domain**: More than just a network of connections between people, communities of practice have an identity based on a shared domain of interest.
- **Community**: In the pursuit of their shared interest and domain, communities of practice engage in joint activities, discussions, helping each other, and sharing information. One of the core components includes interacting and learning together.
- **Practice**: A community of practice is more than a community of interest. Rather, members of a community of practice are practitioners who are able to share their best practices through their experiences, stories, tools, and approaches to problem solving.

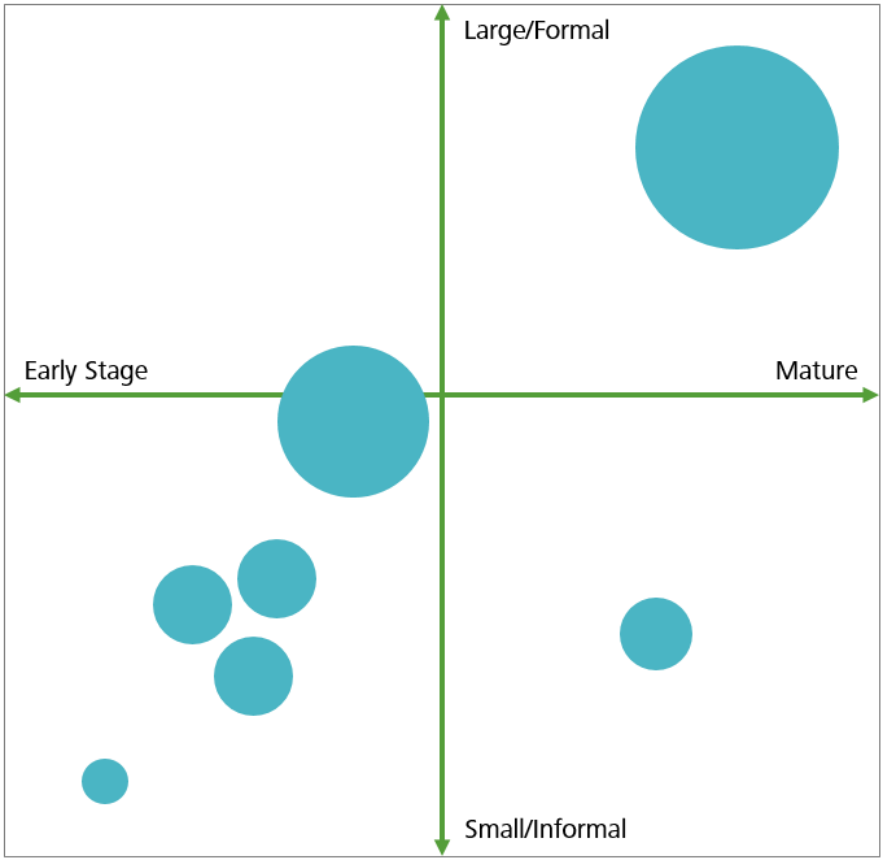
Developing practice: Communities of practice engage in a range of activities. At the most basic level, these activities might be simply transactional—where can I find a resource, who knows a certain skill, or connect me with the right team. With more mature communities of practice where there's a basic level of trust, the activities evolve from simple transactions to sharing documents, ideas, and pictures with others. As even greater levels of trust are developed, individuals start to ask and also answer questions.

At an even higher level of trust and engagement, members of communities of practice pose open-ended questions and work together to create solutions that don't yet exist—this is where the complex, more tacit types of knowledge are shared and developed. Discovering, exploring, and refining new solutions allow these communities of practice to develop best practices and workflows that are specific to the practitioners within their group. In many cases this kind of practice knowledge can only be shaped and developed by our customers, as they are the real practitioners who are using Autodesk tools and services in real-world practice.

Why should we care about communities of practice? They solve problems quickly. They transfer best practices. They help our customers develop professional skills.

CoPs take many forms: Communities of practice take many forms, ranging from small to large, unstructured to structured, with a balance of informal and formal governance. Many CoPs start locally, some evolve to be regional or even global in reach, especially given today's digital collaboration tools.

We mapped various types of communities of practice in a 2 x 2 matrix with the dimensions of early stage/mature tools/services vs. small informal/large formal. In the early stages of technology, the communities of practice are smaller and informal. As the technology matures, the groups grow in size and maturity, though we also saw evidence of small groups continuing to exist around mature technology.



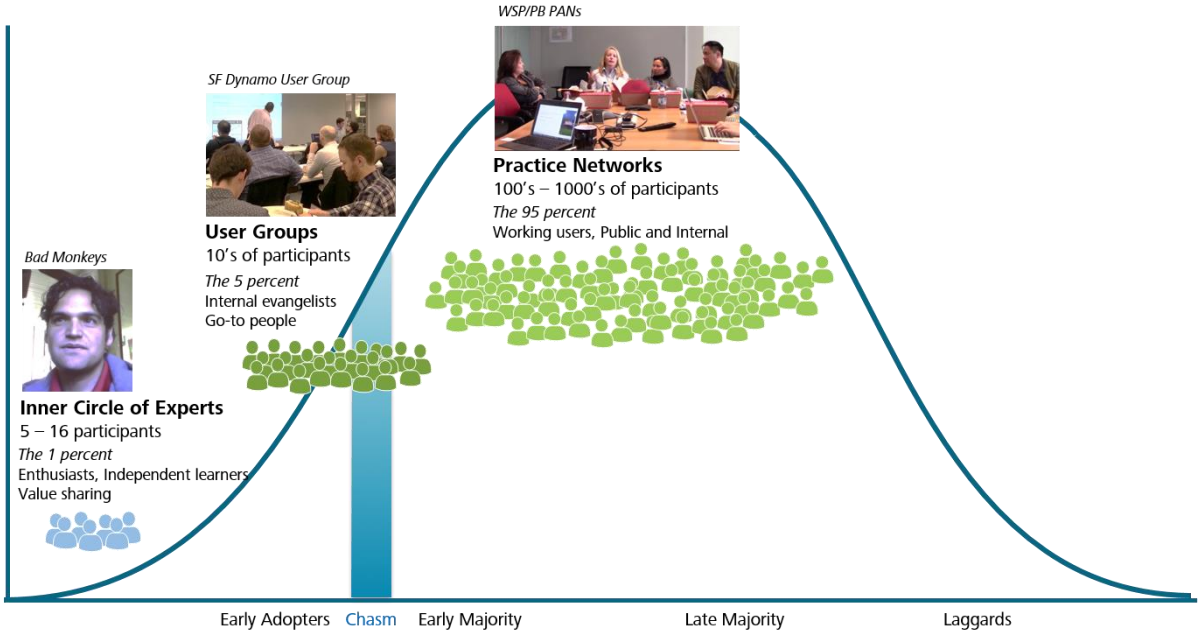
Range of communities of practice

Diffusion of innovation: Early stage technology, for example generative design today, starts out with small, informal groups of users who organically band together to help each other understand new technology and how it might be applied. As the technology matures, medium sized user groups start to form, again with the intent of

sharing and developing practices. Over time, as the technology matures, sometimes these groups mature into larger bodies with sharing of known best practices and repositories of known answers within large organizations.

If Autodesk is interested in getting across the chasm of adoption for our strategic new technologies, then we should focus efforts on supporting the small pioneering inner circle of experts and nurture the medium sized user groups who can help the greater Autodesk community of users by sharing the practices and knowledge they develop. By supporting and nurturing communities of practice, Autodesk can help our customers help each other to solve their business objectives.

> ***"Communities of practice are knowledge management's killer app."***—Carla O'Dell, APQC



Diffusion of Innovation and role of communities of practice

KEY THEMES & INSIGHTS

Social Learning: People learn through others, not just by having access to knowledge assets but by engaging socially with others who share their practices.

Mini-Communities of the 5%: Experts support each other through their own communities of practice. In addition to sharing knowledge, they establish a strong shared identity through activities that include talking trash as well as talking shop. Together these experts are co-developing solutions that don't yet exist, especially around early stage technology. These communities of practice often start organically, start locally, and sometimes expand regionally and beyond.

Next-perts: Next-perts are next-generation experts who are in the wings and highly motivated. Though these Next-perts may have less industry experience, often they are even more skilled, especially in newer technologies than established experts. The Next-perts, given their early or mid-career status, are motivated by professional advancement and set aside time to learn new things. Next-perts are highly plugged into social media as a way of finding resources and connecting with others.

Source of Content: Communities of practice can provide a great source of content, especially in the areas of how technology can work in real practice. Communities of practice can fill gaps in practice and workflow related content that Autodesk has difficulty filling. Communities of practice are motivated to solve problems and could use additional support from Autodesk, though with a light, non-marketing, touch.

Platforms: There is a need for both public and private platforms to help communities share. Groups are looking for opportunities to share their knowledge with others, yet they also want to maintain some information and knowledge as private to within their groups. Maintaining web platforms for communicating and sharing is often too much work, especially for smaller communities of practice.

Help Users Connect: Finding new members and understanding which individuals have certain skills and experience is difficult. Making connections with others is an important goal and outcome of communities of practice. A consistent challenge is locating new speakers and content for their regularly scheduled meetings.

Face to Face: The key to successful communities of practice are the people who make up those communities, not the underlying technology platforms that support community activities.

> *"Behind all the technology, it's all about building relationships."*
> –Emily Hooper, Interior Architects.

Face to Face Learning & Training: Face to face interactions help build relationships, so in addition to gaining knowledge you also learn *who knows what*. Face to face involves learning on both sides–so it's a win-win for all participants who are heavily involved in both sharing and learning. Sharing and helping is seen by participants as a reward in itself.

Social Knowledge Sharing Events: Structured events enable social communication of what's new, what's a problem, and what are solutions. Group interaction provides ways of exchanging tacit knowledge, which is much more difficult to do without face to face interaction. Some of the keys to successful events included: making the bar low for sharing and presenting; providing regularly scheduled events and making them fun; providing food as a good incentive. When knowledge sharing events are held out in the open, this provides a form of ambient learning for people adjacent to the event. Regularly scheduled events build knowledge sharing into the culture.

Support Face to Face Meetings: Communities of practice could use additional support for basic logistics. Users value highly the opportunity to meet each other–developing shared identity is key to successful communities of practice.

Access to Autodesk: The 5% experts crave inside access to Autodesk to engage and influence future directions. These experts feel that they benefit from access to Autodesk product teams, feature roadmaps, and future product participation through sand boxes and beta programs. Having Autodesk inside-access also helps these experts build their own reputations.

Motivations: Why do individuals participate, often on their own time, in communities of practice? We heard time and time again that many of our customers participate, out of altruism, because they really enjoy helping others. They understand that if they help others, that others will reciprocate and help them as well. Customers also expressed the satisfaction gained through increased recognition, reputation, and status–this is also useful for developing their own brand and tied to professional development, especially in the case of the Next-perts.

Value: Wenger, McDermott, and Snyder assert that communities of practice provide both short term and long term value, with benefits to the organization (for internally organized CoPs) and benefits to community members.[2] We saw a high correlation between the Wenger research and what our customers expressed that they get out of participating in communities of practice.

Specific value for our customers:

- Immediate help from colleagues
- Comradery/shared identity
- More powerful voice together as a community
- Professional development
- Builds reputation/status
- Fun/excitement/energy
- Shared best practices
- Explore new topics
- Finding the right expertise
- Satisfaction from helping others

KEY PRINCIPLES

Communitas Guiding Principles: Based on the key themes and insights, we developed a set of guiding principles for supporting and nurturing Autodesk communities of practice.

Help users connect *to form long term relationships*



Help communities develop content *that fills knowledge gaps in practice and productivity*



Support face-to-face meetups *to have fun and develop trust*

Provide a public/private platform *to help communities share their knowledge*



NOTES

1. **Introduction to Communities of Practice**, Etienne and Beverly Wenger-Traynor, 2015 http://wenger-trayner.com/introduction-to-communities-of-practice/

2. Value Table from **Cultivating Communities of Practice**, Wenger, McDermott, Snyder, 2002

	SHORT-TERM VALUE	LONG-TERM VALUE
	IMPROVE BUSINESS OUTCOMES	**DEVELOP ORGANIZATIONAL CAPABILITIES**
Benefits to Organization	• Arena for problem solving • Quick answers to questions • Reduced time & costs • Improved decision quality • More shared perspectives • Coordination, standardization • Take risks with backing of the community	• Increased retention of talent • Capacity for knowledge development • Knowledge based alliances • Capacity to develop new strategic options • Ability to foresee technological development
	IMPROVE EXPERIENCE OF WORK	**FOSTER PROFESSIONAL DEVELOPMENT**
Benefits to Community Members	• Help with challenges • Access to expertise • Better able to contribute to team • Confidence in one's approach to problems • Fun of being with colleagues • More meaningful participation • Sense of belonging	• Forum for expanding skills and expertise • Network for keeping abreast of a field • Enhanced professional reputation • Increased marketability • Strong sense of professional identity

ADDITIONAL RESOURCES & REFERENCES

The Power of Communities of Practice AU Presentation, Douglas Look & John Wallace, 2016. https://autodesk.box.com/s/n4jqoulwfhxv20qpfj65exrahatt4044

Cultivating Communities of Practice, by Wenger, McDermott, and Snyder, 2002 provides an invaluable source of insights, frameworks, and practical recommendations for working with communities of practice to manage knowledge.

Highlights from Cultivating Communities of Practice, Douglas Look, 2016, notes and key learning from the book.
https://autodesk.box.com/s/5y9t5p1zxr9shwfc7qvdg9mkw8a6ftae

Starting a New Community of Practice, General playbook with guidelines for starting a community of practice, applying principles from Cultivating Communities of Practice. https://autodesk.box.com/s/855pr8b7ag1fsove3gg6224m6srjc0ql

PRAXIS Enterprise Priority--Getting Started with Slack, Douglas Look, 2016, guidelines with tips and tricks for deploying Slack for a community of practice.
https://autodesk.box.com/s/vjc9shdrmvooukzocl8siz5oitd0a7x1

Stack Exchange Research, Douglas Look, 2016, initial research around social Q&A model based on Slack Overflow.
https://autodesk.box.com/s/7js0qhy0enjcd7gs69rrkl0jfk8arbwj

KA Connect 2016, compiled by Douglas Look, notes and learning from presentations on knowledge management practices and role of communities of practice
https://autodesk.box.com/s/wi5xem5ycbnoswhr7ksoriei0zm7u84o