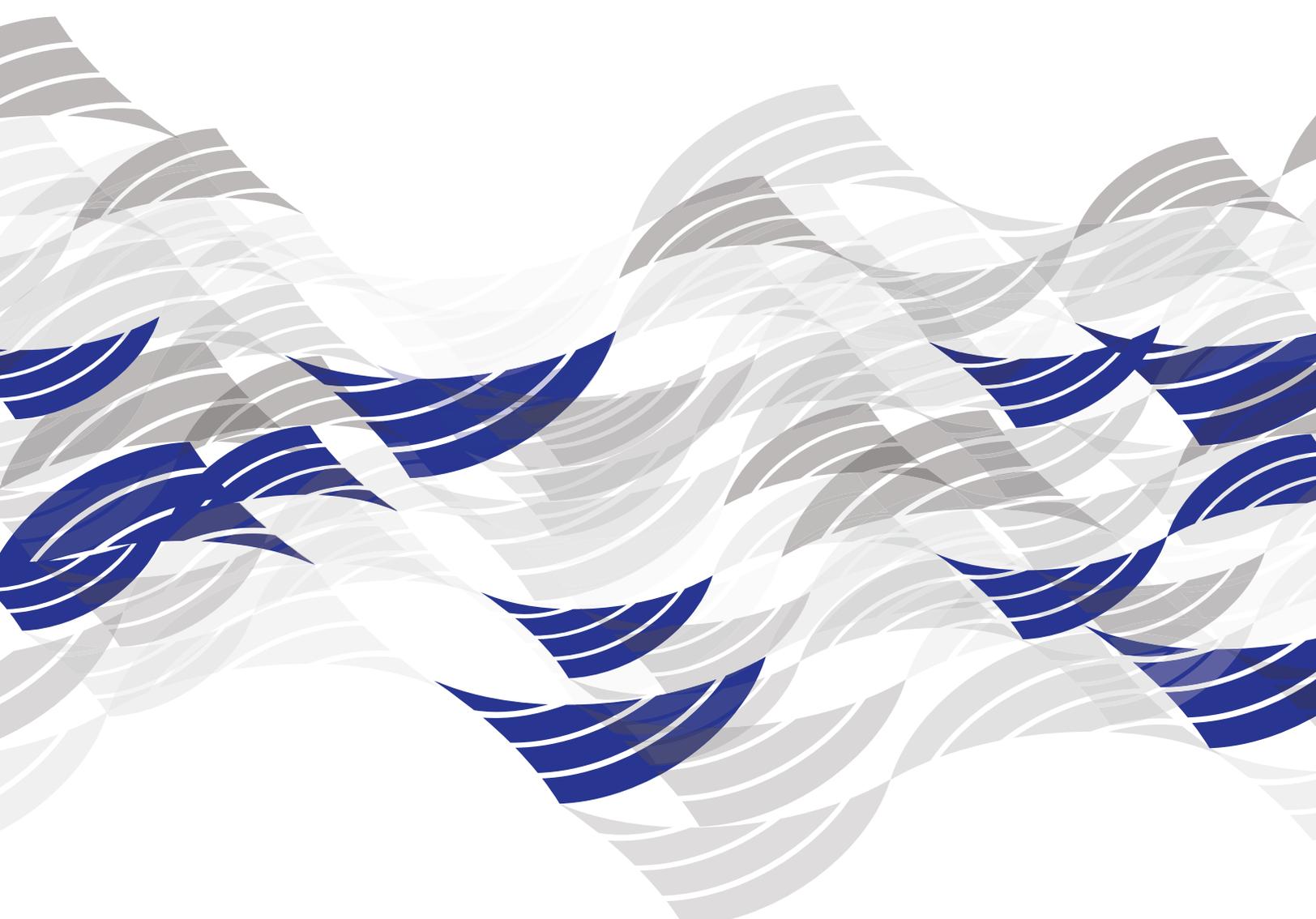


Transformational Change: An Ecosystem Approach

Lessons from Nature for Those Leading Change in Organizations



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Transformational Change Is Widespread, Dominant, and Self-Sustaining

What if our organizational change agents interacted like the players in natural ecosystems so that transformational change was truly widespread, dominant, and self-sustaining?

Change in the natural world occurs similarly to the way change occurs within our organizations. The problem is we don't always recognize the similarities.

In the natural world, change is a constant process of evolutionary and revolutionary shifts resulting from the interaction of ecosystem players, change agents, as they deal with disturbances across the system. Disturbances to the ecosystem are myriad and spark changes that take root, overcome barriers, and prosper, or shrivel and die depending on the adaptive ability of the change agents.

Changes that prosper and, over time, transform the ecosystem tend to be those that span the boundaries between an intricate web of communities and species, overcome natural barriers, and pass the ultimate test of "survival of the most adaptable."

Transformational change to the ecosystem is often triggered by an initial disturbance and, as the impact of that change cascades throughout the interconnected ecosystem communities, the knock-on effects take root in unexpected ways. Both the predictable and unpredictable impact of change tends toward balance, sustainability, stability, and resiliency of the whole system. A revolutionary change here leads to an evolutionary change there and, as seemingly isolated shifts gain momentum across the system, the entire habitat undergoes a fundamental transformation that ultimately becomes self-sustaining. Once it takes root, the underlying transformational change goes beyond any of the distinct communities, species, or individual players that interact across the system. In organizations, this occurs when a shift happens in an industry that requires the organization to make rapid adjustments to its business model, strategy, structure, or leadership.

"It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change."

—Charles Darwin

Consider the classic example of the reintroduction of wolves in Yellowstone National Park.

Two initial systemic disturbances—the eradication of wolves and the prohibition of hunting in the park—resulted in unnaturally large herds of elk for the size of the local ecosystem. This led to massive overgrazing of new-growth vegetation and the destruction of tree species throughout the park, serious problems that required a solution. The solution to the elk problem was to create a new systemic disturbance by reintroducing the natural predator of the elk—the wolf.

As expected:

- The elk colony decreased to balanced levels.
- Vegetation increased and trees grew to taller levels.

The unanticipated cascade effect across ecosystem communities:

- Increased vegetation and growing forests turned previously bare valleys into lush habitats.
- As the wolf population grew, the coyote population shrank to more balanced levels.
- With lush habitats and a shrinking coyote colony, the mouse, weasel, rabbit, fox, hawk, eagle, raven, bear, and beaver communities flourished.
- As the beaver colony flourished, niche communities were created to support other river species.

What impact did the reintroduction of 14 grey wolves in 1995 have on the Yellowstone National Park ecosystem? The broad systemic impact was unexpected, widespread, dominant, and ultimately self-sustaining.

- As river habitats consolidated, the flow of the river was altered and brought nutrients to communities throughout the ecosystem.
- As the ecosystem became richer, the wolf colony prospered.
- As the wolf colony grew, “wolf-watching tourism” increased bringing an estimated \$5 million per annum to help finance the ongoing sustainability of Yellowstone National Park.
- And the elk? Ultimately their behavior changed as well in grazing/foraging, herding behavior, and survival tactics. Their numbers significantly dropped then stabilized to levels sustainable for the ecosystem.



The introduction of a top predator, or “eco-change leader,” aimed at solving a concrete problem actually brought observable behavioral change that cascaded down and around the interconnected ecosystem players and resulted in a long-term systemic transformation. Systemic change in both nature and the organization is often characterized by a series of simultaneous “outside-in” and “inside-out” activities, undertaken by change leaders across the change terrain.

Outside-in activities represent the tasks of preparing and introducing systemic disturbances and creating the systems, structures, and processes to guide change efforts. The planned reintroduction of the wolf to Yellowstone National Park in order to solve a specific problem was an outside-in activity.

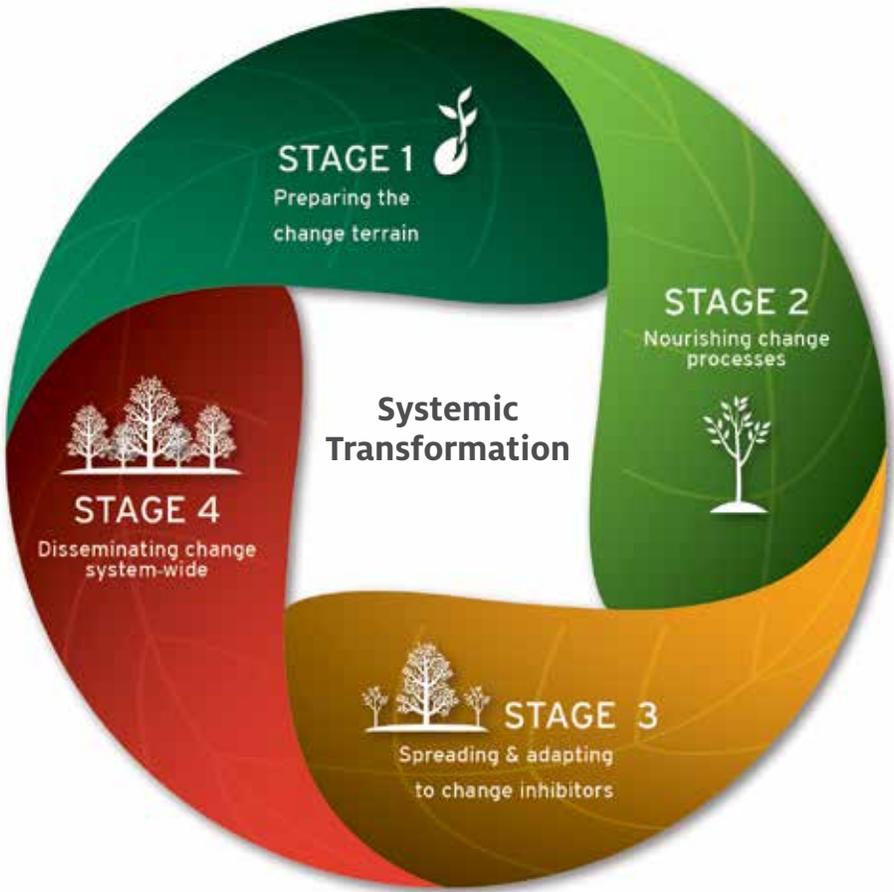
Inside-out capabilities are reflected in the change leader’s ability to create a web of interdependent change agents and shape an environment that elicits the behaviors across the system necessary for transformational change to take root and flourish—the type of dynamic interaction we observed across the wolf, elk, coyote, mouse, weasel, rabbit, fox, hawk, eagle, raven, bear, and beaver communities that brought widespread, dominant and self-sustaining change to the ecosystem. In the organization, we would associate the outside-in activities with the management tasks related to change and the inside-out activities with leading the human element of change processes, two integral and inseparable factors of success.

Transformational Change Flows in Predictable Stages

What if our organizational change leaders guided transformation efforts through stages so that the right change flourished across the system?

One common thread across the wide body of eco-change literature is the staged approach to systemic transformation in which change agents are preparing, nourishing, spreading, and disseminating change throughout the ecosystem. The number of stages and terminology attached to the distinct stages may vary from model to model, but the process flow tends to be common. The model below synthesizes the stages of change and depicts how change may flow through our organizations as we attempt to drive systemic transformation.

Stages of Transformational Change



In Stage 1, the change process is initiated by gaining a deep understanding of the terrain and preparing the early change adopters to support change:

What communities or stakeholder groups need to be taken into consideration? Who are the players and how do they interact? How are they connected, and what would an effective change agent network look like? How might the players influence or be influenced by others?

In Stage 2, the seeds of change are sown and the focus is on building and nourishing the relationships across change agents so that the transformational foundations take root. Here, the early change adopters begin to hand off to pragmatists in the transformation process, some change initiatives die and others continue to flourish.

In Stage 3, dominant changes begin to spread across the terrain and adapt to the ecosystem inhibitors that are encountered. Here the survival of the most adaptable is the driving principle, and change leaders must be tenacious in their efforts to overcome barriers to keep others onboard.

In Stage 4, change pragmatists are handing off to mature players specialized in disseminating the ecosystem changes that will become self-sustaining over time.

Of course, by the time the dominant changes are spread system-wide and gain a life independent of any particular change agent in the habitat, the early adopters have reinitiated the change process and new transformation efforts are starting to circulate across the network of interconnected change agents.

Change that ripples throughout the system often creates anxiety for those within it. Questions arise about whether the new environment will support each group and whose power and rewards will increase or decline as a result. For humans, as well as animals, any potential threat can lead to a state

of fight or flight. This is helpful in the moment as it gives the individual the energy to survive. The difference with animals is that once the threat subsides, the animal will come back down to its resting state. Humans are different in that they can continue ruminating on and on after the event about "what ifs" or about the future and all the changes that could negatively impact them. Therefore, one of the skills of the effective change agent is to be able to anticipate and adapt to a changing environment without adding in negative rumination about things that are outside of its control.

Transformational Change Occurs across Communities Facing Systemic Disturbances

What if our organizational change leaders could predict the impact of systemic disturbances so that change ultimately benefited the entire system?

Similar to organizations, ecosystems have distinct stakeholder groups or communities that operate according to their own priorities, interests, resources, and limitations. These communities coexist, interact, and jointly contribute to the overall success or failure of the broader system. There is a natural order of interaction across species and structures that,

to a certain extent, govern the relationships between the players. We see this in organizations as structures, hierarchies, policies, procedures, systems, and culture coalesce to dictate the way people interact and get things done.

Significant change to the system tends to come through events that disturb the current state, shake things up, and oblige the stakeholders to modify their behavior.

Ecosystem Communities Facing Disturbances



As early American ecologist Frank Egler once stated, *“Ecosystems are more complicated than we think, they may be more complicated than we can think.”*



As we saw with the wolves of Yellowstone National Park, the behavior modification has far-reaching ripple effects. The initial system disturbance of removing the wolves from the ecosystem had unforeseen negative consequences, while the reintroduction of the wolves brought about many unexpected benefits.

Some communities are closely linked and directly feel and impact the changes of other groups. Other communities are loosely linked and the impact is experienced indirectly. The ability to map the eco-change terrain, understand the relationships between species, and predict the potential impact on the different players in the system is indispensable to introducing transformational change in a coherent, sustainable way—in a way that both changes and brings stability to the

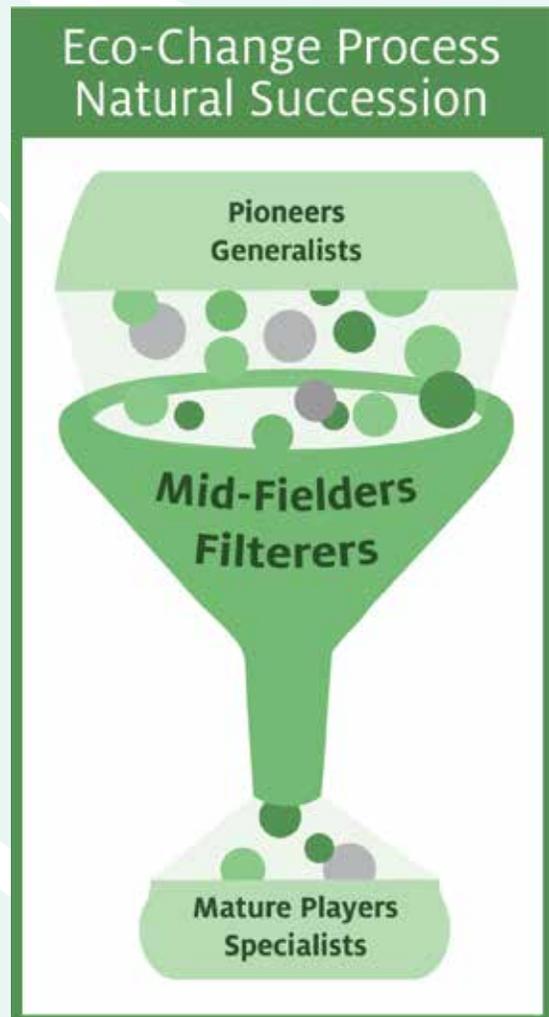
whole. In the organization, it is equally important for change leaders to map the terrain of stakeholder groups, change agents, relational ties, and avenues of influence in order to predict how change disturbances will reverberate across the system.

According to some ecologists, diversity of species and the interaction across the diverse species in the ecosystem is the key to maintaining overall stability. This dynamic interaction is at times a catalyst for transformation while in other circumstances, it can dampen the potential to drive change. Increased diversity brings greater complexity (i.e. difficulty) to predicting the cross-species relationships while simultaneously increasing the potential for change to be widespread and self-sustaining, if and when it takes root.

Change Agents Interact through a Process of Natural Succession

What if our organizational change leaders were adept at guiding change so that it flowed naturally through the system?

When a system disruption significantly impacts the ecosystem, the different players or change agents react and interact in different ways. There tends to be a natural succession of how change flows throughout the ecosystem and how different types of change agents enhance or inhibit change initiatives along the way. For example, in both nature and organizations, we generally see interactions among three types of change adopters: pioneers, mid-fielders and mature players. Let's run through an example of a "primary succession" process where change starts from a completely clean slate and consider the roles that the different change agents play.



The **pioneers** can be seen as generalists that are extremely opportunistic and able to quickly assimilate changes to their habitat. While the pioneers are quick to adopt opportunistic change and ensure that it is widespread, they are not good at competition. They tend to get pushed to the periphery and many of their change efforts fail if they are not effectively converted into initiatives that can be readily assimilated by mid-field players.

The **mid-fielders** can be seen as the pragmatic filter between the rapid-prototyping pioneers and the more selective species in the ecosystem. Mid-fielders help translate change quantity into change quality as they weed out changes that do not necessarily benefit the broader habitat. They help establish the dominance of change initiatives that benefit the broader system.

The **mature players** can be seen as specialists that are adept at selectively capturing new resources and pushing out other players. They are good at competition and ensuring that the most impactful changes are self-sustaining and endure over time. While the mature players help institutionalize change throughout different parts of the ecosystem, they can bring systemic stagnation if the pioneers and mid-fielders are not able to effectively play their roles.

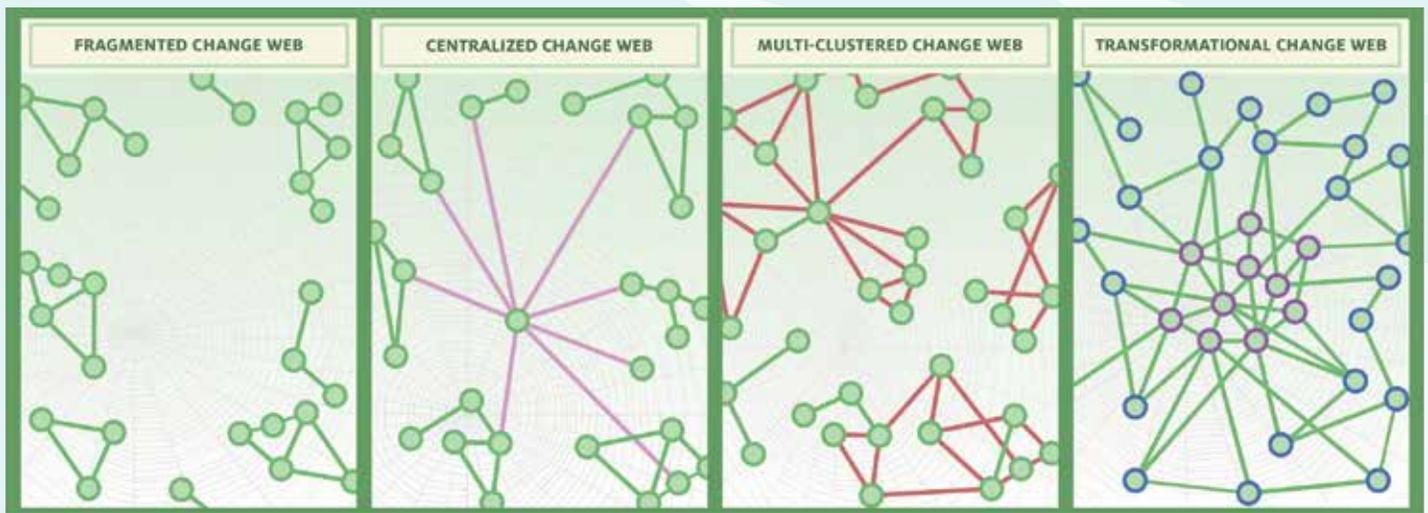
Of course, there are situations in which change agents may adapt their roles in accordance with factors that impact the change process; however, it is the dynamic interaction across and between these players that we must appreciate if we are to guide efforts so change flows naturally through our organizations.

Change Agents Interact through Informal Webs of Influence

What if our organizational change leaders built relationships between the people who really get things done so that transformation gained momentum across the system?

Transformational change that is ultimately widespread, dominant, and self-sustaining tends to come to fruition when there is energy flow and influence exercised across players at different levels and different parts of the system. In nature, change cascades up, down, and around the ecosystem as the agents of change build relationships and interact in ways that fall outside of the established norms. Research shows that in the organization, a similar process tends to unfold as change gains momentum outside of the formal hierarchy and change leaders exert influence across traditional organizational boundaries. As depicted in the graph below, effective change agent webs or networks evolve over time to support transformation.

Change Agent Networks Evolve to Support Transformation



Source: Adapted from Krebs & Holley (2006)

The ability of change leaders to forge relationships across stakeholder boundaries and influence change agents to evolve from fragmented webs to transformational webs is critical to achieving self-sustaining change that transforms the ecosystem.

Fragmented Webs: players interact primarily with species within their distinct stakeholder group

to

Centralized Webs: primary colony of change agents is central to pushing widespread change process

to

Multi-clustered Webs: select stakeholder groups are interacting with each other to find equilibrium and discover strategies to drive dominant change

to

Transformational Webs: change is solidly rooted and flowing system-wide

Transformational Change Encounters Predictable Enhancers and Inhibitors

What if our organizational change leaders learned from both failure and success so that our transformation processes lead to superior performance over time?

Failure is common in transformation processes as rapid-prototype changes instigated by the pioneers pass the filters of the mid-fielders and ultimately mature players selectively propagate system-wide change. At each stage in the transformation process, there are elements that will predictably enhance certain changes and inhibit others.

Let's go back to the reintroduction of the wolves in Yellowstone National Park. What factors enhanced survival of this ecosystem change? Obviously, the overpopulation of elk in the habitat and the degraded forests enhanced the ability of the wolves to hunt and nourish the pack members. As the ecosystem evolved, forests attracted new species and provided better living conditions and river communities added greater diversity to the habitat; the wolf continued to prosper.

At the same time, there were important ecosystem inhibitors for the wolves to overcome. Ranchers in the region were against the reintroduction of wolves due to fear of losing their livestock. The wolf community had to adapt to poachers, traps, and poisons aimed at filtering out this systemic disturbance before it had a chance to establish a permanent niche in the ecosystem.

The ability of change leaders to foresee the predictable enhancers and/or inhibitors that impact the success or failure of change initiatives is critical to zealously driving systemic transformation. True change leaders are tenacious and adaptable enough to overcome impediments to organizational change.



Systemic Change in Our Organizations

So, what lessons can we take from the examples of transformational change in the natural world that are applicable to change efforts in the organizations in which we lead?

Below is a summary of tips for change leaders as they promote the change initiatives that are so critical to the short-term profitability and long-term sustainability of our organizations:

- **Align change disturbances with organizational guiding principles.** How do our change initiatives support the over-arching vision, mission, priorities, and strategies that will bring prosperity across the organizational ecosystem? Do the change disturbances support strategy execution and really help drive us toward our desired future?
- **Map the change terrain.** Do we truly appreciate the interconnection of the stakeholder groups and change agents within those groups? Do we account for their aims, aspirations, motivations, desires, limitations, etc.?
- **Know the players and where they stand.** Do we fully understand the extent to which the agents needed to drive our change will act as enhancers or inhibitors? To what extent? Why? Why not? What if?
- **Build the right relationships.** Are we investing the time, energy, and effort necessary to sustain the relationships across change agents in order to move our transformation initiatives forward? Do our agents help cascade change up, down, and around the organizational ecosystem? Do we build, energize, and leverage powerful informal webs of influence.
- **Nurture enhancers and overcome inhibitors.** Are we effectively persuading change agents to get onboard and drive the necessary changes in their parts of the organization to ensure that transformation truly takes root and flourishes? Do we nourish those that support us? Do we endure in the face of resistance? Do we convert others to our cause? Do we strengthen others' resolve?
- **Be a zealous change leader.** Are we passionate about the change we lead? Do we provide direction to our change agents? Alignment? Commitment? Do we identify the what, when, where, how, why of building the necessary relationships across the organization to drive change? Do we follow through? Do we review what people do? Do we make it matter? Are we examples of the change we expect to see in others?
- **Adapt, adapt, adapt to survive.** Are we sufficiently attentive to systematic disturbances that may derail our change efforts? Do we consider the knock-on effects? Are we flexible enough to shift our plans? Are we resilient enough to deal with controversy? Are we elastic enough to stretch without snapping?

Organizations that are superior performers over time develop the individual and organizational capability to invent, reinvent, and transform their business models according to the dynamic nature of the ecosystems in which they operate.

Leaders in these organizations identify the stakeholder groups that are crucial to driving change, build and nurture the critical change agent relationships across the organization, overcome inhibitors inherent to their organizational ecosystems, step up as living examples of leading change, and develop the adaptability necessary to drive widespread, dominant, self-sustaining change.



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