

“WHAT’S THE FREQUENCY, KENNETH?”

Defining the *crowd* organization

AGENDA

1. Introduction

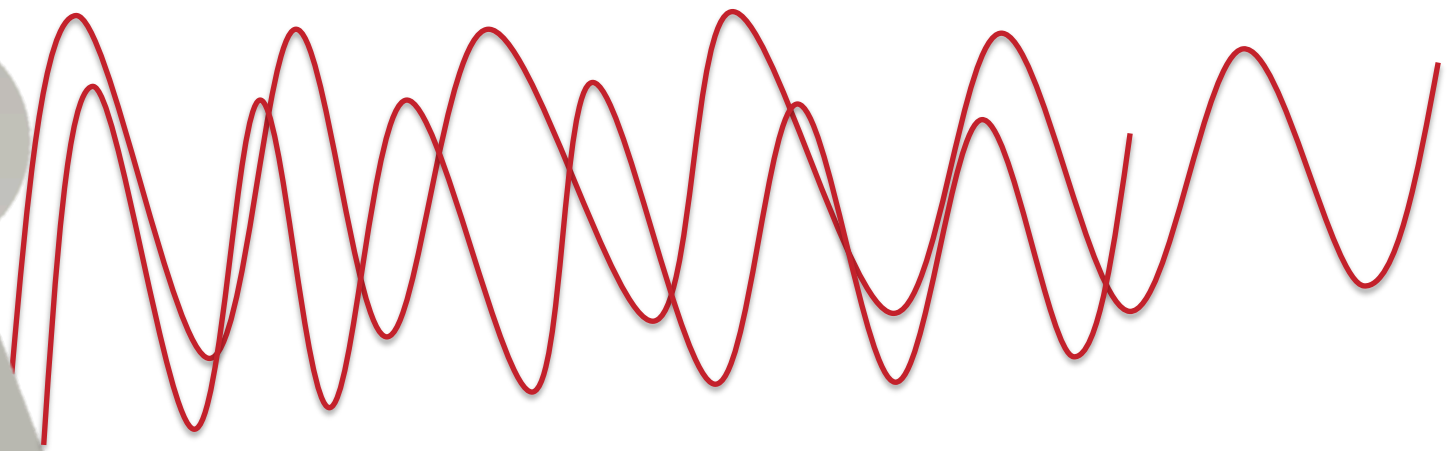
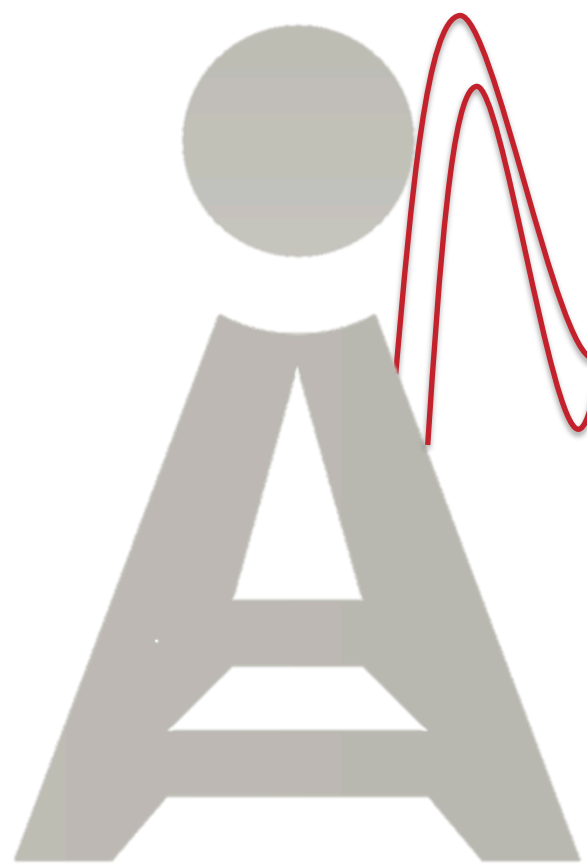
2. Crowd vs Community

3. *Crowd* Organizations

4. *Crowd Tuning*



(Enkel, Gassmann, and Chesbrough, 2009; Lane, 2010; Viscusi, Poulin, and Tucci, 2015)



How to tune the right frequency to exploit crowds in open innovation?

Crowd : Community



Crowd : Community

“seriality”

recognition

equality

differentiated roles

goal orientation

value orientation

slow socialization
and learning

rapid socialization and
learning

Crowd : Community

Self-fulfillment

Equality among roles

Low barriers to entry

“seriality”

equality

goal orientation

slow socialization and learning

recognition

differentiated roles

value orientation

rapid socialization and learning

Reputation
Affiliation

sense of belonging
shared norms, values, codes

Stratified access

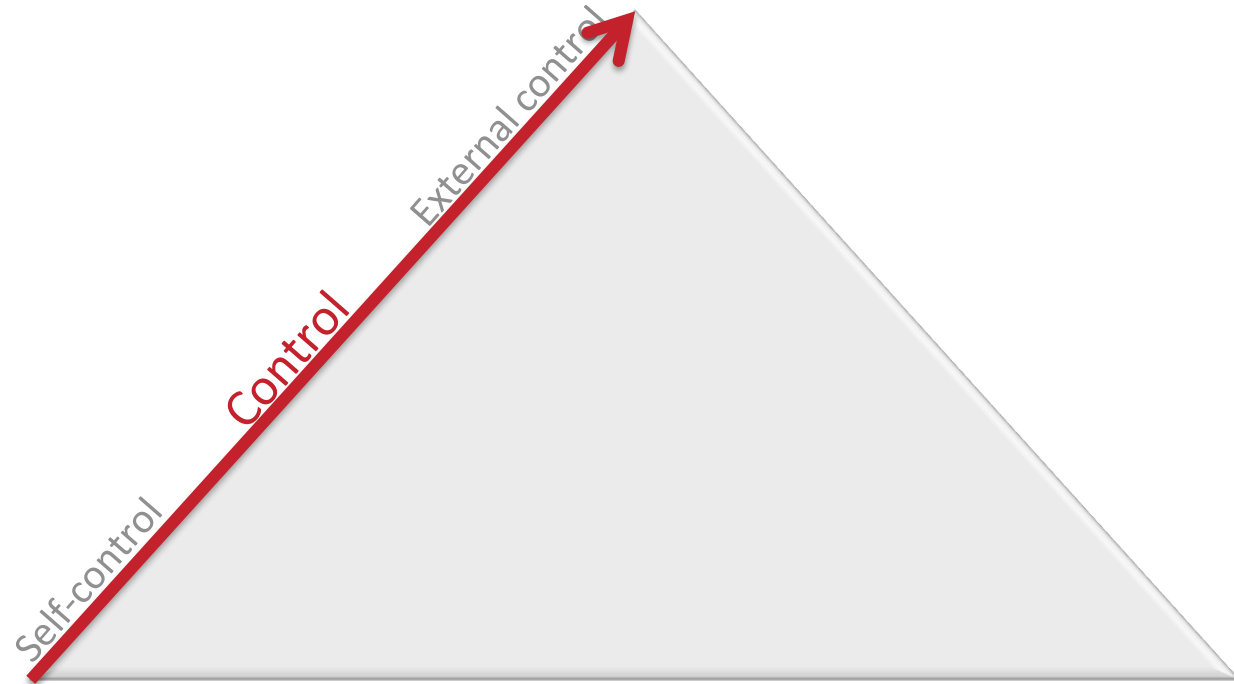
(Adler, 2015; Adler, Kwon, and Heckscher, 2008; Afuah and Tucci, 2012; Brabham, 2008;2013; Clark, 1973; Couch, 1970; 1968; Gulati et al., 2012; Hillery, 1955; Orton and Weick, 1990; Ren, Kraut, and Kiesler, 2007; Sartre, 1960; 2004; Tönnies, 1957; Villarroel and Tucci, 2010; Viscusi and Tucci, 2015; Weick, 1976; Wellman, 1979; West and Sims, 2015; Yoo, 2013; Young, 1994)

Crowd organization:

an organization sustained through **loosely coupled** (autonomous) and **mutually-aligned** agents that achieve their value creation goals through **generativity** (capacity for spontaneous innovation) and **coordination of collective behavior**.

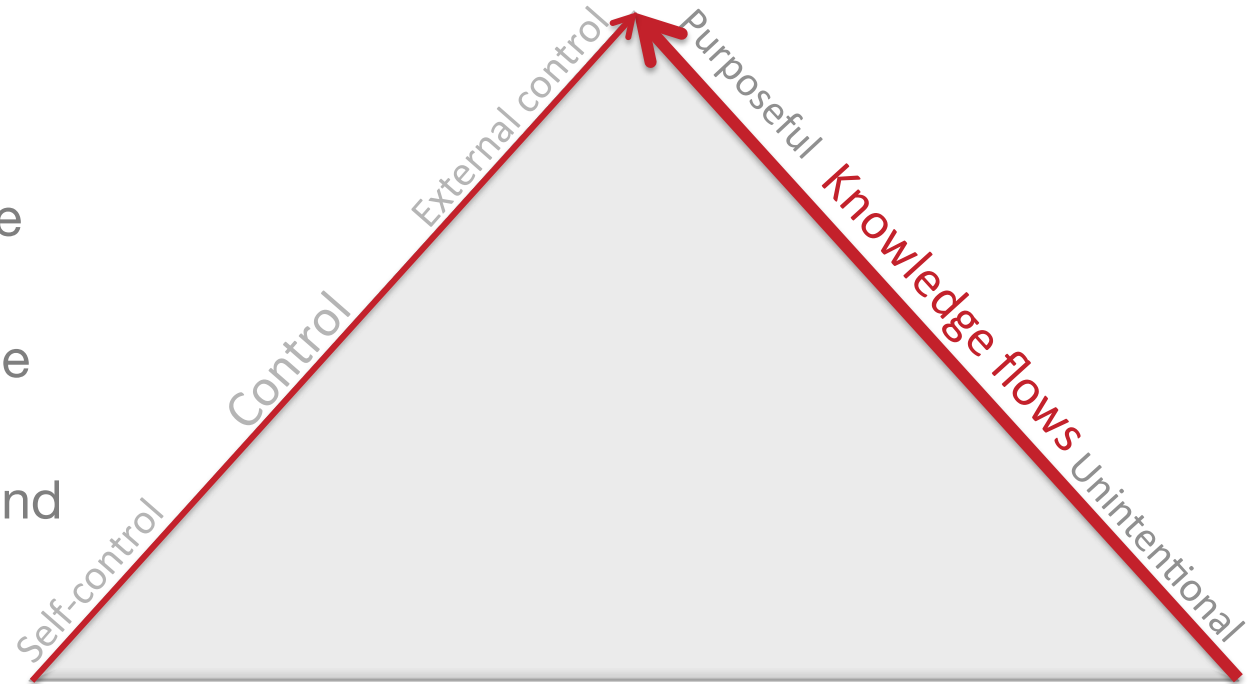
Governance of the crowd itself:

The crowd can be controlled by an external party (“external”) or can be largely self-governing (“self-control”)

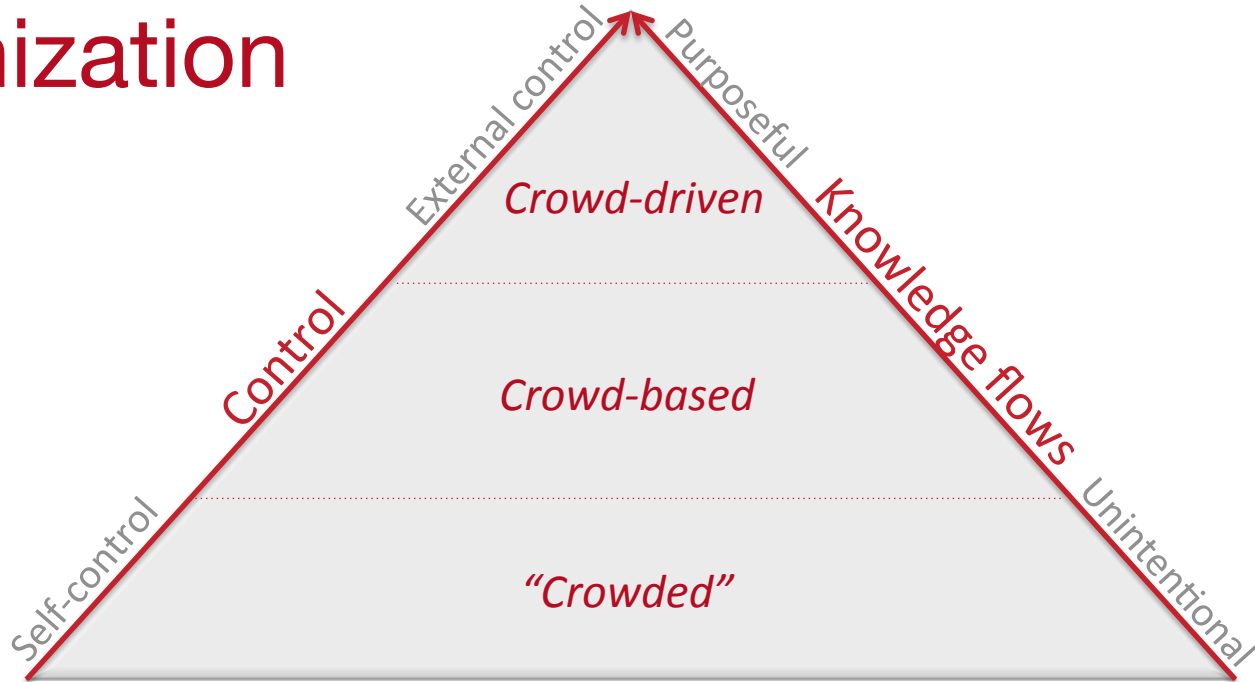


Knowledge Flows (governance of knowledge):

It depends whether the knowledge flows are under the control of the firm (“purposeful”) or whether they are beyond the firm’s control (“unintentional”)

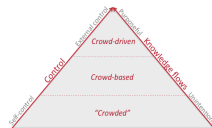


Crowd Organization Types



(Afuah and Tucci, 2012; Brabham, 2008; 2013; Boudreau and Lakhani, 2009 ; Chesbrough and Bogers, 2014 ; Couch,, 1968; 1970; Gawer, 2014; Glassman, 1973; Gulati, Puranam, and Tushman, 2012; March and Olsen, 1976; 1975; Orton and Weick, 1990; Viscusi and Tucci, 2015; Weick, 1976; Yoo, Henfridsson, and Lyytinen, 2010; Yoo, 2013; Zittrain, 2006)

CROWD TUNING



Type

What It Is

When useful + techniques to complement

Crowd-driven

(e.g., Innocentive client)

Crowds controlled by an external agent/firm that uses the crowd to perform a specific task or innovation activity

- Useful for exploitation of well-understood problems or improvements to known products, services, or issues
- Useful for innovative solutions to highly defined tasks
- To complement the exploitation orientation, invest in analytics and data scientists

Crowd-based

(e.g., Wikipedia)

Control of the crowd is shared between an external agent/firm and the crowd

- Firms that have an open-ended problem—not very well defined—and that would like to explore the creative potential of the crowd without losing control over it
- The crowd itself helps not only with potential solutions, but also helps to define the problem/direction itself

“Crowded”

(e.g., One Billion Minds)

Coordination and governance of crowd are performed by the crowd itself, through mutual interactions

- Useful for exploration of little-understood problems
- Searching for new consumer trends, emerging disruptive changes, and highly creative new products and/or services
- To complement the exploration orientation, invest in crowd infrastructure such as peer voting and gamification

What happens when the crowd is at the very heart of the organization (*crowded organizations*)?

Do crowded organizations lead to nonsensical and uncoordinated ideas?

How should crowds be organized to be well tuned with corporate open innovation goals?



EPFL | École Polytechnique Fédérale de Lausanne

Corporate Strategy & Innovation



REFERENCES

- Adler, P.S., S.W. Kwon, and C. Heckscher. 2008. "Professional Work: The Emergence of Collaborative Community." *Organization Science* 19 (2): 359–76.
- Adler, Paul S. 2015. "Community and Innovation: From Tönnies to Marx." *Organization Studies* 36 (4): 445–71.
- Afuah, Allan, and Christopher Tucci. 2012. "Crowdsourcing as a Solution to Distant Search." *Academy of Management Review* 37 (3): 355–75.
- Boudreau, K. J., and K. R. Lakhani. 2009. "How to Manage Outside Innovation." *MIT Sloan Management Review* 50 (4): 69–75.
- Brabham, D. C. 2008. "Crowdsourcing as a Model for Problem Solving-An Introduction and Cases." *Convergence* 14 (1): 75–90.
- . 2013. *Crowdsourcing*. MIT Press.
- Cabinet Office. 2009. *Understanding Crowd Behaviours-Guidance and Lessons Identified. Psychology*. Vol. 59.
- Canetti, Elias. 1962. *Crowds and Power*. Translated by Carol Stewart. New York: Continuum.
- Chesbrough, Henry, and Marcel Bogers. 2014. "Explicating Open Innovation: Clarifying an Emerging Paradigm for Understanding Innovation Keywords." In *New Frontiers in Open Innovation*, edited by Henry Chesbrough, Wim Vanhaverbeke, and Joel West, 3–28. Oxford: Oxford University Press.
- Clark, David B. 1973. "The Concept of Community: A Re-Examination." *The Sociological Review* 21 (3). Blackwell Publishing Ltd: 397–416.
- Couch, C.J. 1968. "Collective Behavior: An Examination of Some Stereotypes." *Social Problems* 15 (3): 310–22.
- . 1970. "Dimensions of Association in Collective Behavior Episodes." *Sociometry* 33 (4): 457–71.
- Daft, Richard, and Arie Y Lewin. 1993. "Where Are the Theories for the 'New' Organizational Forms? An Editorial Essay." *Organization Science* 4 (4): i – iv.
- Enkel, Ellen, Oliver Gassmann, and Henry Chesbrough. 2009. "Open R & D and Open Innovation : Exploring the Phenomenon." *R&D Management* 39 (4): 311–16.
- Gawer, Annabelle. 2014. "Bridging Differing Perspectives on Technological Platforms: Toward an Integrative Framework." *Research Policy* 43 (7): 1239–49.

REFERENCES

- Glassman, Robert B. 1973. "Persistence and Loose Coupling in Living Systems." *Behavioral Science* 18 (2). John Wiley & Sons, Ltd.: 83–98.
- Gulati, Ranjay, Phanish Puranam, and Michael Tushman. 2012. "Meta-Organization Design: Rethinking Design in Interorganizational and Community Contexts." *Strategic Management Journal* 33 (6). John Wiley & Sons, Ltd.: 571–86.
- Hillery, George A. 1955. "Definitions of Community: Areas of Agreement." *Rural Sociology* 20 (1): 111–23.
- Lane, Sean. 2010. "Collective Intelligence for Competitive Advantage : Crowdsourcing and Open Innovation."
- March, J. G., and J. P. Olsen. 1976. *Ambiguity and Choice in Organizations*. Universitetsforlaget.
- March, James G., and Johan P. Olsen. 1975. *Choice Situations in Loosely Coupled Worlds*. Marchand, D A, W J Kettinger, and J D Rollins. 2000. "Information Orientation: People, Technology and the Bottom Line." *MIT Sloan Management Review* 41: 69–80.
- Marx, Gary T, and James L Wood. 1975. "Strands of Theory and Research in Collective Behavior." *Annual Review of Sociology* 1 (January). Annual Reviews: 363–428 CR – 23
- Orton, J Douglas, and Karl E Weick. 1990. "Loosely Coupled Systems: A Reconceptualization." *The Academy of Management Review* 15 (2). Academy of Management: 203–23.
- Sartre, Jean-Paul. 1960. *Critique de La Raison Dialectique*. France: Éditions Gallimard.
- . 2004. *Critique of Dialectical Reason*. Edited by Jonathan Ree. Translated by Alan Sheridan-Smith. Originally Published as "Critique de La Raison Dialectique" by Editions Gallimard, Paris 1960. London; New York: Verso.
- Tönnies, Ferdinand. 1957. *Community & Society*. Translated by Charles Price Loomis. East Lansing: Michigan State University Press.
- Villarreal, Andrei, and Christopher L. Tucci. 2010. "Motivating firm-sponsored e- collective work." MIT Sloan School. No. 4767-10. SSRN.
- Viscusi, Gianluigi, Diane Poulin, and Christopher Tucci. 2015. "Open Innovation Research and E-Government: Clarifying the Connections between Two Fields." *Proceedings of Proceedings of the XII Conference of the Italian Chapter of AIS*.
- Viscusi, Gianluigi, and Christopher L. Tucci. 2015. *Distinguishing "Crowded" Organizations from Groups and Communities: Is Three a Crowd?* June 4, 2015. SSRN.

REFERENCES

- Weick, Karl E. 1976. "Educational Organizations as Loosely Coupled Systems." *Administrative Science Quarterly* 21 (1): 1–19.
- Wellman, Barry. 1979. "The Community Question: The Intimate Networks of East Yorkers." *American Journal of Sociology* 84 (5). The University of Chicago Press: 1201–
- West, Joel, and Jonathan Sims. 2015. "How Firms Leverage Crowds and Communities for Open Innovation." Working paper, Keck Graduate Institute.
- Yoo, Youngjin. 2013. "The Tables Have Turned: How Can the Information Systems Field Contribute to Technology and Innovation Management Research?" *Journal of the Association for Information Systems* 14: 227–36.
- Yoo, Youngjin, Ola Henfridsson, and Kalle Lyytinen. 2010. "The New Organizing Logic of Digital Innovation: An Agenda for Information Systems Research." *Information Systems Research* 21 (4): 724–35.
- Young, Iris Marion. 1994. "Gender as Seriality: Thinking about Women as a Social Collective." *Signs: Journal of Women in Culture and Society* 19 (3): 713–38.
- Zittrain, Jonathan L. 2006. "The Generative Internet." *Harvard Law Review* 119: 1974– 2040.