HEART OF CHANGE FRAMEWORK

DEVELOPMENT AND VALIDATION HISTORY

THECHANGELAB
FROM THE MICHELLEMCQUAID GROUP

BACKGROUND AND THEORETICAL FOUNDATIONS

The HEART of Change framework represents the culmination of two decades of applied research in organizational change, positive psychology, and complex systems science. Its development follows a systematic progression from theoretical foundations through practical application to empirical validation.

THEORETICAL FOUNDATION (2005-2022)

The framework's theoretical underpinnings emerged from Dr Michelle McQuaid's studies at the University of Pennsylvania's Master of Applied Positive Psychology program under Dr. Martin Seligman, focusing on the neurobiological and psychological factors that support human flourishing during periods of transition. Subsequent doctoral research with Dr. David Cooperrider at the University of Twente examined the application of Appreciative Inquiry and complex systems theory to organizational change, resulting in a dissertation on "creating positive disruptions" in workplaces.

Key theoretical influences included:

- POSITIVE PSYCHOLOGY
  Seligman, Deci & Ryan, Peterson, McGonigal, Biswas-Diener, Dweck, Harris, Emmons, Snyder, Lopez, Baumeister, Fredrickson, Csikszentmihalyi, Lyubomirsky, Emmons, Duckworth, Neff, Clifton, Rath, Linley, Niemiec, Steger, Langer, Jarden, Achor, Fogg, Desteno, Buckingham, Frankl, Kashdan, Mangle.
- POSITIVE ORGANIZATIONAL SCHOLARSHIP
  Schein, Drucker, Cameron, Dutton, Baker, Quinn, Grant, Amabile, Edmondson, Barsade, O'Neill, Worline, Spreitzer, Hoffer Gittel, Heen.
- APPRECIATIVE INQUIRY
  Cooperrider, Magruder Watkins, Bushe, Godwin, Fry, Stavros, Ludema, Whitney, Bright.
- COMPLEX ADAPTIVE SYSTEMS THEORY
  Prigogine, Kauffman, Senge, Block, Pascale, Meadows, Wheatley, Holman, Stacey, Holman, Owen, Heffernan, Kern, Reynolds, Johnson, Cole.
- NEUROSCIENCE OF CHANGE
  Feldman Barrett, Prochaska, Hanson, Siegel, Breuning, Porges, Lieberman, Rock.

From 2016 – 2022 Michelle was fortunate to interview many of these researchers about their work and publish these conversations on the Making Positive Psychology Work podcast.

APPLIED RESEARCH (2010-2023)

Over thirteen years, these theoretical foundations were systematically tested and refined through:

- 50+ organizational change interventions across multiple sectors and countries
- Work with over 100,000 participants globally
- Iterative action research methodology
- Interviews with leading researchers
- Independent evaluation of outcomes

This extended period of field testing identified factors that positively influenced change outcomes across diverse contexts, cultures, and organizational types. These factors were progressively refined through researcher interviews, practitioner feedback and outcome analysis.

FRAMEWORK DEVELOPMENT (2023-2025)

Five empirically-derived factors were formalized into the HEART of Change framework:

H

HONOR FEELINGS: Recognize difficult emotions as valuable data that guide learning and growth, rather than problems to suppress or fix.

Evidence-based practices: Emotional intelligence, psychological safety, self-compassion, compassion, boundaries, and uncertainty tolerance.

E

ENGAGE PURPOSEFULLY: Turn announcements into conversations that help people discover what they care enough to own.

Evidence-based practices: Purpose, hope theory, self-determination theory, accountability, systems thinking and self-organization.

A

APPRECIATE STRENGTHS: Build confidence during uncertainty by helping people leverage what they're good at and enjoy doing to sustain momentum.

Evidence-based practices: Strengths development, flow, gratitude, feedback, self-efficacy, and collective efficacy.

R

REACH OUT: Create the psychological safety people need to willingly ask for and offer help, preventing the isolation that leads to quiet cracking and burnout.

Evidence-based practices: Growth mindset, social capital, social networks, and generosity.

T

TAKE TINY STEPS: Encourage people to break overwhelming change into manageable actions that make it easier to access flexible and adaptive thinking.

Evidence-based practices: polarity thinking, the progress principle, tiny habits, generative learning, grit.

(*See appendix for a more detailed academic explanations.)

Each element is grounded in established psychological constructs and supported by extensive empirical literature.

The survey instrument is freely available for anyone to complete and immediately receive a personalized report of their results at: **www.thechangelabs.com**.

MEASURE DEVELOPMENT PROCESS (2024 - 2025)

The HEART of Change assessment tool was developed following established psychometric best practices:

1 ITEM GENERATION

Initial item pool created based on:

- Theoretical constructs underlying each HEART element
- Analysis of qualitative data from change interventions
- Adaptation of validated items from related measures (with permissions)
- Expert review by organizational psychologists

2 PILOT TESTING (N=100+)

- Initial psychometric testing
- Exploratory factor analysis confirming five-factor structure
- Internal consistency analysis (Cronbach's a > 0.7 for all subscales)
- Item refinement based on statistical and conceptual criteria

3 VALIDATION STUDIES

Australia July 2025 (n=1,000+)

- Independent data collection by research agency
- Representative sample of Australian workers
- Confirmatory factor analysis supporting hypothesized structure
- Convergent validity with established measures
- Test-retest reliability assessment

A summary of the findings can be found here.

United Stated December 2025 (to be completed n=1,000+)

- Independent data collection by research agency
- Representative sample of US workers

CURRENT STATUS

The HEART of Change framework and associated assessment tool represent a rigorously developed, theoretically grounded, and empirically validated approach to measuring change readiness and capability. The measure demonstrates:

- Strong psychometric properties
- Clear factor structure
- Evidence of reliability and validity
- Practical utility across diverse organizational contexts

The framework builds upon established research traditions while addressing contemporary challenges in organizational change, particularly the increased pace and complexity of change in modern work environments.

RESEARCH TEAM CREDENTIALS

DR MICHELLE MCQUAID

Creator and Principal Investigator

- PhD in Organizational Behavior (University of Twente), Masters of Applied Positive Psychology (University of Pennsylvania)
- 20+ years experience in organizational research and practice
- Published author in organizational psychology and positive psychology
- Certified in psychometric assessment development

DR STEWART DONALDSON

Research Scientist (Measurement & Evaluation)

- Distinguished University Professor: PhD in Psychology (Organizational Behavior & Evaluation Research, Claremont Graduate University)
- 30+ years experience in positive psychology, organizational research, and evaluation science
- Published author of 20+ scholarly books and 200+ peer-reviewed articles in organizational and positive psychology
- Past President, American Evaluation Association; recognized with multiple lifetime achievement awards in evaluation and positive psychology

DR SCOTT DONALDSON

Research Scientist (Measurement & Evaluation)

- Assistant Professor and applied positive psychology researcher: PhD in Evaluation and Applied Research Methods (Claremont Graduate University), MS in Applied Psychology (USC)
- 10+ years experience in positive psychology, wellbeing research, and advanced psychometric evaluation
- Published author of highly cited research on work-related wellbeing, including development of the PERMA+4 model and Positive Functioning at Work Scale
- Specialist in designing, validating, and evaluating workplace wellbeing and positive functioning interventions using evidence-based, quantitative methodologies

APPENDIX: THEORETICAL FOUNDATIONS OF HEART FACTORS

HONOR FEELINGS

During organizational change, people typically suppress or judge difficult emotions as "unprofessional," yet studies suggest this emotional avoidance intensifies anxiety and creates psychological barriers that prevent adaptive thinking and collaborative problem-solving. When teams must hide their true reactions to change, trust erodes, and organizations lose crucial information about what's working and what isn't.

The Honor Feelings factor draws from interpersonal neurobiology and polyvagal theory research on emotional regulation and threat detection systems. Siegel's interpersonal neurobiology explains that the brain continuously evaluates safety cues, determining whether individuals feel "safe enough" to approach or should avoid potential threats (Siegel, 1999, 2019). Porges' polyvagal theory demonstrates that this assessment activates either a connection circuit (enabling curiosity, creativity, compassion, courage, confidence, clarity, collaboration, and calm) or protection circuit (triggering fight, flight, freeze, fawn, or flop responses). Porges' research shows that feelings of safety emerge from cues of safety that downregulate threat reactions, while neuroception becomes biased toward threat when we're defensive (Porges, 2011). Hayes' ACT research reveals the psychological mechanism: emotional avoidance sends internal threat cues, keeping us trapped in protection circuits, while psychological flexibility - accepting emotions as informational data - functions as an internal cue of safety, enabling ventral vagal activation necessary for connection and adaptive functioning (Hayes, Strosahl, & Wilson, 2003; Kashdan & Rottenberg, 2010).

This research demonstrates that honoring feelings creates the neurological conditions for feeling safe enough to engage with uncertainty. When organizations make space for emotional expression, they signal safety to the nervous system, enabling individuals to stay present with difficult emotions without triggering protection responses. Edmondson's research on psychological safety demonstrates that when people believe they can speak up, ask questions, and admit mistakes without risk of punishment or humiliation, teams perform better and learn more effectively (Edmondson, 1999, 2012). This transforms emotions from threats to be eliminated into valuable information about navigating uncertainty together.

MEASUREMENT RATIONALE:

The scale measures support for psychological flexibility through a systems lens:

- **Individual:** "I expressed my true thoughts and feelings about the changes"
- **Team:** "My team spoke honestly about how we felt about the changes"
- **Organizational:** "My workplace acknowledged that uncertainty during change can trigger a range of emotions"

ENGAGE PURPOSEFULLY

Organizations often struggle with change because they treat engagement as compliance rather than collaboration, inadvertently activating threat responses that limit the cognitive flexibility needed for adaptation. When change feels imposed rather than co-created, individuals lose the agency and meaning-making capacity that enables sustainable commitment to new ways of working.

The Engage Purposefully factor integrates complexity science research on self-organization with dialogue theory and self-determination research. Nobel Prize winner Prigogine's work on dissipative structures demonstrates that living systems flourish through continuous information exchange with their environment, self-organizing into increasingly complex adaptive states when disturbance reaches optimal levels (Prigogine, 1998). Kauffman's research on complex adaptive systems reveals that self-organization emerges naturally at "the edge of chaos" - the permeable zone between order and disorder where components are no longer locked in place but excitation hasn't dissolved the system entirely (Kauffman, 1995). Wheatley's synthesis shows that in human systems, this self-organization requires genuine dialogue that creates new information through collective meaning-making rather than information transmission (Wheatley, 1992). Frankl's logotherapy establishes that meaning-seeking is humanity's primary motivational force, requiring personal discovery rather than imposed rationales (Frankl, 1985). Owen's research on self-organizing systems demonstrates that sustainable engagement emerges when people can identify "what they care enough to own" within change initiatives, creating voluntary ownership rather than mandated compliance (Owen, 2008).

This research reveals how purposeful engagement creates the informational and motivational conditions for adaptive self-organization. When organizations provide genuine dialogue opportunities, support personal meaning-making, and invite voluntary ownership, they enable the distributed intelligence and collective creativity that complex change requires while honoring the neurobiological need for agency and connection.

MEASUREMENT RATIONALE:

The scale measures meaningful participation through a systems lens:

- **Individual:** "I engaged in meaningful conversations about the changes"
- **Team:** "My team had meaningful conversations about the changes"
- **Organizational:** "My workplace involved us in meaningful conversations about changes affecting our work"

APPRECIATE STRENGTHS

During change, organizations typically focus on gaps and problems, inadvertently reinforcing deficit thinking that increases anxiety and diminishes confidence when people need to feel capable. This problem-focused approach triggers threat detection systems, limiting access to the creative thinking and energy needed for adaptation.

The Appreciate Strengths factor integrates attentional research on negativity bias with energy systems theory and flow science. Baumeister's research demonstrates that human brains are evolutionarily wired with a negativity bias where "bad is stronger than good," causing people to attend more readily to threats, weaknesses, and failures than to capabilities and opportunities (Baumeister et al., 2001). Cooperrider's positive organizational scholarship reveals that this bias creates organizational energy drains where 80% of attention focuses on fixing problems while only 20% builds on existing capabilities, systematically depleting rather than generating the psychological resources needed for adaptation (Cooperrider & Godwin, 2011). Fredrickson's broaden-and-build theory shows that positive emotions triggered by strengths recognition literally expand cognitive scope, broadening peripheral vision and flooding the brain with dopamine and serotonin to create new neural connections essential for creative problem-solving (Fredrickson, 2013). Csikszentmihalyi's flow research demonstrates that when capabilities align with environmental demands, individuals enter optimal states of engagement where they feel energized rather than depleted, creating upward spirals of confidence and performance (Csikszentmihalyi, 2000). Cole's energy systems research shows that this productive energy spreads throughout organizations, creating contagion effects that amplify collective capacity for handling uncertainty (Cole, Bruch, & Vogel, 2012).

This research reveals how appreciating strengths creates the neurobiological and energetic conditions for sustained adaptation. When organizations help people identify and calibrate their capabilities, they shift attentional focus from deficit to asset, generating the psychological safety, creative thinking, and sustainable energy needed to navigate uncertainty while building collective confidence.

MEASUREMENT RATIONALE:

The scale measures strengths recognition and utilization through a systems lens:

- **Individual:** "I used my strengths to contribute meaningfully towards the changes"
- **Team:** "My team recognized and utilized our individual and collective strengths to navigate the changes"
- **Organizational:** "My workplace clearly communicated how we can use our strengths to navigate changes"

REACH OUT

Change often isolates people as they struggle privately with new demands and doubts about their capability, yet asking for help can feel like admitting failure. This isolation perpetuates stress responses and limits access to collective wisdom needed for adaptation, creating a paradox where the support people most need becomes least accessible.

The Reach Out factor integrates social cognitive neuroscience research on belonging with mindset theory and help-seeking barriers research. Lieberman's social cognitive neuroscience demonstrates that "social pain and pleasure make use of the same neural machinery as physical pain and pleasure," creating powerful motivational drives to avoid rejection, which explains why isolation during change triggers genuine distress responses that impair adaptation (Lieberman, 2013). Baker's research reveals that people systematically underestimate others' willingness to help by up to 50%, creating unnecessary barriers to support-seeking because they fear imposing on others or being seen as incompetent, when in reality help requests strengthen relationships and signal trust (Baker, 2019). Dweck's growth mindset research reveals that beliefs about ability development determine help-seeking behavior, with fixed mindsets creating shame around struggle while growth mindsets reframe challenges as learning opportunities that make support-seeking safe (Dweck, 2002; Mangels et al., 2006). Dutton's research on high-quality connections demonstrates that supportive interactions release oxytocin, improve vagal tone, and create upward energy spirals that enhance both individual resilience and collective capacity (Dutton, 2003). Grant's research on sustainable giving reveals how "self-protective givers" prevent collaborative burnout by aligning helping with strengths and managing support strategically, ensuring help-seeking systems remain viable rather than depleting key contributors (Grant, 2013; Grant & Rebele, 2017).

This research reveals how reaching out creates the neurobiological and social conditions for collective adaptation during uncertainty. When organizations normalize struggle, make help-seeking safe, and create sustainable support systems, they transform change from individual isolation into collaborative capacity-building that strengthens both relationships and collective resilience.

MEASUREMENT RATIONALE:

The scale measures social support and help-seeking through a systems lens:

- **Individual:** "I asked for help when I needed it around the changes"
- **Team:** "My team reached out to others for help to navigate the uncertainty created by the changes"
- **Organizational:** "My workplace provided clear pathways to connect with others for support during changes"

TAKE TINY STEPS

Complex change is inherently unpredictable, yet organizations often respond with ambitious timelines and detailed implementation plans that assume outcomes can be controlled and predetermined. This approach paradoxically creates fragility because it reduces the adaptive capacity needed to respond to the inevitable surprises that emerge when organizations interact with their environments within in and around them.

The Take Tiny Steps factor integrates complexity science research on unpredictability with polarity management theory, behavior science, and learning systems research. Wheatley's synthesis of complexity science demonstrates that "the myths that prediction and control are possible" must be abandoned because living systems exist in continuous exchange with their environment, creating inherently unpredictable outcomes that emerge through self-organization rather than predetermined plans (Wheatley, 1992). Prigogine's research on dissipative structures shows that living systems navigate "bifurcation points" where outcomes cannot be predicted in advance, requiring adaptive capacity rather than rigid adherence to plans (Prigogine, 1998). Johnson's polarity management research demonstrates that complex change presents ongoing tensions to manage rather than problems to solve permanently, requiring "both/and" approaches that honor competing needs without false choice paralysis (Johnson, 1992). Fogg's behavior research shows that sustainable change emerges when actions match current capabilities, preventing overwhelm while building competence through manageable challenges (Fogg, 2020). Amabile's Progress Principle reveals that small wins create psychological momentum by rewiring motivation circuits through incremental satisfaction, enabling sustained adaptation rather than burnout from delayed outcomes (Amabile & Kramer, 2011). Senge's learning systems research shows that adaptive organizations thrive through sensing and responding to feedback rather than plan execution, because intelligence emerges from iterative learning rather than predetermined solutions (Senge, 1990).

This research reveals how incremental action builds adaptive capacity for navigating unpredictable complexity. When organizations focus on developing learning capability through manageable steps and responsive feedback rather than making change "stick," they create antifragile systems that grow stronger with uncertainty rather than breaking under pressure, transforming change from a problem to solve into ongoing capacity to evolve with whatever emerges.

MEASUREMENT RATIONALE:

The scale measures incremental action and progress through a systems lens:

- **Individual:** "I took actions that helped move the changes forward"
- **Team:** "My team broke down the changes into manageable steps we could take without feeling overwhelmed"
- **Organizational:** "My workplace broke down change goals into small wins that built confidence and learning"

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WANT MORE?

FREE - NAVIGATING CHANGE TOOLBOX

Build the psychological safety needed for successful change initiatives. This free toolkit equips you with the HEART framework, assessment tools, and practical conversation templates that help teams navigate uncertainty together without quietly cracking or burning out.

FREE – HEART OF CHANGE SURVEY TOOL

Get personalized insights on navigating change more effectively in just 5 minutes. The survey measures five key areas – **H**onoring feelings, **E**ngaging in dialogue, **A**ppreciating strengths, **R**eaching out for support, and **T**aking tiny steps. Receive an immediate report with practical actions to make change easier.

FREE – TINY NUDGES FOR YOUR NERVOUS SYSTEM

Calm the “Oh FUD!” moments of fear, uncertainty, and doubt that hijack clear thinking during change. This free video series teaches evidence-based techniques you can use anywhere to steady yourself when uncertainty strikes. Includes downloadable playsheets with specific methods that work directly with your nervous system.

LEADING HEART OF CHANGE MASTERCLASS

Develop neurologically-informed skills to help people move through uncertainty without quietly cracking or burning out. This masterclass provides assessment tools, conversation templates, and ready-to-use micro-practices you can co-brand and implement immediately. Perfect for leaders, champions, and practitioners supporting people through change.