Hellenic Society for Systemic Studies

UNIVERSITY OF IOANNINA

22nd NATIONAL & INTERNATIONAL HSSS CONFERENCE

Applied Systemic Management in the AI Era

07-10 October 2026, Preveza, Greece

H-SCALE™

A Human-Systemic Learning Architecture for Adaptive Management in the AI Era

Eleftherios Kakavoulis, MBA, MSc

Organizational Psychologist | Systems Thinking Researcher
Executive & Systemic Coach | Author | Trainer

Email: Lkakavoulis@gmail.com

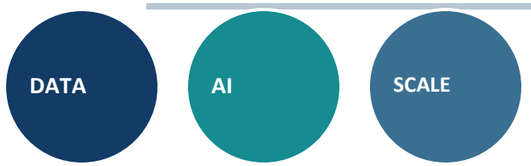
Human experience · Collective learning · Systemic adaptation

THE ADAPTATION CHALLENGE

Smarter Technologies Do Not Automatically Create More Adaptive Organizations

TECHNOLOGICAL CAPABILITY

AI systems increase speed, reach, and analytical power



Rapidly expanding

THE ASSUMED PATH

THE HUMAN–SYSTEMIC LEARNING GAP

Meaning
Trust
Agency
Learning

ADAPTIVE CAPACITY

People and systems must interpret, experiment, learn, and evolve

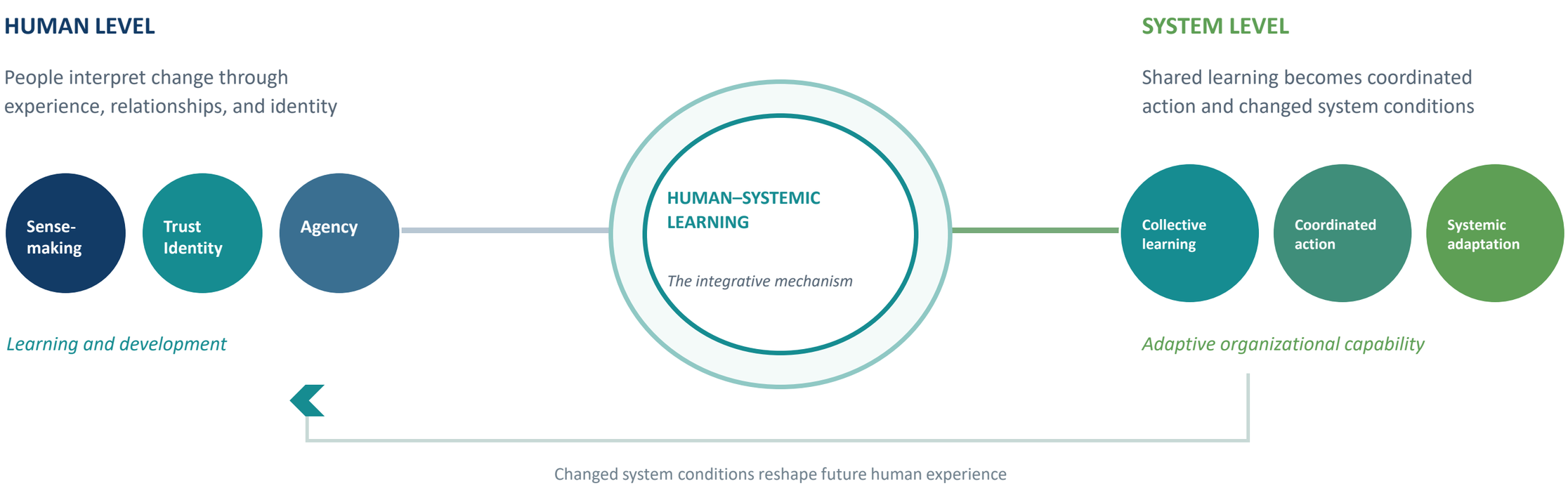


Developed—not installed

Technology changes what is possible. Learning determines what becomes adaptive.

Sources: Faraj, S., Pachidi, S., & Sayegh, K. (2018). Jarrahi, M. H. (2018). Raisch, S., & Krakowski, S. (2021).

The Missing Link: From Human Experience to Systemic Adaptation

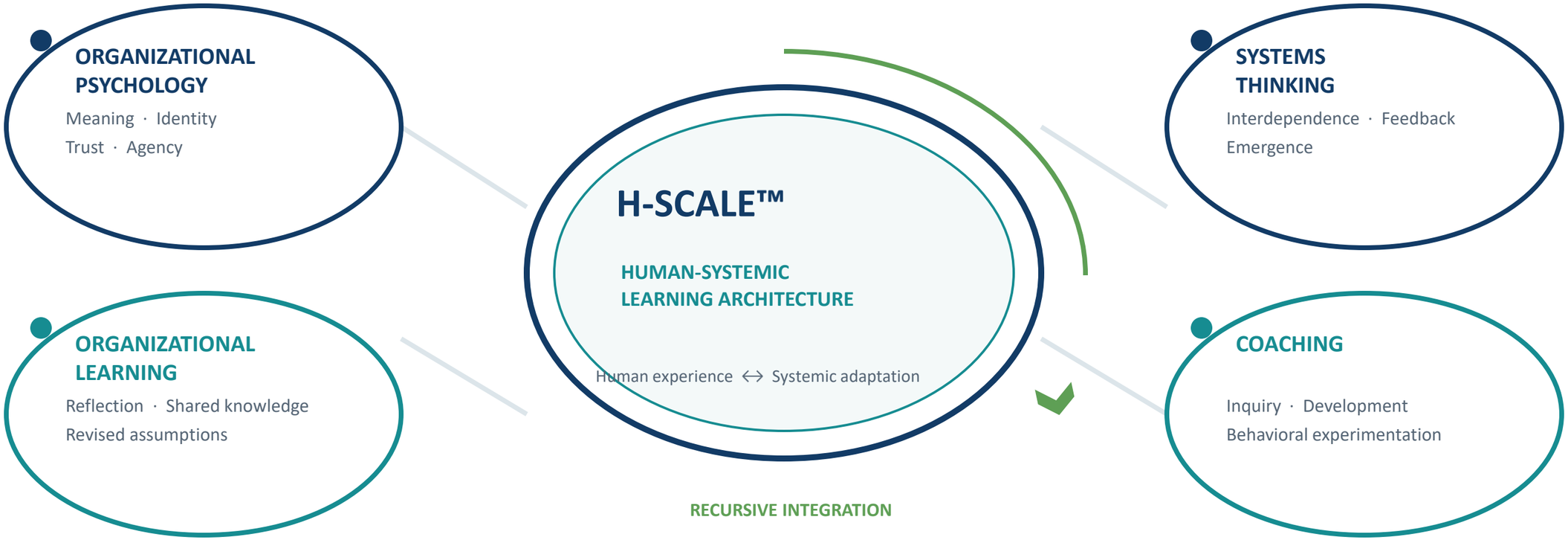


How does human experience become organizational adaptive capability?

Sources: Crossan, M. M., Lane, H. W., & White, R. E. (1999). Edmondson, A. C. (1999). Weick, K. E. (1995). Kakavoulis, E. (2026).

CONCEPTUAL FOUNDATIONS

Four Foundations, One Human-Systemic Learning Architecture

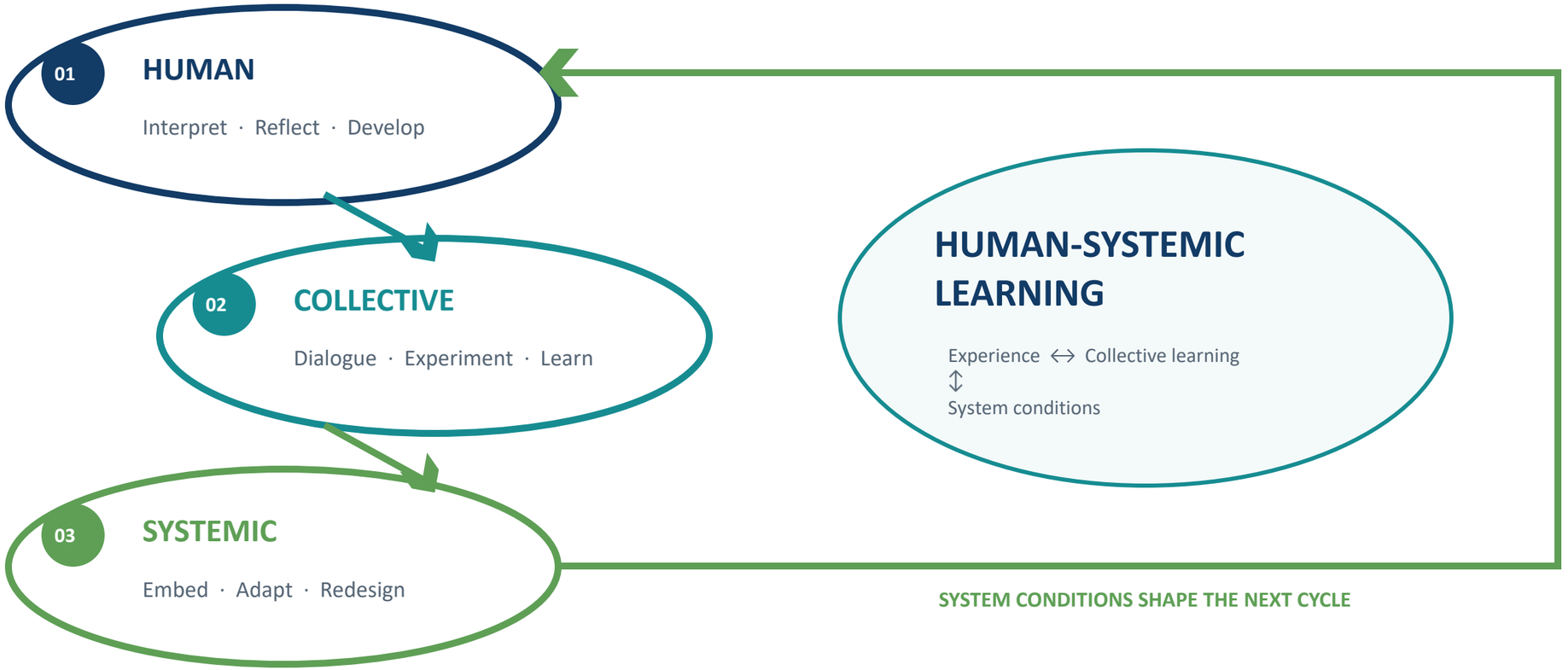


H-SCALE™ integrates these foundations into a recursive learning architecture linking human experience with systemic adaptation.

Sources: - Argyris, C., & Schön, D. A. (1978). Bandura, A. (2001). Cox, E., Bachkirova, T., & Clutterbuck, D. (Eds.). (2018). Senge, P. M. (2006).

THE CENTRAL PREMISE

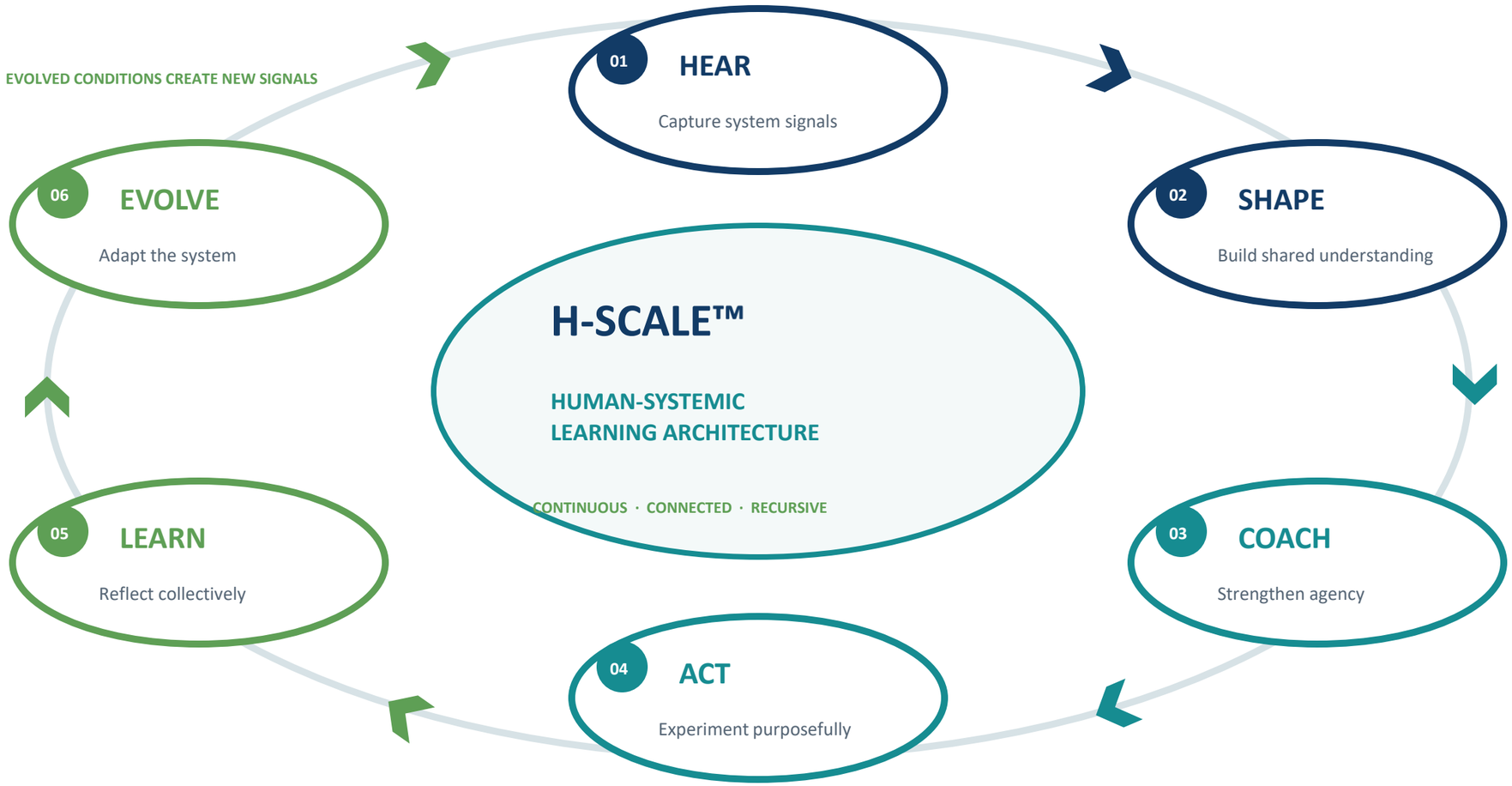
Adaptation Emerges Through Recursive Learning Across Levels



Human experience becomes collective learning and systemic adaptive capability.

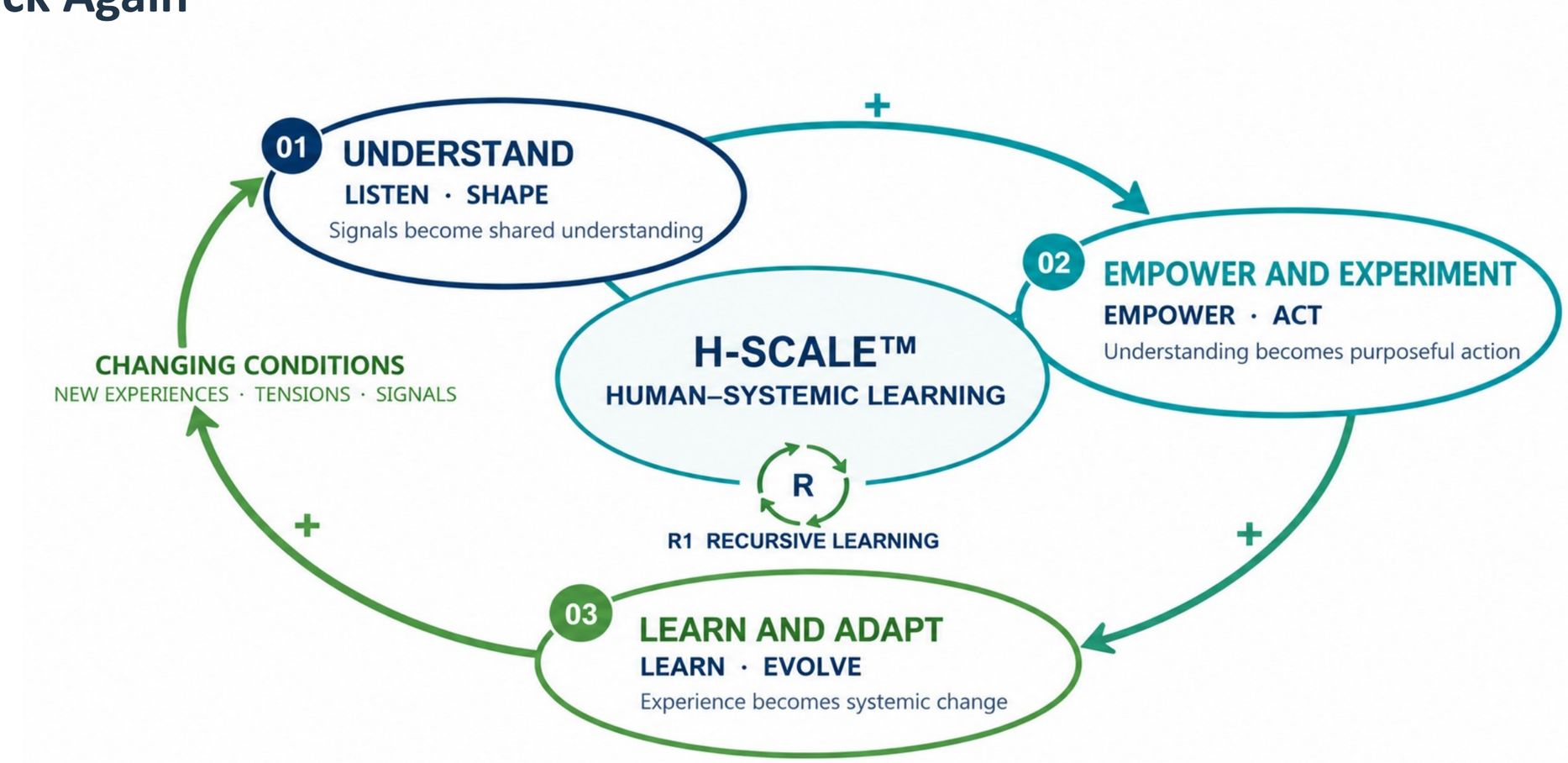
THE H-SCALE™ ARCHITECTURE

H-SCALE™ Activates Human-Systemic Learning Through Six Recursive Phases



Each phase informs the next—and each cycle reshapes the conditions of the next.

From System Signals to Systemic Adaptation—and Back Again

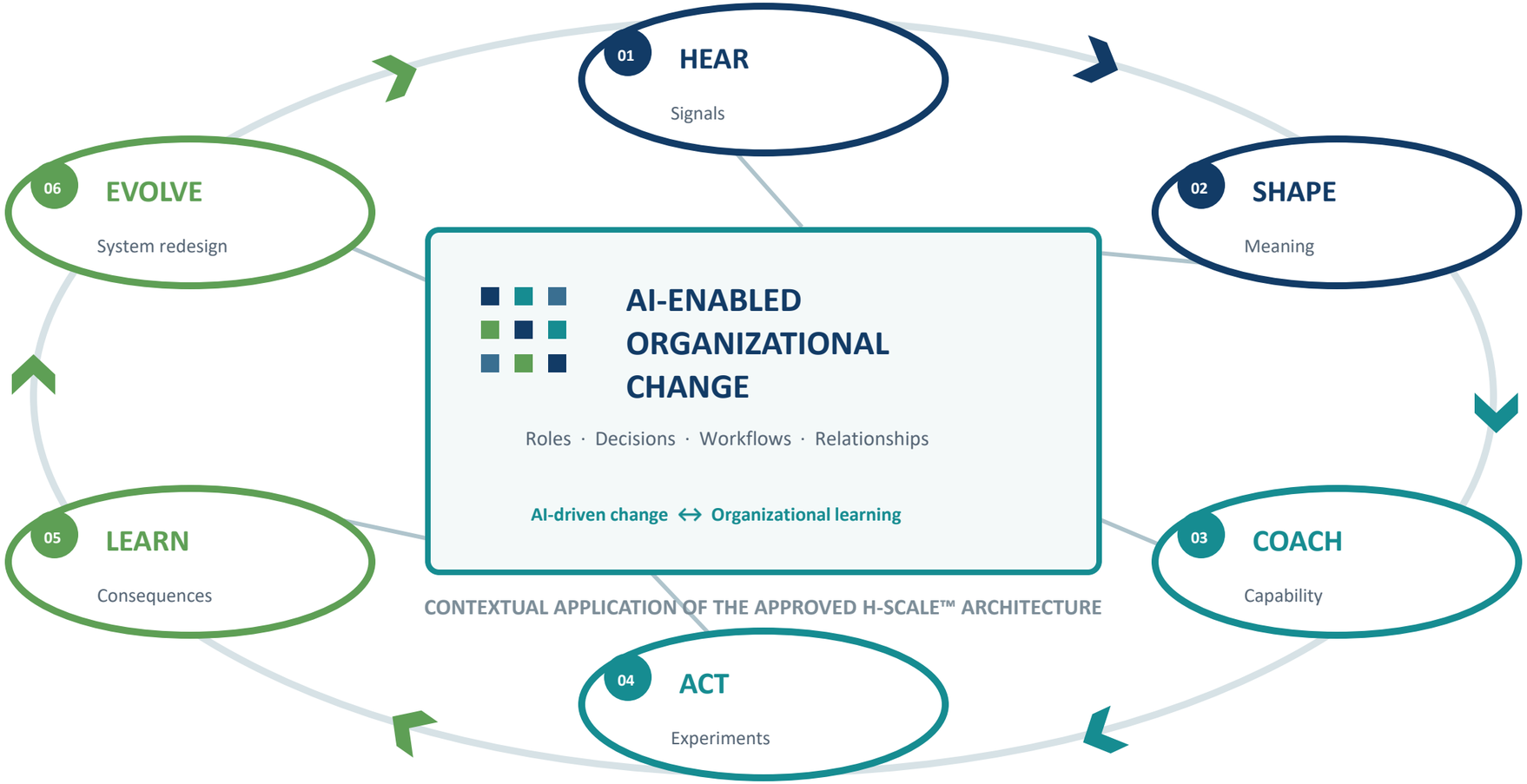


MEANING OF +
Positive causal relationship; not necessarily a positive outcome..

BOUNDARY CONDITION R1
Learning can enhance adaptation or entrench erroneous assumptions..

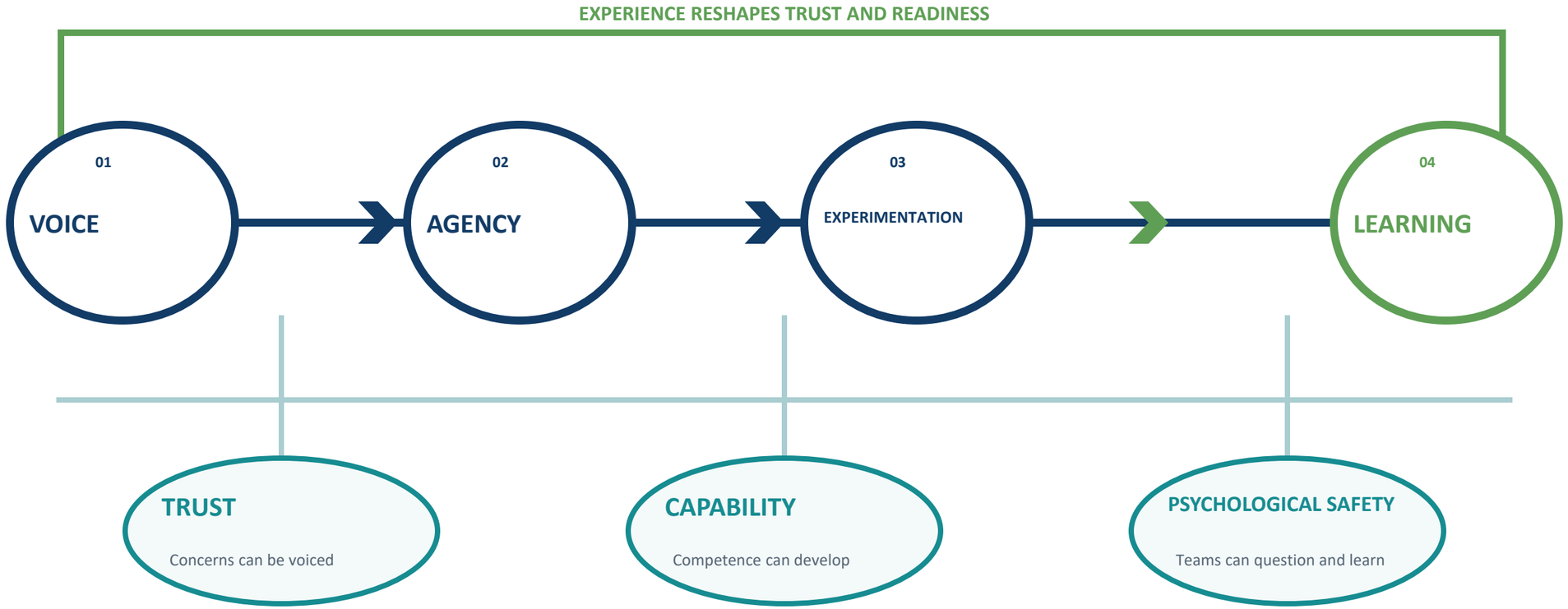
Action changes the system—and the changed system must be heard again.

AI Changes the System; H-SCALE™ Enables the Organization to Learn with It



Adaptive AI integration is a recurring learning challenge—not a one-time implementation event.

Adaptive Learning Requires Trust, Agency, and Psychological Readiness

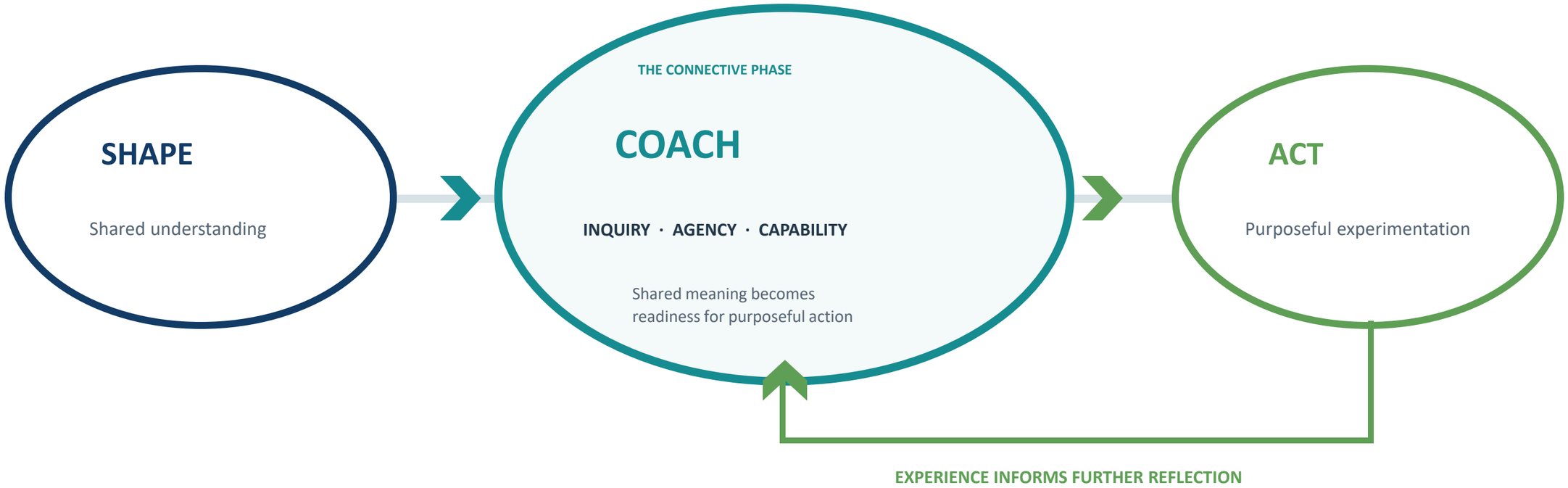


ENABLING CONDITIONS ACROSS THE H-SCALE™ LEARNING CYCLE

Without supportive human conditions, signals remain unheard and learning remains incomplete.

COACHING AS THE BRIDGE TO ACTION

Coaching Translates Shared Understanding into Agency and Experimentation

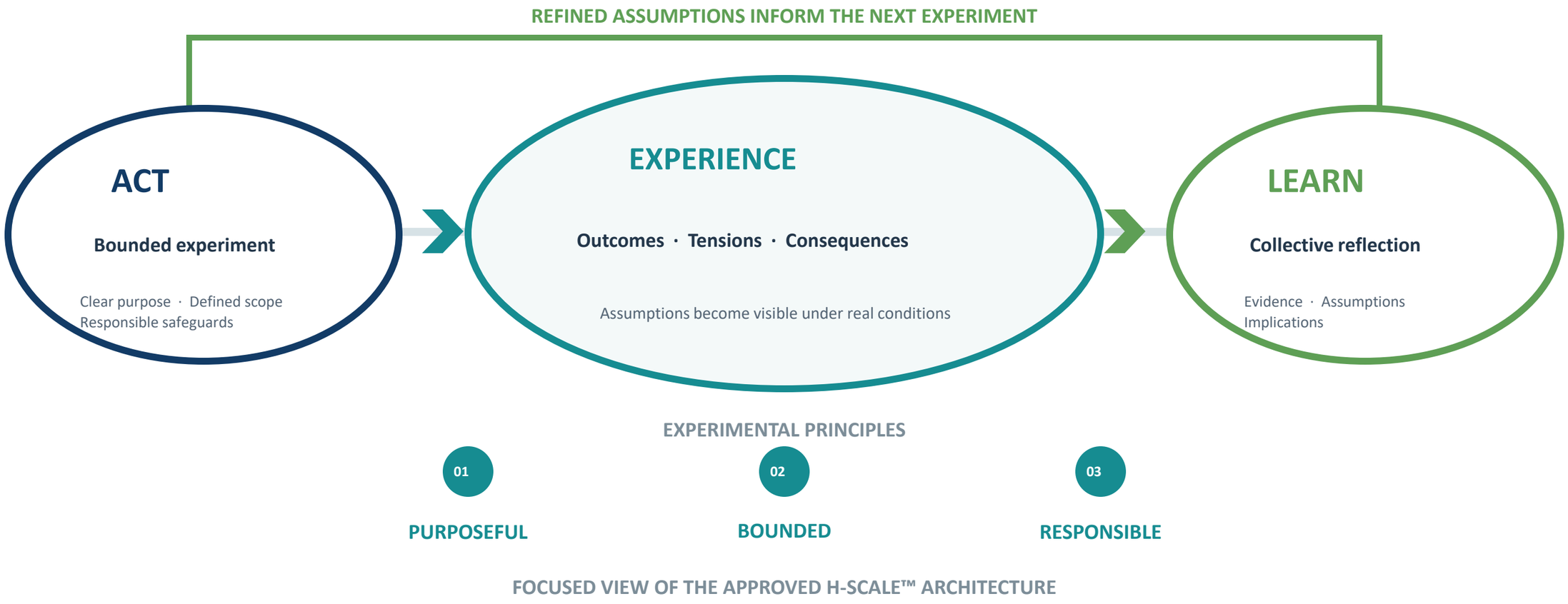


FOCUSED VIEW OF THE APPROVED H-SCALE™ ARCHITECTURE

Understanding produces adaptation when people develop the capacity to act upon it.

EXPERIMENTATION AS A LEARNING MECHANISM

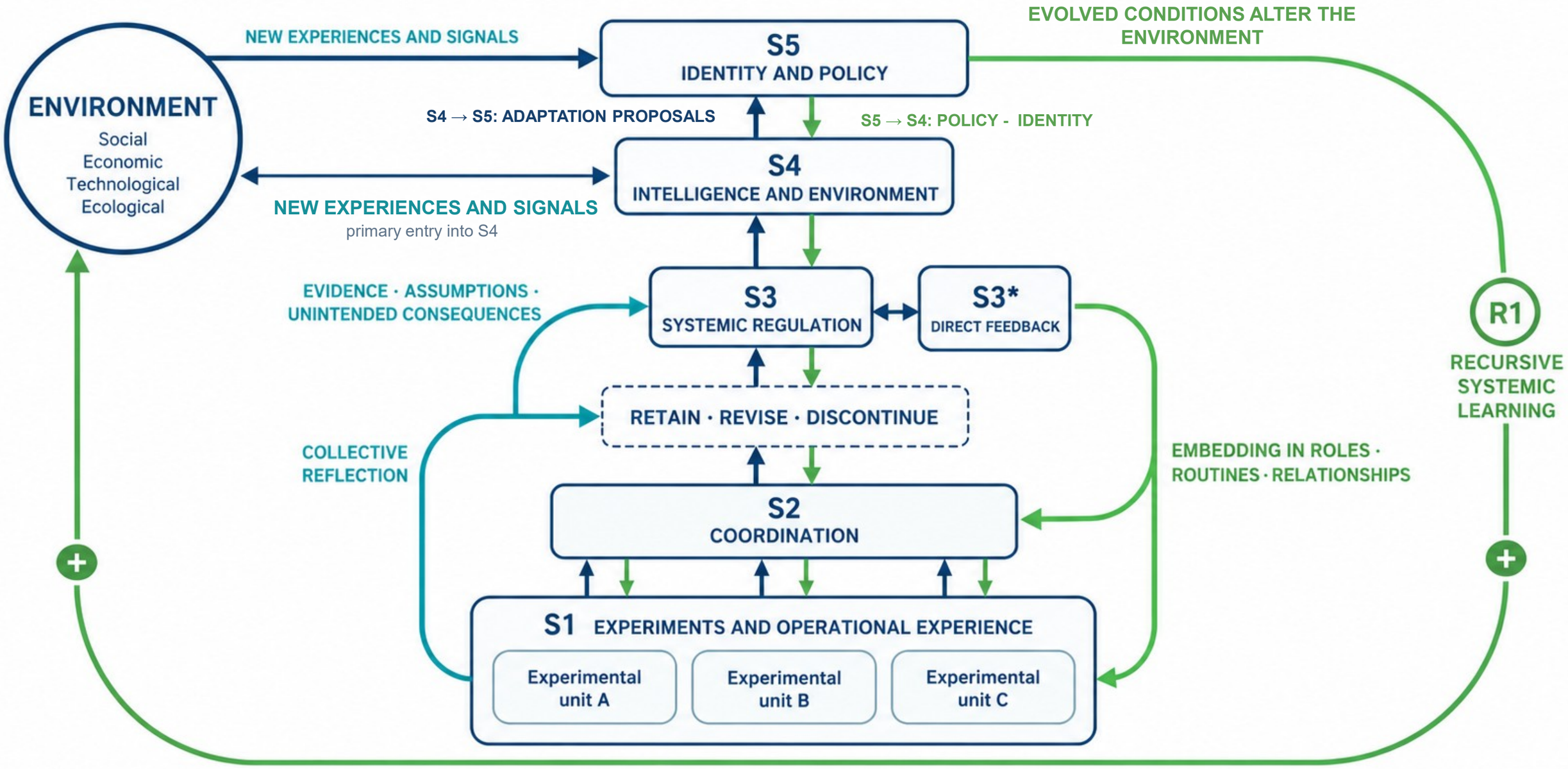
Bounded Experimentation Turns Action into Evidence for Learning



Experimentation makes assumptions visible and adaptation evidence-informed.

H-SCALE™

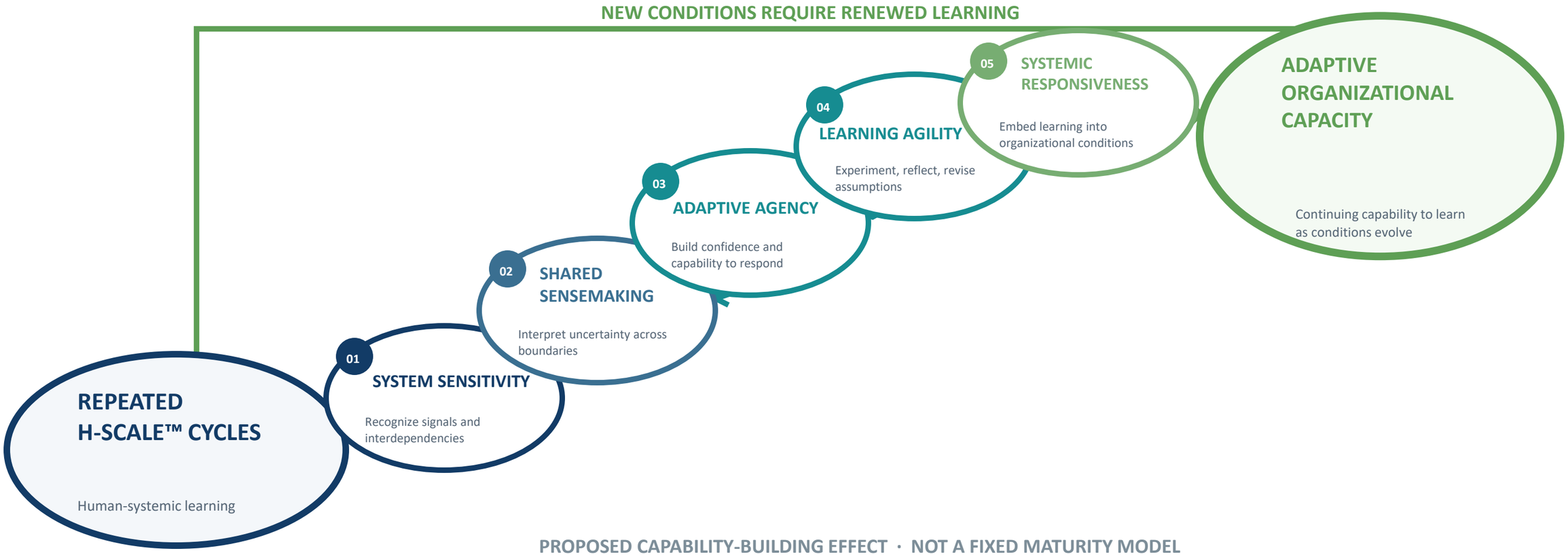
LEARN → EVOLVE



VSM theoretical foundation: Beer, S. (1981), *Brain of the Firm* · Beer, S. (1985), *Diagnosing the System for Organizations*.

ADAPTIVE CAPACITY AS A SYSTEMIC CAPABILITY

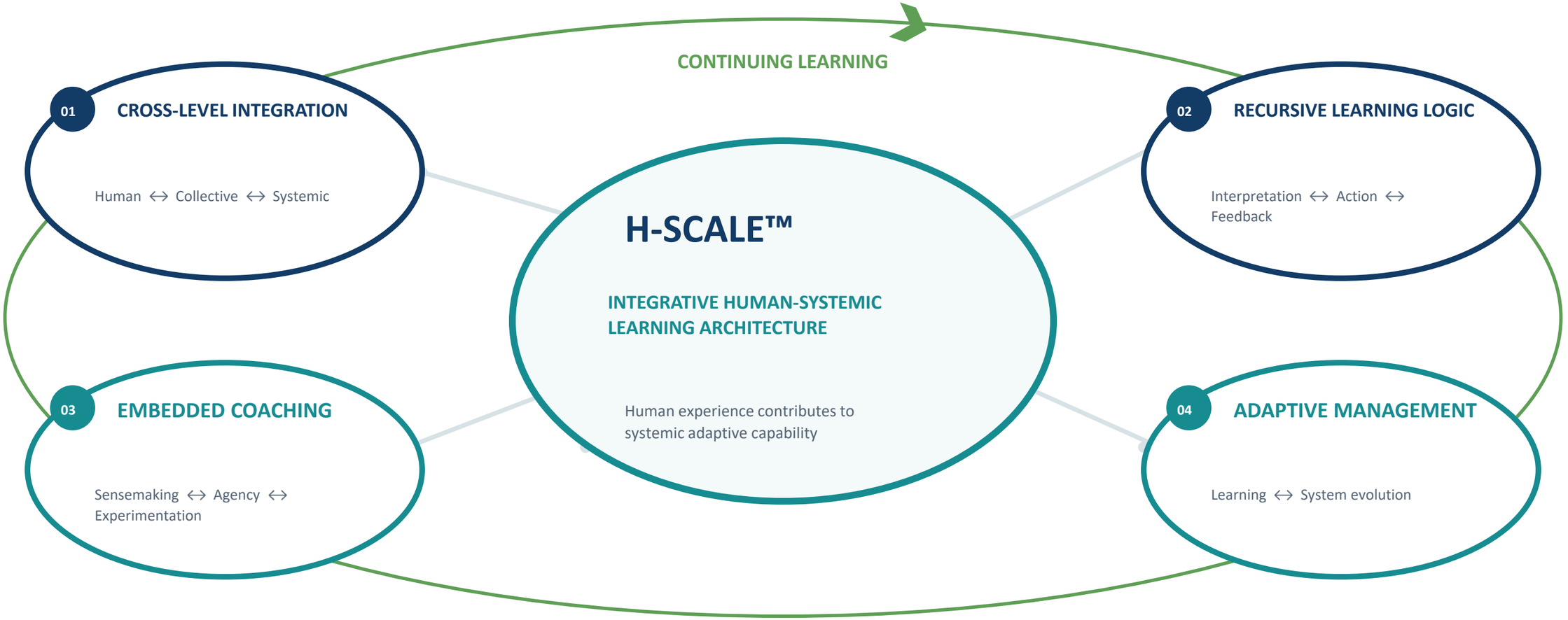
Repeated Learning Cycles Build the Capacity to Adapt Continuously



Adaptive capacity develops through repeated cycles of human-systemic learning.

THE SCHOLARLY CONTRIBUTION OF H-SCALE™

H-SCALE™ Connects Human Development, Organizational Learning, and Systemic Adaptation



CONCEPTUALLY GROUNDED · EMPIRICALLY TESTABLE · NOT YET EMPIRICALLY VALIDATED

H-SCALE™ connects established insights across levels without replacing its foundational theories.

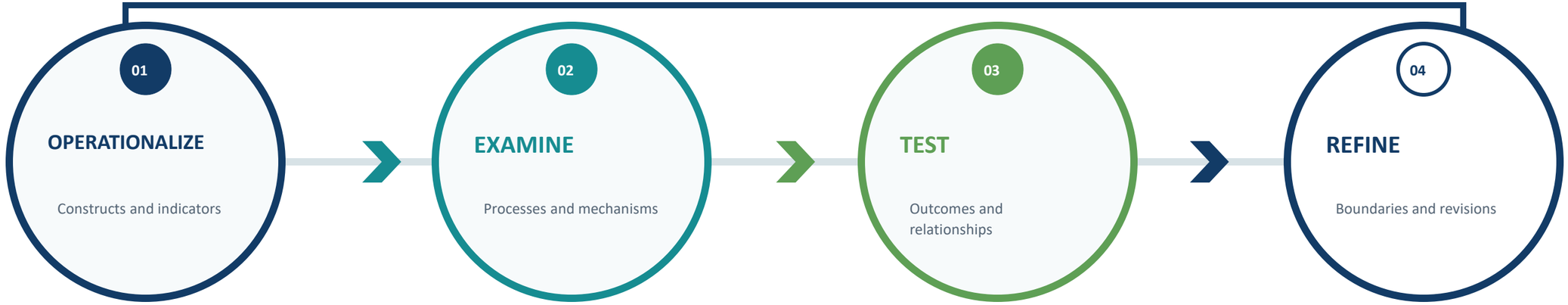
RESEARCH AGENDA AND EMPIRICAL VALIDATION

From Conceptual Architecture to an Empirically Testable Model

CENTRAL RESEARCH QUESTION

How—and under what conditions—do recursive H-SCALE™ cycles transform human experience into systemic adaptive capability?

EVIDENCE INFORMS MODEL DEVELOPMENT



METHODOLOGICAL STRANDS

01 LONGITUDINAL CASE STUDIES

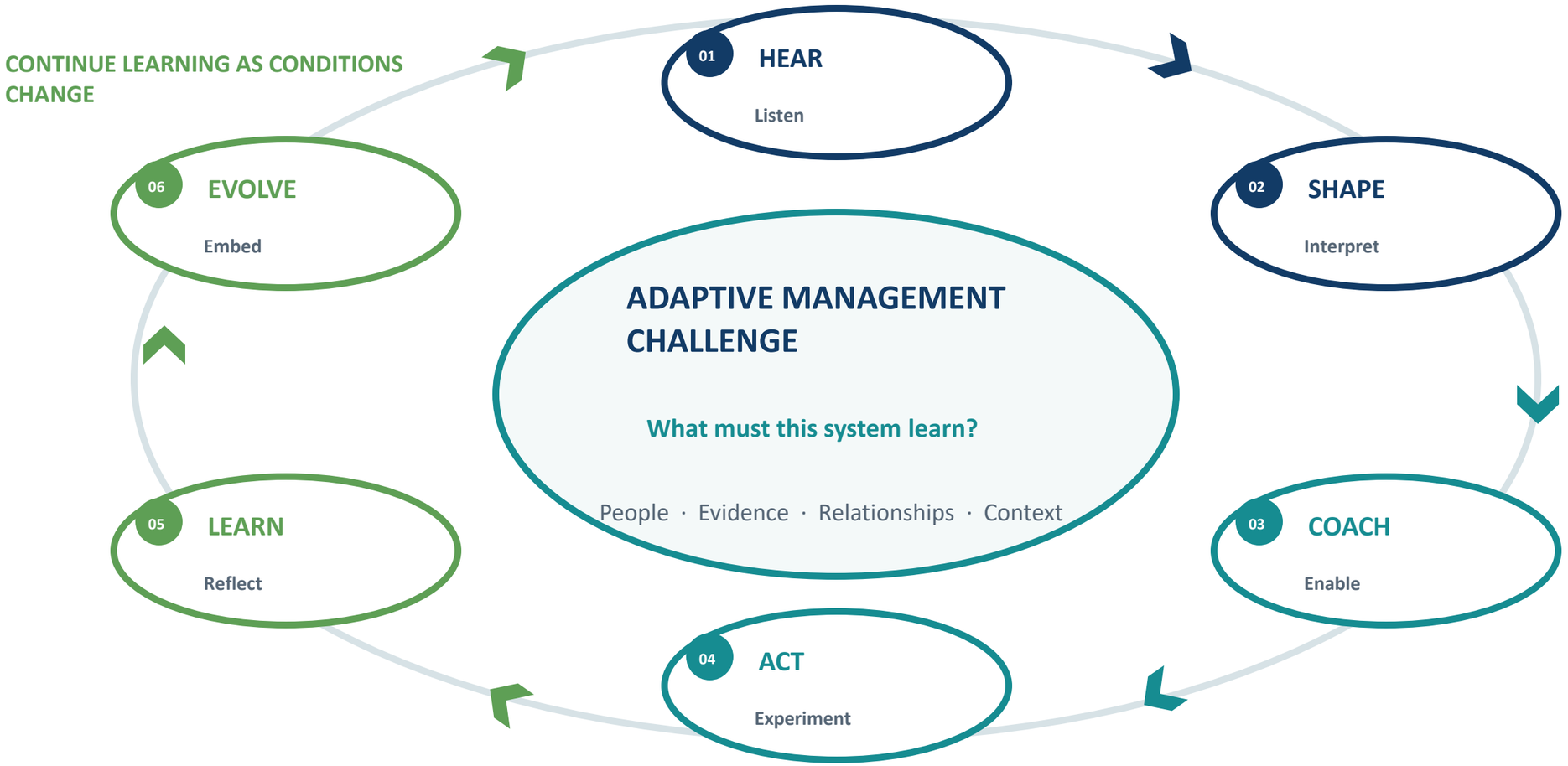
02 MIXED METHODS

03 COMPARATIVE RESEARCH

CUMULATIVE RESEARCH PROGRAMME · EVIDENCE MAY SUPPORT, QUALIFY, OR CHALLENGE THE ARCHITECTURE

Construct development → Process evidence → Outcome testing → Model refinement

H-SCALE™ Provides a Disciplined Framework for Managing Adaptation

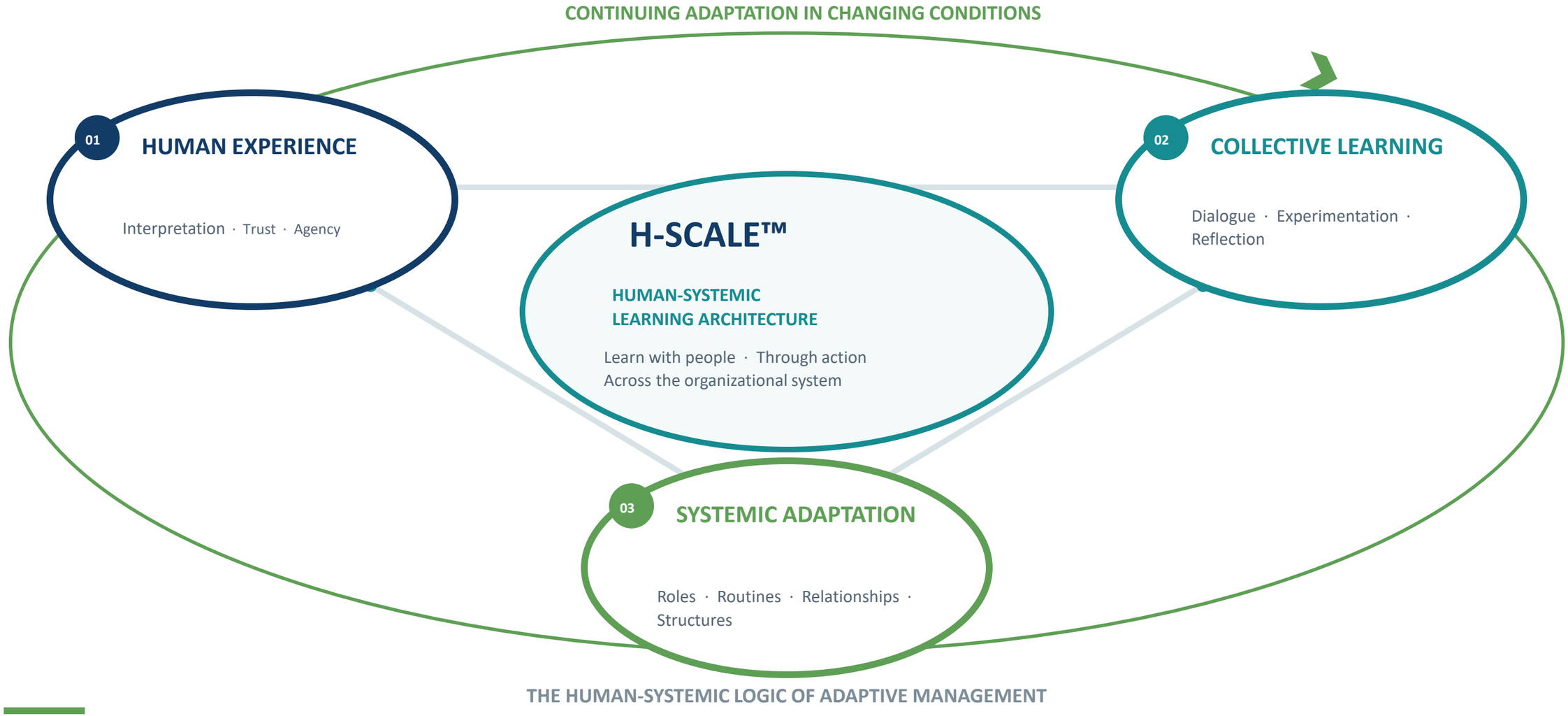


SIMPLIFIED PRACTITIONER VIEW OF THE APPROVED H-SCALE™ ARCHITECTURE

CONTEXT-SENSITIVE · PARTICIPATIVE · EVIDENCE-INFORMED · RECURSIVE

A guiding architecture—not a standardized prescription.

Adaptive Management Is the Capacity to Learn with People and Systems



A human-systemic architecture for practice, research, and continuing development

THANK YOU

H-SCALE™

A Human-Systemic Learning Architecture for Adaptive Management in the AI Era

A QUESTION TO CARRY FORWARD

“What must organizations learn—not merely implement—to remain adaptive in the AI era?”

Eleftherios Kakavoulis

Organizational Psychologist | Systems Thinking Researcher
Executive & Systemic Coach | Author | Trainer

22nd National & International HSSS Conference
Applied Systemic Management in the AI Era

UNIVERSITY OF IOANNINA

Questions & Discussion

Email: Lkakavoulis@gmail.com

References — APA 7

Argyris, C., & Schön, D. A. (1978). *Organizational learning: A theory of action perspective*. Addison-Wesley.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1–26. https://doi.org/10.1146/annurev.psych.52.1.1 Annual Reviews

Bateson, G. (1972). *Steps to an ecology of mind*. Chandler.

Beer, S. (1981). *Brain of the firm* (2nd ed.). John Wiley & Sons.

Beer, S. (1985). *Diagnosing the system for organizations*. John Wiley & Sons.

Cox, E., Bachkirova, T., & Clutterbuck, D. (Eds.). (2018). *The complete handbook of coaching* (3rd ed.). SAGE.

Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. *Academy of Management Review, 24*(3), 522–537. https://doi.org/10.5465/amr.1999.2202135 journals.aom.org

Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly, 44*(2), 350–383. https://doi.org/10.2307/2666999

Edmondson, A. C. (2011). Strategies for learning from failure. *Harvard Business Review, 89*(4), 48–55.

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal, 21*(10–11), 1105–1121. https://doi.org/10.1002/1097-0266(200010/11)21:10/11%3C1105::AID-SMJ133%3E3.0.CO;2-E Wiley Online Library

Faraj, S., Pachidi, S., & Sayegh, K. (2018). Working and organizing in the age of the learning algorithm. *Information and Organization, 28*(1), 62–70. https://doi.org/10.1016/j.infoandorg.2018.02.005

Fiol, C. M., & Lyles, M. A. (1985). Organizational learning. *Academy of Management Review, 10*(4), 803–813. https://doi.org/10.5465/amr.1985.4279103 Academy of Management Review

Grant, A. M. (2012). An integrated model of goal-focused coaching: An evidence-based framework for teaching and practice. *International Coaching Psychology Review, 7*(2), 146–165.

Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human–AI symbiosis in organizational decision making. *Business Horizons, 61*(4), 577–586. https://doi.org/10.1016/j.bushor.2018.03.007 ideas.repec.org

Kakavoulis, E. (2026a). *H-SCALE™: A human-systemic learning architecture for adaptive management in the AI era* [Conference presentation].

Kakavoulis, E. (2026b). *The H-SCALE™ way: Human-systemic coaching for adaptive learning and execution* [Unpublished manuscript].

Kellogg, K. C., Valentine, M. A., & Christin, A. (2020). Algorithms at work: The new contested terrain of control. *Academy of Management Annals, 14*(1), 366–410. https://doi.org/10.5465/annals.2018.0174 conference.management.ase.ro

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

Raisch, S., & Krakowski, S. (2021). Artificial intelligence and management: The automation–augmentation paradox. *Academy of Management Review, 46*(1), 192–210. https://doi.org/10.5465/amr.2018.0072 journals.aom.org

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68 PubMed

Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization* (Rev. ed.). Doubleday.

Shrestha, Y. R., Ben-Menahem, S. M., & von Krogh, G. (2019). Organizational decision-making structures in the age of artificial intelligence. *California Management Review, 61*(4), 66–83. https://doi.org/10.1177/0008125619862257

Sitkin, S. B. (1992). Learning through failure: The strategy of small losses. *Research in Organizational Behavior, 14*, 231–266. THE STRATEGY OF SMALL LOSSES

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7%3C509::AID-SMJ882%3E3.0.CO;2-Z Wiley Online Library

Vakola, M. (2014). What's in there for me? Individual readiness to change and the perceived impact of organizational change. *Leadership & Organization Development Journal, 35*(3), 195–209. https://doi.org/10.1108/LODJ-05-2012-0064 Emerald Publishing

Weick, K. E. (1995). *Sensemaking in organizations*. SAGE.

Weick, K. E., & Sutcliffe, K. M. (2015). *Managing the unexpected: Sustained performance in a complex world* (3rd ed.). Jossey-Bass.