Thomas W. Malone

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EDUCATION

B.A., Mathematical sciences, Rice University, 1974, *magna cum laude* M.A., Psychology, Stanford University, 1977 M.S., Engineering-economic systems, Stanford University, 1979 Ph.D., Psychology, Stanford University, 1980

PROFESSIONAL EXPERIENCE

Region IV Education Service Center Houston, TX	Consultant for Computer-Based Instruction	June 1974	Aug. 1975
Xerox Palo Alto Research Center Palo Alto, CA	Research Intern Member of Research Staff	Oct. 1979 June 1980	June 1980 Sept. 1983
Massachusetts Institute of Technology Cambridge, MA	Assistant Professor Douglas Drane Career Development Associate Professor of Information	Sept. 1983 July 1985	June 1985 June 1989
	Technology and Management Patrick J. McGovern Professor of Information Systems	July 1989	Jan. 2004
	Director, Center for Coordination Science	July 1989	June 2006
	Co-Director, Initiative on Inventing the Organizations of the 21st Century	May 1994	Dec 1999
	Head, Information Technology Group	Sept. 2000	July 2009
	Patrick J. McGovern Professor of Management	Jan. 2004	
	Director, Center for Collective Intelligence	July 2006	

Harvard Business School Boston, MA	Visiting Professor	Jan. 1992	Dec. 1992
IESE Business School Barcelona, Spain	Visiting Professor	Sept. 2001	Aug. 2002
New York University New York, NY	Visiting Scholar Stern School of Business	Sept. 2011	Jan. 2012
Stanford University Stanford, CA	Visiting Professor Department of Psychology	Jan. 2012	Jun. 2012

AWARDS

U. S. Presidential Scholar (1970)

Phi Beta Kappa (1974)

National Science Foundation Graduate Fellowship (1976-1979)

IBM Faculty Award (2004, 2013)

Outstanding Paper Award at International Conference on Collaboration Technologies and Systems (2011)

Honorary doctorate, University of Zurich (2012)

Honorary Fellow, Argentinian Engineers' Center (CAI, Centro Argentino de Ingenieros) (Lifetime title, awarded 2021)

2006 -

RECENT RESEARCH GRANTS (Last 10 years)

IBM Faculty Award 2013

Center for Collective Intelligence

Research center funded by National Science Foundation (Grant Nos. IIS-0963285, ACI-1322254, IIS-0963451, IIS-0968321, CCF-1442887, IIS-1144663, and IIS-1047567), Army Research Office (Grant Nos. 56692-MA and 64079-NS), BT, Cisco, Manpower, Inc., Genpact, Argosy Foundation, Deloitte, Takeda, Fuji Xerox, Toyota, Fujitsu, and others.

PROFESSIONAL ACTIVITIES

Conference steering committee: ACM *Collective Intelligence Conference* Steering Committee (Chair: 2017-).

Journal steering committee: ACM/Sage *Collective Intelligence* (Chair: 2020 -).

Journal editorship: ACM/Sage *Collective Intelligence* (Founding editor: 2021 -)

Member of editorial boards: Human-Computer Interaction (1986-93), MIS Quarterly (1987-90), Information Systems Research (editorial board, 1987-94; advisory board, 1994-), Organizational Science (1988-91), Management Science (1990-2000), Organizational Computing (1991-), ACM Transactions on Information Systems (1991-94), Cambridge University Press series on Human-Computer Interaction (1990-94), Electronic Markets (1999-2007).

Conference program committees: ACM Conference on Human Factors in Computer Systems (CHI) (Program committee member: 1983, 1986, 1991; Special Presentations Chairman, 1985; Doctoral Consortium Committee member, 1988), ACM Conference on Office Information Systems (1984), Conference on Computer-Supported Cooperative Work (Program committee chair: 1994; Program committee member: 1986, 1988, 1990, 1992), Workshop on Organizational Science (planning committee chairman, 1987), International Conference on Information Systems (1987), National Science Foundation Coordination Theory Workshop (planning committee chairman, 1988), AAAI National Conference on Artificial Intelligence (1990), National Science Foundation Workshop on Coordination Theory and Collaboration Technology (co-chair: 1991,1992), National Science Foundation Workshop on Information Technology and Productivity (co-chair, 1993), American Association of Artificial Intelligence (AAAI) Conference (2006), Collective Intelligence Conference (Founding Co-Organizer, 2012; Co-General Chair, 2014).

Reviewer for: National Science Foundation, National Institute of Education, Communications of the ACM, ACM Transactions on Office Information Systems, ACM Computing Surveys, Operations Research, Management Science, Organizational Science, Sloan Management Review, Journal of Educational Psychology, Cognitive Science, IEEE Transactions on Computers, Operations Research, International Conference on Information Systems, Cognitive Science Conference, Journal of the Association of Information Systems (JAIS), Conference on Computer-Supported Cooperative Work (CSCW), Collective Intelligence Conference.

Congressional testimony: Testified for US House of Representatives Committee on Education and the Workforce (Subcommittee on Oversight and Investigations), American Worker at a Crossroads Project, October 29, 1997. Congressional staff briefing for US House of Representatives Select Committee on Energy Independence and Global Warming, December 7, 2010. Congressional staff briefing for US House of Representatives Natural Resources Committee, January 25, 2012.

Museum exhibit: "Climate Collaboratorium" exhibit on the MIT Climate CoLab project, included as part of the "Sampling MIT" exhibit at the MIT Museum, Cambridge, MA (September 2009 – November 2011).

Other professional service: Member of National Science Foundation (NSF) Advisory Board for Information, Robotics, and Intelligent Systems Division (1988-91); Chairman of Subcommittee on "Fundamentals of Collaboration" for NSF Initiative on "The National Collaboratory" (1989); Member of NSF Review panels; Member of NSF site

visit team; Subcommittee member and presenter for DARPA Summer Study on the Engineer's Assistant project (1990); Subcommittee chair for DARPA Human Computer Interaction Workshop (1992). Member of National Academy of Sciences (NAS) Committee on Network Science for Future Army Applications (2004-05)

Member: Association for Computing Machinery

TEACHING

Masters courses: Decision Support Systems I; Management Information Systems; Inventing the Organizations of the 21st Century; Proseminar on Organizational Transformation; Electronic Commerce; Information Systems; Information Technology as an Integrating Force in Manufacturing; Distributed Leadership Workshop; Putting People at the Center of Business; Information Technology Essentials; Strategic Organizational Design; Supermind Design for Responding to Covid-19.

Doctoral seminars: Organization Design; Workshop in Management Information Systems; Information Processing in Individuals, Organizations and Computers; Computer-Supported Cooperative Work.

Executive education: Artificial Intelligence: Implications for Business Strategy; Machine Learning in Business; Intelligent Organizations: Collaboration and the Future of Work; Distributed Leadership; Collective Intelligence; Future of Work; Building Organizational Capacity for Innovation.

PATENTS

Malone, T.W., Lai, K.Y., Yu, K. C., & Berenson, R. W. Object-oriented computer user interface. US Patent Nos: 5,727,175 (March 10, 1998); 5,790,116 (August 4, 1998); 5,794,001 (August 11, 1998); 5,900,870 (May 4, 1999).

Malone, T.W., Crowston, K., Lee, J., Pentland, B., & Dellarocas, C. Computer system for displaying representations of processes. US Patent No. 5,819,270 (October 6, 1998).

Malone, T.W., Crowston, K., Lee, J., Pentland, B., & Dellarocas, C. A computerized handbook of processes. European Patent No. 0692113 (October 14, 1998). Canadian Patent No. 2,156,917 (April 22, 2003).

Malone, T.W., Crowston, K., Lee, J., Pentland, B., & Dellarocas, C. Computer handbook of processes. US Patent No. 6,070,163 (May 30, 2000). US Patent No. 6,349,298 (February 19, 2002).

Dellarocas, C., & Malone, T.W. Computer system and computer implemented process for representing software system descriptions and for generating executable computer programs and computer system configurations from software system descriptions. US

Patent Nos: 6,370,681 (April 9, 2002); 7,017,146 (March 21, 2006). Canadian Patent No. 2,249,386 (June 27, 2003).

PUBLICATIONS

Books

Olson, G. M., Malone, T. W., and Smith, J. B. (Eds.) *Coordination Theory and Collaboration Technology*. Mahwah, NJ: Erlbaum, 2001.

Malone, T. W., Laubacher, R. J., & Scott Morton, M. S. (Eds.) *Inventing the Organizations of the 21st Century*. Cambridge, MA: MIT Press, 2003.

Malone, T. W., Crowston, K. G., & Herman, G. (Eds.) *Organizing Business Knowledge: The MIT Process Handbook.* Cambridge, MA: MIT Press, 2003.

Malone, T. W. The Future of Work: How the New Order of Business Will Shape Your Organization, Your Management Style, and Your Life. Boston, MA: Harvard Business School Press, 2004 (Translated into Japanese, Chinese, Spanish, Korean, Portuguese, and Russian. Favorably reviewed by USA Today, Financial Times, Fortune.com, The Economist, Boston Globe, and others).

Malone, T. W., and Bernstein, M. S. (Eds.) *Handbook of Collective Intelligence*. Cambridge, MA: MIT Press, 2015. (Named an "Outstanding Academic Title" for 2016 by *Choice* magazine)

Malone, T. W. Superminds: The surprising power of people and computers thinking together. New York: Little Brown, 2018.

Refereed journal articles

Malone, T.W. Computer simulation of two-person interactions, *Behavioral Science*, 1975, 20, 260-267.

Malone, T.W., Suppes, P., Macken, E., Zanotti, M. and Kanerva, L. Projecting student trajectories in a computer-assisted instruction curriculum, *Journal of Educational Psychology*, 1979, 71, 74-84.

Malone, T.W., Macken, E. and Suppes, P. Toward optimal allocation of instructional resources: Dividing computer-assisted instruction time among students, *Instructional Science*, 1979, 8, 107-120.

Thomas, E.A.C. and Malone, T.W. On the dynamics of two-person interactions, *Psychological Review*, 1979, 86, 331-360.

- Malone, T.W. Toward a theory of intrinsically motivating instruction, *Cognitive Science*, 1981, 4, 333-370 (Reprinted in D. F. Walker and R.D. Hess (eds.) *Instructional Software*, Wadsworth Publishing Co., 1984).
- Malone, T.W. How do people organize their desks? Implications for designing office information systems, *ACM Transactions on Office Information Systems*, 1983, 1, 99-112.
- Luconi, F.L., Malone, T.W. and Scott Morton, M.S. Expert systems: The next challenge for management, *Sloan Management Review*, 1986 (Summer), 3-14. (Reprinted in J. F. Rockart & C. V. Bullen (Eds.), *The Rise of Managerial Computing*, Homewood, IL: Dow Jones-Irwin, 1986. Also reprinted in R. H. Sprague & H. J. Watson (Eds.), *Decision Support Systems: Putting Theory into Practice* (Third edition), Englewood Cliffs, Prentice Hall, 1993.).
- Malone, T. W., Grant, K. R., Turbak, F. A., Brobst, S. A., & Cohen, M. D. Intelligent information sharing systems, *Communications of the ACM*, 1987, *30*, 390-402.
- Malone, T. W., Yates, J., & Benjamin, R. I. Electronic markets and electronic hierarchies, *Communications of the ACM*, 1987, 30, 484-497 (Reprinted in: I. Greif (Ed.), *Computer Supported Cooperative Work*, Los Altos, CA: Morgan Kaufmann Publishers, 1988. Also reprinted in T. J. Allen & M. S. Scott Morton (Eds.), *Information Technology and the Corporation of the 1990s*, New York: Oxford University Press, 1994. Excerpt reprinted in M. Stefik, *Internet Dreams*, Cambridge, MA: MIT Press, 1996.)
- Malone, T. W., Grant, K. R., Lai, K. Y., Rao, R. & Rosenblitt, D. A. Semi-structured messages are surprisingly useful for computer-supported coordination, *ACM Transactions on Office Information Systems*, 1987, 5, 115-131 (Reprinted in I. Greif (Ed.), *Computer Supported Cooperative Work*, Los Altos, CA: Morgan Kaufmann Publishers, 1988).
- Malone, T. W. Modeling coordination in organizations and markets, *Management Science*, 1987, 33, 1317-1332. (Reprinted in A.H. Bond, & L. Gasser (Eds.), *Readings in Distributed Artificial Intelligence*, San Mateo, CA: Morgan Kaufman Publishers, 1988).
- Crowston, K., Malone, T. W., & Lin, F. Cognitive science and organizational design: A case study of computer conferencing, *Human-Computer Interaction*, 1987, 3, 59-85 (Reprinted in I. Greif (Ed.), *Computer Supported Cooperative Work*, Los Altos, CA: Morgan Kaufmann Publishers, 1988).
- Malone, T.W., & Smith, S. A. Modeling the performance of organizational structures, *Operations Research*, May-June, 1988, *36*, 421-436.
- Lai, K.Y., Malone, T.W. & Yu, K.C. Object Lens: A 'spreadsheet' for cooperative work. *ACM Transactions on Office Information Systems*, October 1988, 6, 332-353. (Reprinted in D. Marca & G. Bock (Eds.) *Groupware: Software for Computer-Supported Cooperative Work*, Los Alamitos, CA: IEEE Computer Society Press, 1992. Also

- reprinted in R. M. Baecker (Ed.), Readings in Groupware and Computer Supported Cooperative Work, San Mateo, CA: Morgan Kaufmann Publishers, 1993.)
- Lee, J., & Malone, T. W., Partially Shared Views: A scheme for communicating among groups that use different type hierarchies, ACM Transactions on Information Systems, 1990, 8, 1-26.
- Olson, J., Card, S. K., Landauer, T. K., Olson, G. M., Malone, T., & Leggett, J. Computer Supported Collaborative Work: Research Issues for the 90s, Behavior and Information Techology, 1993, 12 (2), 115-129.
- Malone, T. W. & Crowston, K. The interdisciplinary study of coordination. ACM Computing Surveys, 1994 (March), 26 (1), 87-119 (Reprinted in: G. M. Olson, T. W. Malone, and J. B. Smith (Eds.) Coordination Theory and Collaboration Technology. Mahwah, NJ: Erlbaum, 2001; Malone, T. W., Crowston, K. G., & Herman, G. (Eds.) Organizing Business Knowledge: The MIT Process Handbook. Cambridge, MA: MIT Press, 2003).
- Brynjolfsson, E., Malone, T. W., Gurbaxani, V., & Kambil, A. Does information technology lead to smaller firms? *Management Science*, 1994, 40 (12), 1628-1644.
- Malone, T. W., Lai, K. Y., & Fry, C. Experiments with Oval: A radically tailorable tool for cooperative work. ACM Transactions on Information Systems, 1995, 13, 2 (April), 177-205.
- Malone, T. W. Is "Empowerment" just a Fad? Control, Decision-making, and Information Technology. Sloan Management Review, 1997, 38 (2), 23-35. (Reprinted in Malone, T. W., Laubacher, R. J., & Scott Morton, M. S. (Eds.) Inventing the Organizations of the 21st Century. Cambridge, MA: MIT Press, 2003. Excerpt reprinted in BT Technology Journal, 1999, 17, 4 (October), 141-144.)
- Malone, T. W., Crowston, K. G., Lee, J., Pentland, B., Dellarocas, C., Wyner, G., Quimby, J., Osborn, C. S., Bernstein, A., Herman, G., Klein, M., & O'Donnell, E. Tools for inventing organizations: Toward a handbook of organizational processes. Management Science, 1999, 45, 3 (March), 425-443 (Reprinted in: Malone, T. W., Crowston, K. G., & Herman, G. (Eds.) Organizing Business Knowledge: The MIT Process Handbook. Cambridge, MA: MIT Press, 2003. Malone, T. W., Laubacher, R. J., & Scott Morton, M. S. (Eds.) *Inventing the Organizations of the 21st Century*. Cambridge, MA: MIT Press, 2003).
- Woolley, A. W., Chabris, C. F., Pentland, A., Hashmi, N., & Malone, T. W. Evidence for a collective intelligence factor in the performance of human groups, Science, 29 October 2010, 330 (6004), 686-688; Published online 30 September 2010 [DOI: 10.1126/science.1193147] (Available on-line at: http://www.sciencemag.org/cgi/content/abstract/science.1193147).

Hines, James H., Thomas W. Malone, Paulo Gonçalves, George Herman, John Quimby, Mary Murphy-Hoye, James Rice, James Patten, and Hiroshi Ishii, Construction by Replacement: A new approach to simulation modeling. *System Dynamics Review*, 2011, 27, 1, 64-90; published online 28 July 2010 [DOI: 10.1002/sdr.437] (Available on-line at: http://onlinelibrary.wiley.com/doi/10.1002/sdr.437/abstract).

Introne, J., Laubacher, R., Malone, T. ROMA: A framework to enable open development methodologies in climate change assessment modeling. *IEEE Software*, 2011, 28(6): 56-61.

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Weelley A. W. Aggawyal I and Malana T. W. (2015). Collective intelligence of

Woolley, A. W., Aggarwal, I., and Malone, T. W. (2015). Collective intelligence and group performance. *Current Directions in Psychological Science*. 24 (6), 420-424.

Awad, E., Bonnefon, J., Caminada, M., Malone, T., & Rahwan, I. (2017) Experimental assessment of aggregation principles in argumentation-enabled collective intelligence. *ACM Transactions on Internet Technology*, 17, 3, 1-21.

Amelkin, V., Askarisichani, O., Kim, Y. J., Malone, T. W., & Singh, A. K. (2018) Dynamics of collective performance in collaboration networks. *PLOS ONE*. 13(10: e0204547. https://doi.org/10.1371/journal.pone.0204547

Engel, D., Malone, T. W. (2018) Integrated information as a metric for group interaction. *PLOS ONE* 13(10): e0205335. https://doi.org/10.1371/journal.pone.0205335.

Aggarwal, I., Woolley, A. W., Chabris, C. F., Malone, T. W. (2019) The impact of cognitive style diversity on implicit learning in teams. *Frontiers in Psychology*. 10:112. Doi: 10.3389/fpsyg.2019.00112 (https://www.frontiersin.org/articles/10.3389/fpsyg.2019.00112/full).

Riedl, C., Kim, Y. J., Gupta, P., Malone, T. W., Woolley, A. W. (2021) Quantifying collective intelligence in human groups. *Proceedings of the National Academy of Sciences* (https://www.pnas.org/content/118/21/e2005737118).

Hashmi, N., Shankaranarayanan, G., Malone, T. W. (in press) Is bigger better? A study of the effect of group size on collective intelligence in online groups. *Decision Support Systems*. (https://doi.org/10.1016/j.dss.2022.113914)

Other articles

Malone, T.W. What makes computer games fun? *Byte*, 1981, 6, 258-277 (Reprinted in *Computers in Education* (U.K.), 1982, 4, 14-21; and in D. Peterson (Ed.), *Intelligent Schoolhouse*. Reston, VA: Reston Publishing Co. (Prentice-Hall), 1984. Abbreviated version reprinted as: Guidelines for designing educational computer programs, *Childhood Education*, 1983, 59, 241-247.)

- Crowston, K. & Malone, T. W. Intelligent software agents. *Byte*, December 1988, 267-271.
- Malone, T.W., Yates, J. & Benjamin, R.I. The logic of electronic markets, *Harvard Business Review*, May-June, 1989, 67(3), 166-169 (Reprinted in *Revolution in Real Time: Managing Information Technology in the 1990s*, Harvard Business School Press, 1991.)
- Malone, Thomas W., and Rockart John F. Computers, networks, and the corporation, *Scientific American*, 1991, 265, 3 (Sept.), 128-136. (Reprinted in *Proceedings of the GroupWare* '92 conference, San Jose, CA, August 3, 1992. Reprinted in P. Lloyd (Ed.), *Groupware in the 21st Century*, London: Adamantine Press, 1994. Reprinted in P. Gray & J. Jurison (Eds.), *Productivity in the Office and the Factory*, Danvers, Mass.: Boyd & Fraser, 1995. Reprinted in Kirn & O'Hare (Eds.), *Cooperative Knowledge Processing*, London: Springer-Verlag, 1996.)
- Malone, T. and Streitz, N. Guest Editorial (for Special Issue on Computer-Supported Cooperative Work), *ACM Transactions on Information Systems*, 11 (4) (October), 1993, 319.
- Berndt, E. R. & Malone, T.W. Information technology and the productivity paradox: Getting the questions right (Guest editors' introduction to special issue). *Economics of Innovation and New Technologies*, *3* (3-4), 1995, 177-182.
- Bernstein, A., Dellarocas, C., Malone, T. W., & Quimby, J. Software tools for a Process Handbook. *IEEE Bulletin on Data Engineering*, 1995, 18, 1 (March), 41-47.
- Malone, T. W. Invited commentary on article by L. Suchman entitled "Do Categories Have Politics?" *Computer Supported Cooperative Work (CSCW)*, 1995, 3, 37-38. (Reprinted in B. Friedman (Ed.), *Designing Computers for People--Human Values and the Design of Computer Technology*. New York: Cambridge University Press, in press.)
- Malone, T. W. Foreword for D. Coleman & R. Khanna (Eds.), *Groupware: Technology and Applications*, Upper Saddle River, NJ: Prentice Hall, 1995, xix-xx.
- Malone, T. W., Scott Morton, M. S., & Halperin, R. R. Organizing for the 21st Century. *Strategy & Leadership*, 1996, 24, 4 (July/August), 7-10.
- Malone, T. (Interview). Free on the Range: Tom Malone on the implications of the digital age. *IEEE Internet Computing*, May/June 1997, *I* (3), 8-20.
- Schwartz, P. Re-organization Man (Interview with Thomas Malone). *Wired*, July 1998, 134-135.
- Lee, J. & J., Grunninger, M., Jin, Y., Malone, T., Tate, A., Yost, G., & other members of the PIF Working Group. The Process Interchange Format and Framework. *Knowledge Engineering Review*, 1998, *13* (1) Cambridge Univ. Press (Reprinted in: P. Bernus, K. Mertins, G. Schmidt (Eds.) *Handbook on Architectures of Information Systems*. Berlin: Springer-Verlag, 1998 (also in Second Edition, 2006); Malone, T. W., Crowston,

K. G., & Herman, G. (Eds.) Organizing Business Knowledge: The MIT Process Handbook. Cambridge, MA: MIT Press, 2003).

Malone, T. W. & Laubacher, R. J. The Dawn of the E-lance Economy. Harvard Business Review, September - October 1998, 76 (5), 144-152. (Reprinted in: D. Tapscott (Ed.) Creating Value in the Network Economy, Boston, MA: Harvard Business School Press, 1999, pp. 55-67. J. Magretta (Ed.), Managing in the New Economy, Boston, MA: Harvard Business School Press, 1999, pp. 145-157. P. O'Meara, H. D. Mehlinger, & M. Krain, Globalization and the Challenges of a New Century: Bloomington, IN: Indiana University Press, 2000, pp. 289-299 Revised versions reprinted in: Institute for Information Studies, The Promise of Global Networks (Annual Review of the Institute for Information Studies), Queenstown, MD: The Aspen Institute / Nortel Networks, 1999, pp. 119-136. Financial Times, March 1, 1999, Special section on "Mastering Information Management," pp. 2-4. Marchand, Donald A., Davenport, T. H., & Dickson, T. (Eds.) Mastering Information Management, London: Financial Times / Prentice Hall, 2000, pp. 137-142. Malone, T. W., Laubacher, R. J., & Scott Morton, M. S. (Eds.) Inventing the Organizations of the 21st Century. Cambridge, MA: MIT Press, 2003.)

Wolken, J. The Dawning of Opportunity: An interview with MIT's Thomas Malone (Cover story), *Contract Professional*, September 1999, 4, 1, 24-30.

Laubacher, R. J. & Malone, T. W. Entre dos mundos (English title: "Between two worlds") *Gestion*, November – December 1999, 4, 92-103. (Spanish translation of excerpts from the following working paper: Robert J. Laubacher, Thomas W. Malone, and the MIT Scenario Working Group. *Two Scenarios for 21st Century Organizations: Shifting Networks of Small Firms or All-Encompassing "Virtual Countries"?* MIT Initiative on Inventing the Organizations of the 21st Century, Working Paper No. 001, January 1997.)

Malone, T. W. & Laubacher, R. J. The Rebirth of the Guild (Op ed piece). *The Boston Globe*, August 24, 2000, p. A17.

Malone, T. W. State of the new economy / Voices / Thomas W. Malone (Interview), *Fast Company*, September 2000, p. 142.

Malone, T. W. The future of e-business (Editorial). *Sloan Management Review*, Fall 2001, p. 104.

Rosenfeld, Jill. Free agents in the olde world (Interview with Thomas Malone), Fast Company, May 2001, p. 136.

Malone, T. W. Making the decision to decentralize. *Harvard Business School Working Knowledge*, March 29, 2004.

Malone, T. W. Bringing the market inside. *Harvard Business Review*, April 2004, 82 (4), 106-114. (Reprinted in Chinese in *Harvard Business Review China*, July 2006.)

Malone, T. W. Competing in the marketplace for values. *Leader to Leader*, Summer 2004, 33, pp. 53-58. (Excerpt reprinted in *Science and Theology News*, June 2005, 5, 10, p. 5)

Malone, T. W. Pioneers that cultivate a new model of work. *Financial Times*, August 12, 2004.

Malone, T. W. Smarter companies. *Microsoft Executive Circle*, Summer 2004, 4, 2, p. 42.

Ancona, D., Malone, T. W., Orlikowski, W. J., & Senge, P. M. In praise of the incomplete leader. *Harvard Business Review*, February 2007, 85 (2), 92-100.

Malone, T. W. IT does not *drive* organizational change; it *enables* corporate transformation. Interview with Thomas W. Malone. (Article in Japanese) *Harvard Business Review* (Japan), January 2007, pp. 114-115.

Malone, T. W. & Klein, M. Harnessing collective intelligence to address global climate change (Invited Lead Essay). *Innovations: Technology* | *Governance* | *Globalization*, Summer 2007, 2 (3), 15-26.

Reeves, B., Malone, T. W., & O'Driscoll, T. 2008, Leadership's Online Labs, *Harvard Business Review*, 86 (5): 58-67.

Malone, T. W. Looking to Wikipedia for answers. *Financial Times* (FT.com), Nov 5, 2008.

Malone, T. W., Laubacher, R., & Dellarocas, C. The Collective Intelligence Genome, *Sloan Management Review*, Spring 2010, *51*, 3, 21-31 (Reprint No. 51303. Also available at: http://sloanreview.mit.edu/the-magazine/articles/2010/spring/51303/the-collective-intelligence-genome/#1).

Kraut, R., Maher, M. L., Olson, J., Malone, T. W., Pirolli, P., & Thomas, J. C. Scientific Foundations: A case for technology-mediated social-participation theory (Cover feature), *IEEE Computer*, November 2010, **43**, 11, 22-28.

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Woolley, A., & Malone, T. Defend your research: What makes a team smarter? More women, *Harvard Business Review*, June 2011, 89 (6): 32-33.

Malone, T., Laubacher, R., & Johns, T. The Age of Hyperspecialization, *Harvard Business Review*, July-August 2011, 89(7/8): 56-65.

Weill, P. Malone, T. W., Apel, T. G., The business models investors prefer, *Sloan Management Review*, Summer 2011, 52 (4): 17-19.

- Malone, T. W. Collective Intelligence / Interview: New Models for Human-Machine Collaboration. *Pictures of the Future. The Magazine for Research and Innovation*, Siemens, Spring 2011, pp. 90 (Reprinted in *Engine*, June 2011, pp. 6-7).
- Bernstein, A., Klein, M., & Malone, T. W. Programming the global brain. *Communications of the ACM*, May 2012, **55** (5): 41-43.
- Introne, J., Laubacher, R., Olson, G., and Malone, T. (2013) Solving Wicked Social Problems with Socio-computational Systems. *KI Künstliche Intelligenz*, February 2013, **27** (1), 45-52.
- Malone, T. W., Laubacher, R., & Fisher, L. How millions of people can help solve climate change. Nova Next website (PBS.org), January 15, 2014 (http://www.pbs.org/wgbh/nova/next/earth/crowdsourcing-climate-change-solutions/).
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- Malone, T. W. (Interviewed by Henner Gimpel), Interview with Thomas W. Malone on "Collective Intelligence, Climate Change, and the Future of Work." *Business & Information Systems Engineering*, August 2015, *57* (4), 275-278.
- Malone, T. W. How human-computer "superminds" are redefining the future of work. *MIT Sloan Management Review*, Summer 2018, 59(4): 34-41.
- Malone, T. W. Is cyber socialism worth a try? *LinkedIn Weekend Essay*, May 18, 2018 (https://www.linkedin.com/pulse/cyber-socialism-worth-try-thomas-malone/).
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Malone, Thomas W. *Tapping human intelligence: Why machines will never (completely) take over.* Real Business Intelligence 2017 Conference, Cambridge, MA, July 12, 2017.

Malone, Thomas W., Plenary panel on "The Impact of Technology and Innovation on the Future of Work," Eisenhower Fellowships Future of Work Global Conference, Malaga, Spain, September 15, 2017.

Malone, Thomas W., *Creating more intelligent organizations*. MIT Sloan Alumni Online webinar, September 28, 2017.

Malone, Thomas W., Panel on "Mobilizing private finance towards sustainable infrastructure: Latin America's experience of NDC implementation," COP 23 (23rd annual "Conference of the Parties") UNFCCC (United Nations Framework Convention on Climate Change) (UN Climate Change Conference), Bonn, Germany, November 14, 2017.

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Collective Intelligence: What is it? How can we measure it? And how can we increase it? Workshop with MIT Center of Brain, Minds, and Machines and German Science of Intelligence Consortium, Cambridge, MA, December 14, 2017.

How can we create more intelligent organizations? Workshop on "Collective Intelligence in the Insurance Industry," MIT Center for Collective Intelligence, Cambridge, MA, February 18, 2016. AmChams (American Chambers of Commerce) in Europe Conference, Cambridge, MA, May 11, 2017. Alliance ARTEM Conference (Ecole Nationale Superieure d'Art et de Design de Nancy, ICN Business School, Mines Nancy, Universite de Lorraine, Metropole GrandNancy), Nancy, France, November 17, 2017. MIT Industrial Liaison Program Executive Session for MFS, Cambridge, MA, December 12, 2017.

Malone, Thomas W. Superminds: The surprising power of people and computers thinking together. MIT Book Launch Event, Cambridge, MA, May 21, 2018. IE School of International Relations Course, Cambridge, MA, May 21, 2018. MIT William Barton Rogers Reception, Los Angeles, CA, May 23, 2018. RamsayTalks, Toronto, Canada, June 19, 2018. Tortoise ThinkIn on "The Future of Listening," Boston, MA, July 17, 2018. Eden McCallum seminar, London, UK, September 12, 2018. Nesta "In conversation" event, London, UK, November 27, 2018. Eden McCallum breakfast and discussion event, London, UK, November 28, 2018. Federation of Chilean Industry (SOFOFA), Santiago, Chile, January 15, 2019. Chilean Institute of Rational Business Administration (ICARE), Santiago, Chile, January 17, 2019. Outthinker Chief Strategy Officers Roundtable, Boston, MA, February 5, 2019. MIT Investment Management Co., Cambridge, MA, February 12, 2019. Network Sciences Institute, Northeastern University, Boston, MA, March 1, 2019. MIT / Junior Achievement Centennial Executive Forum on "Innovation and the Future of Work," Cambridge, MA, May 2, 2019. MIT Technology Review EmTech Next Conference, Cambridge, MA, June 11, 2019. US Deloitte Chief Learning Officer Forum, Virtual Workforce Innovation Forum 2020 (online), March 13, 2020. Family Firm Institute Global Conference, Cambridge, MA, October 27, 2022.

Malone, Thomas W. *The future of work* (keynote address). University of Zurich Digital Forum, Zurich, Switzerland, September 13, 2018.

Malone, Thomas W. Moving toward the instinctive enterprise: Artificial intelligence, collective intelligence, and why they matter (Panel member), MIT Technology Review / Genpact Symposium, Cambridge, MA, September 26, 2018.

Malone, Thomas W. *How superminds can help us become the species we want to be*. Futures Congress, Punta Arenas, Chile, January 14, 2019. Futures Congress, Santiago, Chile, January 15, 2019.

Malone, Thomas W. *Collective intelligence, wicked problems, climate change, and superminds*. Member of plenary panel on "Wicked problems and collective intelligence," Collective Intelligence Conference, Pittsburgh, PA, June 13, 2019.

Malone, Thomas W. *The human-computer superminds in our future*. Member of plenary panel on "The future reimagined," International Risk Assessment and Horizon Scanning Symposium, Singapore, July 24, 2019. Aspen Institute Roundtable on Institutional Innovation, Aspen, CO, August 1, 2019.

Malone, Thomas W. How can science and engineering help answer big questions about human and machine intelligence? (Panel Member), MIT Charter Society, Boston, MA, April 6, 2019.

Hashmi, Nada & Malone, Thomas W. Effects of collaboration tools and group size on collective intelligence. INGRoup Annual Conference, Lisbon, Portugal, July 20, 2019.

Malone, Thomas W. Superminds: The surprising power of people and computers thinking together. Invited presentation on the "Science" stage for the Library of Congress National Book Festival, Washington, DC, August 31, 2019.

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Malone, Thomas W. *Creating human-computer superminds*. MIT Quest for Intelligence workshop on "Collective Intelligence," Cambridge, MA, September 24, 2019.

Malone, Thomas W. (Instigator) Panel discussion on "Markets," The Human Movement Kickoff workshop, Half Moon Bay, California, October 9, 2019.

Malone, Thomas W. *Superminds: The Collective Intelligence of Community Bio*. Global Community Bio Summit, Cambridge, MA, October 12, 2019.

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Malone, Thomas W. (Panel member). Better World (Atlanta), MIT Campaign for a Better World, Atlanta, GA, October 18, 2019.

Malone, Thomas W. *Superminds* (Dinner presentation in which Malone was interviewed by Yuri Milner), Breakthrough Prize Foundation laureates dinner, Los Altos Hills, CA, November 2, 2019.

Malone, Thomas W. *Human-Computer Collaboration*. MIT Industrial Liaison Program 2019 Research and Development Conference on "Human and Technology Collaboration," Cambridge, MA, November 13, 2019.

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Malone, Thomas W. *Institutions as superminds: Five forms of group decision-making.* (keynote presentation). Interdisciplinary conference on "The Choice II: Market, Organization, Democracy, Algorithm, or Community?" University of Michigan, Ann Arbor, MI, December 13, 2019.

Malone, Thomas W. *COVID-19 and the Future of Work*, MIT Industrial Liaison Program Webinar (online), May 5, 2020 (https://ilp.mit.edu/attend/covid-19-and-future-work).

Malone, Thomas W. *COVID-19 and Collective Intelligence* (invited plenary). ACM Collective Intelligence 2020 Conference (online), June 18, 2020 (https://ci2020.weebly.com/program.html).

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Malone, Thomas W. *Minglr: Supporting ad hoc, private conversations online* (invited plenary). Microsoft New Future of Work Symposium (online), August 3, 2020 (https://www.microsoft.com/en-us/research/event/new-future-of-work/).

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Thomas Malone (Panel moderator and presenter), *Work of the Future @MIT Roundtable*, MIT Industrial Liaison Program Online Roundtable, May 4, 2021.

Thomas Malone, Collective Intelligence: The Power of People and Computers Thinking Together, Collective[i] Forecast online speaker series, June 24, 2021.

Thomas Malone, Como podemos reinventar las organiaciones en el Siglo XXI? [How can we reinvent the organizations of the 21st century?] Online interview marking official induction as Honorary Fellow, Argentinian Engineers Center, August 25, 2021,

https://www.youtube.com/watch?v=lOJlcJ07E2I [video portion in English begins around 3:40].

Michelle Vaccaro, Andres Campero, Jaeyoon Song, Abdullah Almaatouq, and Thomas Malone. What is an Analogue of the Turing Test for Human-Computer Systems? ACM Collective Intelligence Conference (CI). Virtual. October 20, 2022.

Malone, Thomas W. *How Hyperconnectivity is Changing the Way That We Solve Problems* (keynote presentation). Mobius Executive Leadership Conference, October 24, 2022 (https://www.facebook.com/watch/?v=683608809581147, Malone introduction starts at 3:00).

Thomas W. Malone, *Collective Intelligence*, Workshop on "Advances in the quest to understand intelligence," MIT Quest for Intelligence, Cambridge, MA, November 4, 2022 (https://quest.mit.edu/events/advances2022).