

Creating a Community of Practice for Emerging Technologies

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What is a Community of Practice?

A community focused around a topic which inspires passion and actions related to that topic.

DEFINITION:
"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." (Wenger-Traynor, 2015)

ACTIONS:
"Problem solving; Requests for information; Seeking experience; Reusing assets; Coordination and strategy; Building an argument; Growing confidence; Discussing developments; Documenting projects; Visits; Mapping knowledge and identifying gaps." (Wenger-Traynor, 2015)
"Connect people, provide a shared context, enable dialogue, stimulate learning, capture and diffuse existing knowledge, introduce collaborative processes, help people organize, generate new knowledge." (Cambridge, Kaplan, Suter, 2005)

Objectives

With the creation of a new informationist position focused on emerging technologies, a significant challenge was to identify appropriate constituents and scope. This was especially critical since faculty and staff engaged in emerging technologies may be new to the campus and their department. They may be unaware of the library's ability to offer support for their innovative efforts, and it may be equally difficult for the library to discover them. Creating a campus community of practice (CoP) around emerging technologies addressed the goals of facilitating discovery and awareness of emerging technologies themselves as well as connecting various campus communities gathered around specific technologies, with the ultimate goal of connecting the library to these various communities and individuals. The core goals of a community of practice include connecting people, sharing context, enabling dialogue, stimulating learning, capturing and diffusing existing knowledge, collaborative processes, self organization of the group, and generating new knowledge (Wenger, McDermott, Snyder, 2002).

Methods

Framing the creation of the CoP within a library services model began with establishing a consensus of core emerging technologies literacies and vocabulary within a group that self-identified as interested in this area. Components of the process began with an email list, a blog, and monthly face-to-face meetings. After a few years, the focus of these components shifted from a library-driven approach to a collaboration model, with community members suggesting topics and tools for exploration. To support this process, a web interface was created to facilitate information sharing and collaborative authoring of the community blog, along with the creation of a Google Plus community, and adoption of Google Hangouts. As the group established strong core literacies in emerging technologies, the focus shifted from information consumption to creation, integration with campus activities, and outreach to other campus communities.

Growth Over Time

SEE: <https://cooltoysu.wordpress.com/calendars/>

2008-2009: Discovery-focused, highly random for both content & location.

2010-2012: Establishing foundations, shared knowledge base and vocabulary (Horizon Report, Gartner Hype Cycle)

2013: Questioning & broadening who is expert: Beyond NMC & Gartner

2014: Redefining expertise / Guest speakers

2015: Focusing on local interests & expertise; redefining our boundaries & scope

Barriers & Challenges

Informal structures and floating membership Tech support
Time / space conflicts Discovering potential partners.
Travel to meetings, weather

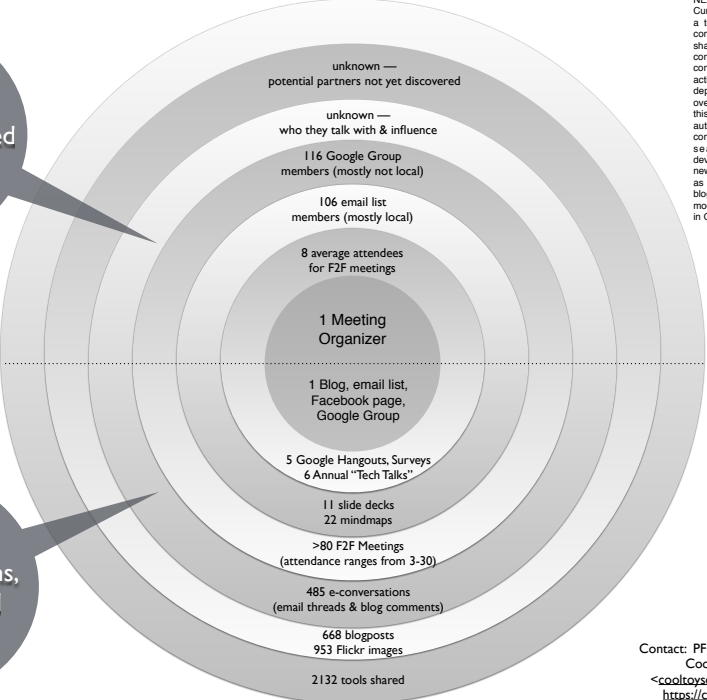
Allies & Partners & Resources

Ann Arbor Bi Bim Bop (A2B3) Mobile Users Group (MUG)
Duderstadt Emerging Technologies Group (ETG) Tech & Trends Team (UMTnT)
UMMS, Office of Enabling Tech
Health Design By Us / #MakeHealth UM, SPH, Risk Science Center
Instructional Design Team Web Accessibility Working Group
Mobile Developers Group (MDG)

The Numbers

Our people, campus, local, and those who've moved on but stay engaged.

Our products, activities, creations, and "unintended consequences."



NEXT STEPS:
Currently, we are testing and completing a tech interface to simplify options for community members to post to the shared blog. This will allow everyone to contribute and receive credit for their contributions. It will also help make the activities and products of the group less dependent on a single person, and overall more sustainable. To accomplish this, we have created a 'survey' form that auto-generates a formatted blogpost, converting the shared blog to a kind of searchable public database. In developing this tool, we have enlisted new partners in content creation as well as in technical problem solving. The blog, with new content and this new mode of engagement should be released in October 2015.

Staff, Stuff, & Space

Libraries are well suited for hosting the development of a community of practice because of having the combined resources of staff, stuff, and space.

STAFF: Here, having librarian expertise was valuable due to expertise that supports the standard CoP information related tasks, especially those related to discovery and learning. As is so often true, libraries also have good tech support staff, which were invaluable in exploring and supporting the integration of new technologies to support the extended online community.

STUFF: The Library has not only rich collections but also services and expertise in areas that are great resources for CoPs in general. The University of Michigan Libraries are especially well suited to supporting a CoP in emerging technologies because of their innovative and creative exploration of new trends and technologies in all of the four campus mission areas: learning, research, clinical care, and service.

SPACE: Requirements for a suitable space were that it be centrally located to the community, accessible, included appropriate technology, and (most importantly) allowed food.

LESSONS: In seeking lessons learned to apply in building other communities, we extracted the CACKLE model identifying priority factors from our experience: Community, Access, Continuity, Knowledge, Location, & Empowerment.



Future

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References

Busch R. Contrasting Technophobia: A Topology. Phenomenology + Pedagogy (1988) 4(2):3-21.

Cambridge D, Kaplan S, Suter V. Community of Practice Design Guide: A Step-by-Step Guide for Designing & Cultivating Communities of Practice in Higher Education. EDUCAUSE, 2005. Retrieved from: <http://www.educause.edu/library/resources/community-practice-design-guide-step-step-guide-designing-cultivating-communities-practice-higher-education>

Can A. What are Communities of Practice? A Critical Review of Four Seminal Works. Journal of Information Science December 2005, 31(6): 527-540. Retrieved from: <http://jis.sagepub.com/content/31/6/527.abstract>

Hoadley C. Chapter 12. What is a Community of Practice and How Can We Support It? Theoretical foundations of learning environments (2nd ed.). 2013-200. Ed. D. Jonassen & S. Land. Routledge, 2013. Retrieved from: <https://scholarship.library.miami.edu/scholarship/1006/677/CHAPTER12.pdf>

Oguz F, Marsh CV, Landis C. Collaboration through Communities of Practice in the Digital Age. Communications in Computer and Information Science. Proceedings of the 2nd International Symposium on Information Management in a Changing World, 96:18-30. Heidelberg, Germany: Springer Verlag, 2010. Retrieved from: http://link.springer.com/chapter/10.1007/978-3-642-16032-5_3#page-1

Vaughan KTL, Hayes B, Moore ME. A Diversified Approach to Creating a Community of Practice in Biotechnology. 2004 Annual Meeting of the American Society for Information Science and Technology. Providence, RI, November, 2004. Retrieved from: <http://www.asis.org/Conferences/AM04/posters/165.doc>

Wenger E, McDermott R, Snyder WM. Chapter One: Communities of Practice and Their Value to Organizations. Cultivating Communities of Practice: A Guide to Managing Knowledge. Boston, MA: Harvard Business School Press, 2002.

Wenger EC, Snyder WM. Communities of Practice: The Organizational Frontiers. Harvard Business Review (Reprint R00116) Jan-Feb 2000; 139-145.

Wenger-Traynor E, Wenger-Traynor B. Communities of Practice: A Brief Introduction. (April 15, 2015). Retrieved from: <http://wenger-traynor.com/introduction-to-communities-of-practice-PDF/> <http://wenger-traynor.com/wp-content/uploads/2015/04/07-Brief-introduction-to-communities-of-practice.pdf>