

# CHANGE: HOW IT REALLY HAPPENS

CHANGE. NEUROSCIENCE. COMPLEXITY SCIENCE.

*"Self-organization provides a powerful new model for guiding organizational change that surpasses the hierarchically controlled and resistance-busting strategies of the past."*

Goldstein, 1994



## About ChangeFusion

ChangeFusion helps organizations achieve change, define strategy, shift culture, and build the capacity of their leaders and people. We do it with hard-hitting business acumen, heart, soul, and style. Call 571.405.6798 today to learn more.

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# CHANGE: HOW IT REALLY HAPPENS

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## CHANGE IS CONSTANT.

No organization is exempt from the changing environment in which it operates and the nature of change is growing increasingly complex. In our work with executives, we hear this resoundingly confirmed. Top leaders across diverse fields describe how their business model can change overnight due to new technology, economic disruption, or customer changes and how the change they are experiencing is disruptive.

Traditional approaches to change focus on limiting or controlling it. However, our approach to change is informed by groundbreaking research in the field of complexity science, neuroscience, and organization development. From both a theoretical and a practical perspective, we see that it is the ability to successfully influence and navigate change (rather than control or limit it) that leads to top results, resiliency, and innovation in organizations.

What does this mean for change agents and business leaders? By understanding how change really happens and the science behind it, you can support your organization (and yourself) in realizing and using change for improved performance. To that end, this article explores how change occurs from the lens of neuroscience and complexity science and distills out leadership lessons for those seeking to thrive in emergent conditions and establish new patterns of behavior that support greater organization-wide success.

“All of the great leaders have had one characteristic in common: it was the willingness to confront unequivocally the major anxiety of their people in their time. This, and not much else, is the essence of leadership.”

– John Kenneth Galbraith





## NEUROSCIENCE FACT

From the perspective of neuroscience, change is about creating new “mental maps” in the brain (Rock and Page, 2009; Doidge, 2007). All individuals carry mental maps; networks of neurons that fire together automatically and hold assumptions, beliefs, and perceptions in place. These mental maps are created through the brain’s constant scanning of the world; it collects bits of data and fuses those pieces of data together to create meaning. Then, as you experience the world each day, your brain compares new data you perceive with its existing mental maps, trying to match new information into previously mapped information. Essentially, this is how you make meaning. You perceive the world through your preexisting “wiring.”

The benefit of this wiring is that for routine and familiar tasks, your brain can use less energy. Mental maps enable the brain to operate on autopilot for rote tasks, freeing up space elsewhere for more complex actions and cognition. What does this look like? Think about a time when you were driving to a familiar place using an often-traveled route and suddenly looked up to notice a building or landmark you have never seen before. “I don’t remember passing that,” you may have thought. Your mental map and hardwiring had you on “autopilot” as you drove, making the familiar trip easier but also limiting your perception of the route itself.

While many daily tasks occur on autopilot, new tasks or experiences that don’t fit into preexisting mental maps require the brain to tap into the resources the prefrontal cortex. This highly sophisticated area of the brain is an agile and powerful thinking center, capable of great cognition and meaning making. However, it also “crashes” when it is overloaded. For example, let’s say you are driving to a new and unfamiliar place. The route is tricky and requires heightened attention and awareness. After you reach your destination, you’re likely to collapse exhausted. Dynamic experiences (like change) require you demand this type of focus and attention from your prefrontal cortex. **This is why change is hard; it literally requires increased energy and effort.**



## CHANGE IS CONSTANT CONT'D.

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### LEADERSHIP LESSONS

For leaders at all levels, the take home lesson from neuroscience is clear. The best way to support change in your organization is to support others in adapting and creating new, neural pathways. While the popular way of doing this is to focus on what behaviors are "wrong" and need to change, far greater success comes from focusing on the desired new behaviors and asking future-focused questions that support others in having "moments of insight." Through practice, repetition, and positive reinforcement, you can help others change and re-wire their behavior.



## COMPLEXITY SCIENCE ON CHANGE

The field of complexity science offers another perspective on how change occurs. From this lens, change happens through the process of self-organization, or the natural ability in all complex adaptive systems to create new patterns in response to challenges or new conditions. Under the right conditions, these systems can spontaneously transform from chaos to order.

COMPLEX ADAPTIVE SYSTEMS ARE COMPRISED OF INDIVIDUALS, OR GROUPS OF INDIVIDUALS, THAT ARE DIVERSE, INTERDEPENDENT, AND CONNECTED.

What does this look like in action? Think of water. When heated, water transforms into steam. When chilled, water transforms into ice. Scientists have found that human systems (whether a individual or an organization) demonstrate this same type of spontaneous, emergent transformation. However, the predominant approach of trying to control change inhibits this capacity. This is why organizations that try to limit the forces of change often fail to adapt to their environment and lose competitively. Organizations that thrive do so by seeking out and supporting new, adaptive patterns to changing external conditions. These new patterns emerge first at the micro, individual level and then – once supported – create feedback that informs greater, system-wide patterns at a macro level.

“The most powerful processes of change occur at the micro level, where relationships, interactions, small experiments, and simple rules shape emerging patterns.”

- Eoyang & Olson

By facilitating new behavioral patterns between individuals, you can create feedback that informs and shifts overall system-wide patterns.



## NAVIGATING CHANGE: THE CHANGE DIALS™

To facilitate self-organization, seek out and navigate the conditions for change. The Change Dials™ are a tool to help you do this. The dials describe six conditions you can “tune” to either support or inhibit self-organization. While this does not give you the power to control or predict change, it helps you influence its speed and direction.



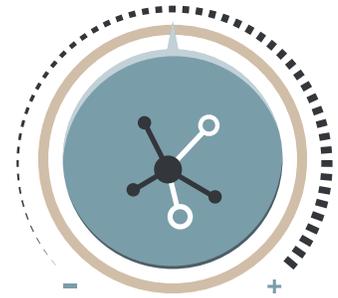
**DRIVE FOR FITNESS:**  
Felt sense of urgency

Degree of desire for something to be better or different than the current state



**DIVERSITY OF VIEWS:** Multiple voices to broaden perspective

Degree that a wide variety of perspectives, knowledge, or ideas are considered



**CONNECTIVITY:**  
Interconnectivity

Degree of quantity and quality of interconnections between stakeholders



**SAFETY:**  
Psychologically safe space

Degree of individuals willingness to take risks, experiment, or develop new ways of thinking and working



**DEGREE OF STABILITY:**  
System agility

Degree that patterns of behavior are entrenched or agile



**CONTROL:**  
System autonomy

Degree of or ability to have choice and autonomy within the system





## DIAL 1: DRIVE FOR FITNESS

Drive for fitness is the degree of desire for something to be better or different than the current state. It reflects how well the individual, group, or organization fits within its surrounding environment. Unhappy customers, declining sales, technological innovations, competitive activity, or new regulations may all create a need and desire for greater fitness and alignment with the environment.

This dial also indicates the degree of motivation in a system to adapt; it reflects the affective, cognitive, or somatic need to change. Drive for fitness indicates a driving desire for improvement. Without this drive, there is an absence of motivation for something different to occur.

Leaders often need to tune this dial up to ensure a sense of urgency is felt organization-wide for improvement and creating the best “fit” with the environment. At the same time, leaders faced with organizations that are over-reactive to external events or internal dynamics often have to tune this dial down to ensure the urgency and drive for change does not trump the need for strategic reflection and action.

### THREE WAYS TO INCREASE URGENCY IN A SYSTEM

Leaders increase urgency when an organization is comfortable with the status quo of the current state. This includes:

- Communicate and describe emerging trends, opportunities, and threats
- Provide feedback on where and how results are not meeting stakeholder expectations
- Connect organization members with external stakeholders to receive direct perspective / feedback

### THREE WAYS TO DECREASE URGENCY IN A SYSTEM

Leaders decrease urgency when an organization is overly reactive and needs to move to a more strategic stance. This includes:

- Acknowledge the pending issue and layout steps to address
- Share examples of dealing with similar issues in the past to normalize the situation
- Address and be clear and decisive about action steps





## DIAL 2: DIVERSITY OF VIEWS

Diversity of views is the second change dial. Without diverse perspectives, knowledge, or ideas, the propensity for change is reduced. Diverse perspectives increase the potential for insight and innovation. Understanding and incorporating diverse views also encourages buy-in and involvement in the change.

Traditional hierarchical structures foster silos and reduce the sharing of diverse views. To broaden views, knowledge needs to be shared across silos, levels, and the external environment. However, wide dissemination of information can also heighten differences and system-wide reactivity, leading to polarization, conflict, and fragmentation.

Leaders need to monitor and nurture the flow of diverse views, while dampening unhealthy conflict that can fragment collective understanding and action.

### THREE WAYS TO INCREASE DIVERSITY OF VIEWS

Leaders increase diversity of views when there is a need to find unique ways to solve problems. This includes:

- Set a norm of inviting and listening to diverse views
- Establish cross-group project teams to address specific issues
- Build one-on-one relationships to create comfort in sharing minority views

### THREE WAYS TO INCREASE A UNIFICATION OF VIEWS

Leaders decrease diversity of views when there is unhealthy conflict or a need to move fast and the necessary action is known. This includes:

- Emphasize the common ground that exists across diverse perspectives
- Make a decision on the issue and invite input on how to achieve it
- Allow time for all parties to build relationships





## DIAL 3: CONNECTIVITY

The connectivity dial refers to the quantity and quality of interconnection in a system. Increasing or decreasing connectivity impacts the transfer, or diffusion, of information, ideas, and resources.

Greater connectivity enables rapid transfer and sharing of ideas. Connecting disparate parts can also increase an organization's speed in adapting. At the opposite extreme, too much connectivity can lead to overtaxed networks, people, and/or groups and a lack of strategic focus in who needs to know what, when.

The most effective leadership stance is to encourage high quality connections that diffuse change rapidly and ensure information flow is also strategic and focused.

### THREE WAYS TO ENHANCE CONNECTIVITY

Leaders increase connectivity when there is a need for new ideas and/or the spread of strategies and information. This includes:

- Create cross-group teams and social connectivity
- Schedule regular cross-group meetings
- Identify and work on shared projects

### THREE WAYS TO LIMIT CONNECTIVITY

Leaders decrease connectivity when there are overburdened groups or a lack of focus the sharing of strategies and information. This includes:

- Identify single points of contact between groups
- Reduce meeting frequency
- Establish communication guidelines





## DIAL 4: SAFETY

Safety refers to how psychologically safe it is to challenge the status quo, take risks, and share divergent points of views. Increasing or decreasing safety impacts the propensity of individuals to develop new ways of thinking and working together.

Appropriate levels of safety enable dialogue that supports innovation, agility, and collaboration. In systems where safety needs to be increased, individuals feel it is unsafe to take risks, speak up, or challenge the status quo. In systems of the opposite extreme, there is a lack of authority or power to coalesce and channel diverse views and approaches into standard processes and alignment around collective forward action.

A key role of the change catalyst leader is to create a safe space for the sharing of diverse ideas and perspectives. Without appropriate levels of safety, individuals will not feel free to act or engage in the collaborative process of system-wide change and innovation. At the same time, change leaders must also maintain boundaries of authority and the need for effective collaboration, even in the lack of agreement.

### THREE WAYS TO TUNE UP SAFETY

Leaders increase safety when there is fear within the organization. This includes:

- Be explicit in inviting diverse perspectives
- Be forward-focused on ideas and solutions versus past problems
- Encourage experimentation and risk taking

### THREE WAYS TO REBALANCE SAFETY

Leaders rebalance safety when there is a need to reinforce boundaries of authority and effective collaboration. This includes:

- Establish specific times and mechanisms for input
- Adopt a debate and decide philosophy so that once decisions are made, others adhere to them
- Encourage adherence to known processes and policies that work well; hold each other accountable





## DIAL 5: DEGREE OF STABILITY

The stability dial focuses on how stable or entrenched patterns are within a system. As seen in the complexity landscape, when a system is at the edge of chaos, it is poised for transformation and small actions can produce dramatic impacts. In a stable environment, however, there is little need for change and fewer opportunities for new patterns to emerge.

To create and lead change, leaders must often disrupt and decrease stability. Once a change has been enacted, however, increasing stability can help sustain and solidify new behaviors and processes.

### THREE WAYS TO STABILIZE A SYSTEM

Leaders increase stability when there is anxiety and uncertainty in an organization. This includes:

- Define what is certain and what is uncertain
- Clarify roles, short term goals, and action steps
- Provide information and increase communication channels

### THREE WAYS TO DISRUPT A SYSTEM

Leaders decrease stability when an organization's patterns and habits are deeply embedded and reinforced, but do not align with future needs. This includes:

- Establish bold, new goals, priorities, requirements
- Reorganize a team or organization
- Increase connectivity with diverse stakeholders and/or the external environment





## DIAL 6: CONTROL

The control dial refers to the degree of system autonomy. When systems are rigidly controlled, there is less opportunity for novel ideas and approaches to emerge and be adopted. Control can stifle initiative, which is a hallmark of self-organization.

Conversely, when control is too loose, it can be difficult to build coherent patterns. Ideas and initiative fall apart before they can be tested. Change leaders must find a way to balance control in a manner that enables individual initiative, yet still sets important minimum boundaries for behavior to provide space for innovation.

### THREE WAYS TO INCREASE CONTROL

Leaders increase the control of an organization when more order and structure is needed. This includes:

- Build repeatable processes to replace ad hoc customization
- Decrease decision making authority; ensure decision-makers and processes are specified
- Establish accountability mechanisms and make sure roles and responsibilities are well defined

### THREE WAYS TO DECREASE CONTROL (OR INCREASE AUTONOMY)

Leaders decrease control when engagement is low and leaders are overburdened. This includes:

- Empower cross-organization teams to deal with critical issues
- Increase decision making authority; delegate to the lowest possible level
- Adopt simple rules to guide decisions and behavior

**LEADERSHIP LESSONS:** For change leaders at all levels, the lesson from complexity science is clear: support change by enabling new patterns of interaction to aggregate and create system-wide change. To do this, attend to the conditions that influence change (the Change Dials™) and tune them to allow for new structures to emerge.





## WHAT DO THE CHANGE DIALS™ LOOK LIKE IN ACTION?

Here is an example from our work:

**SITUATION:** This client wanted to change its culture, especially the way managers and employees engaged and interacted. A changing workforce, declining employee engagement, and a shifting external environment all combined to demanded the change. The dilemma? This change would mean new mindset, new behaviors, and new skills from everyone.

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### A VIEW OF THE DIALS IN ACTION:



**Drive for fitness: LOW**

While parts of the organization had urgency for change and desire things to be different, this view was not widespread.

**How we tuned this dial:** In partnership with this client, we amplified drive for fitness by doing a comprehensive assessment to illuminate pain points in the organization. This included interviews, focus groups, and multiple discussions with cross division leaders. Additionally, outside experts and



**Diversity of views: HIGH**

**How we tuned this dial:** In partnership with this client, we amplified diversity of views by establishing a cross-divisional Task Force to discuss the current system and co-design a new system. By bringing in diverse views from around the organization, we were able to understand the real challenges people faced in the organization and how a new performance management system could address them.



**Connectivity: LOW**

This client's hierarchical structure kept people operating in silos and limited opportunities for creative thinking about alternative ways to engage with employees. People were unhappy, but did not have the opportunity to use this dissatisfaction towards creating something new.

**How we tuned this dial:** In partnership with this client, we amplified connectivity by designing a strategic communications campaign that would reach all divisions and employees with the same information about the new system. We also designed trainings and focus groups that rolled out to every corner of the organization, bringing the same information to everyone and increasing the number of opportunities for employees to come together and share their perspectives and experiences.



### **Safety: LOW**

Under the old performance management system, employees reportedly felt little opportunity to take initiative in their growth and development, let alone ask for and receive candid feedback. As a result, there was little shared responsibility or accountability for work expectations and deliverables.

**How we tuned this dial:** In partnership with this client, we amplified safety by designing a training series focused on the manager-employee relationship and how to have meaningful, two-way conversations. By taking a deep dive into issues such as trust, power, and collaboration, we supported managers and employees in creating the safety they needed for candid feedback and shared accountability.



### **Stability: HIGH**

The old performance management system was well known and many, many years old. Everyone was used to it and could almost complete its “check the box” requirements with their eyes closed. Its patterns were entrenched.

**How we tuned this dial:** In partnership with this client, we de-amplified stability by designing a multi-year change strategy for the new performance management system. The strategy had bold, new goals, priorities, and requirements that disrupted the status quo and demanded new action from leaders and employees alike.



### **Control: HIGH**

This client had little autonomy. Employees and managers alike were not used to trying novel ideas or new approaches in performance management and went along with the old system to keep up with requirements, not necessarily because it led to the best performance outcomes.

**How we tuned this dial:** In partnership with this client, we de-amplified control by empowering the cross-divisional Task Force with authority and capability to design portions of the new system and lead its rollout in their divisions. We also held focus groups to help employees share their ideas on the change and designed trainings for them to test out new skills and ways of thinking.

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How did it end? New conversations are now heard throughout the organization. The new system completed its multi-year rollout and is enabling dialogue that drives greater alignment and clearer performance expectations. The shifting culture is clear and evident. Manager-employee relationships are improving and open, helpful feedback is now an ongoing event.

## SUMMARY: HOW DOES CHANGE REALLY HAPPEN?

New and emerging fields such as neuroscience and complexity science are transforming how leaders are looking at and understanding change in their organizations. Simply by harnessing the brain's ability to make new pathways and the conditions for change effectively, organizations can achieve new results and sustainability. In our work with clients we use these principles and our Change Dials™ to help leaders, teams, and individuals understand and unlock the power of change and adapt to the fast-paced complexity of today's business environment.

In short, change happens. And change is hard. But you can work with it to create something even better.



### WANT TO LEARN MORE?

#### SIGN UP FOR OUR TWO-DAY TRAINING LEADING CHANGE IN COMPLEX TIMES

Leading Change in Complex Times prepares leaders, executives, and individuals to catalyze and navigate change. It is a hard-hitting course that develops leaders' skills to understand and use the principles of self-organization in complex and challenging situations. It is a deep dive into change from which leaders emerge armed and ready to navigate transition in their organizations, feedback, navigate difficult conversations, and constructively speak up to make things better. Visit our training page online at [www.change-fusion.com](http://www.change-fusion.com) to learn more and sign up.



## AUTHOR BIOGRAPHIES



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David Osborne is a Strategic Change Leader at ChangeFusion where he partners with leaders to accelerate organization-wide change and to achieve new levels of performance. He is a passionate explorer of the boundaries of OD and complexity science. His publications include articles in the Practicing Social Change Journal and Tapping the Power of Emergent Change, a chapter in NTL's Handbook of OD and Change. He holds an M.S.O.D. from American University, and over 25 years combined business and OD experience. David currently serves as Chair of the Board of NTL Institute for Applied Behavioral Science.



### JILL HINSON

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International business leader with 20 years combined experience in organization development, leadership development and marketing. Results-driven consultant experienced in conceptualizing, developing and managing culture change initiatives, leadership development programs and organization assessments. Jill is an innovative thinker, driven to make a positive impact, by applying thorough, practical solutions to solve complex organizational issues.

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