Habits of Systems Thinking

Results Washington Lean Conference October 27, 2020

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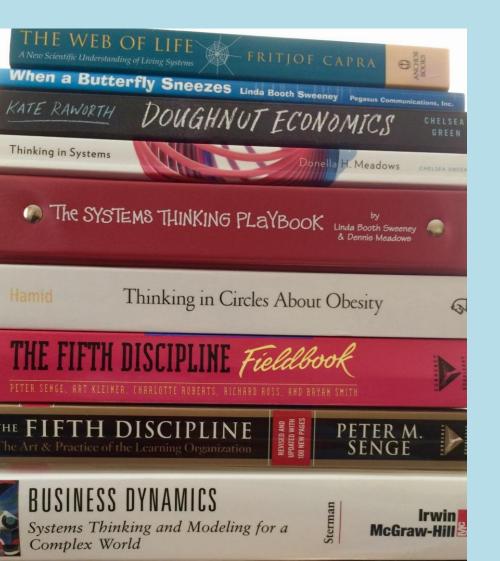


I wish to acknowledge the Duwamish People and other Native Peoples who have lived and continue to live adjacent to the Salish Sea. Specifically in my region I live and work on the unceded land of the Nisqually People and the Squaxin Island People. I acknowledge the ancestors of these people as well as the present-day members of these tribes who continue to steward the land and live among us.

Learn more about the practice of Land Acknowledgment: https://nativegov.org/a-guide-to-indigenous-land-acknowledgment/



What is systems thinking?



A discipline for seeing "wholes"

A language

A set of tools

A way of asking questions

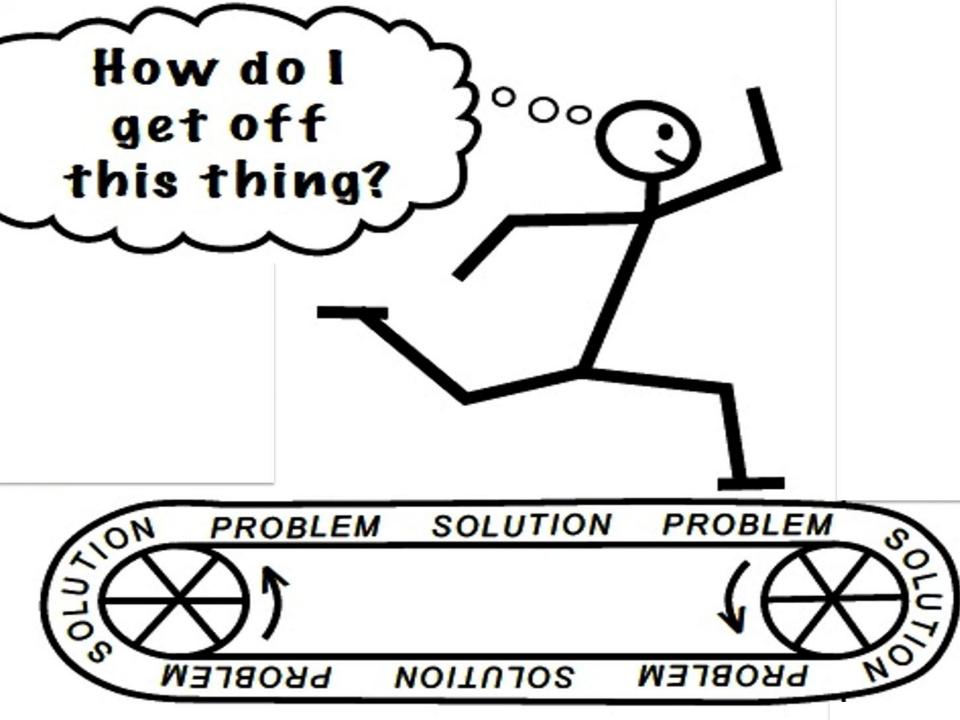
A way of seeing the world

A way of understanding complex dynamics

...to address complex adaptive challenges:

we don't know the solution, we don't fully understand the problem.







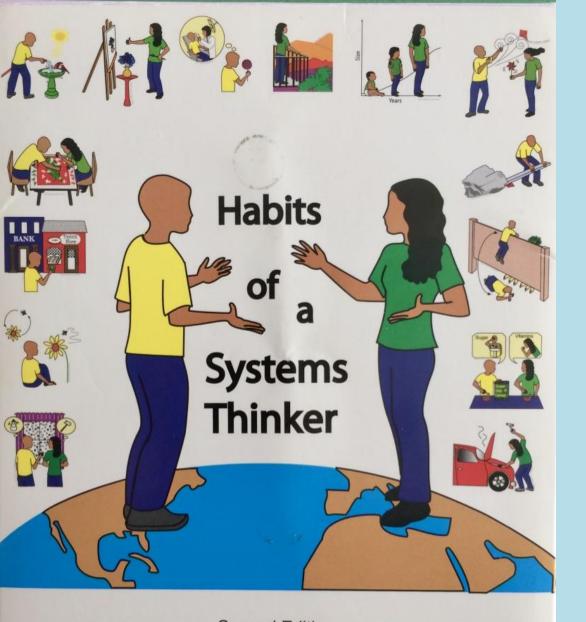
Inquiry is key

Open & Curious

Willing to learn

Willing to change one's mind

Humble



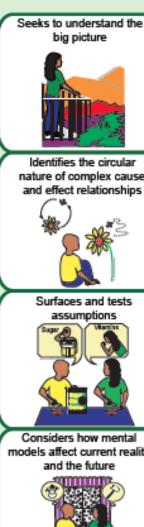
A deck of cards from The Waters Center for Systems Thinking

Second Edition
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https://waterscenterst.org/shop/s
hop-online/

This is a habit for me!

This is *not* yet a habit for me. NY





Observes how elements within

Recognizes that a system's

I'm not sure what this means.

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Seeks to understand the "big picture"



A Systems Thinker focuses on the forest rather than on the details of any one tree.

Questions to ask...

"How can I maintain balance between the big picture and important details?"

"What time frame should be considered as I view the system?"

"Am I keeping my focus on areas of influence, rather than on areas of concern that I cannot influence?"

Changes perspectives to increase understanding



A Systems Thinker increases understanding by changing the ways he or she looks at the system.

Questions to ask...

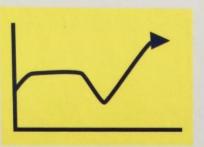
"Am I open to other points of view?"

"How do different points of view influence the way I understand the system?"

"Who should I approach to help me gain new perspectives on an issue?"

"As I learn about new perspectives, am I willing to change my mind?"

Observes how elements within systems change over time, generating patterns and trends



A Systems Thinker sees change over time as the "dynamics" of a system.

Questions to ask...

"What important elements have changed in the system?"

"How have the elements changed over time?"

"What changing elements represent amounts and how quickly/slowly are they increasing or decreasing?"

"What patterns or trends have emerged over time?"

Surfaces and tests assumptions



A Systems Thinker actively tests theories and surfaces assumptions, perhaps with others, in order to improve performance.

Questions to ask...

"How do my past experiences influence the development of my theories and assumptions?"

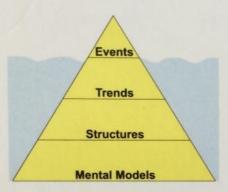
"How well does my theory or model match the system under study?"

"When considering a possible action, do I and those I work with ask 'What if' questions?"



What questions do you have?

Considers how mental models affect current reality and the future



A Systems Thinker is aware of how beliefs and attitudes influence perspectives and actions.

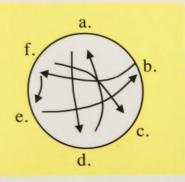
Questions to ask...

"How are the current mental models advancing our desired results?"

"How are the current mental models hindering our efforts in this area?"

"How am I helping others see the influence that mental models have on our decision-making?"

Recognizes that a system's structure generates its behavior



A Systems Thinker focuses on system structure and avoids blaming when things go wrong.

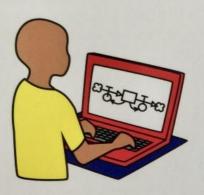
Questions to ask...

"How do parts affect one another?"

"How does the organization and interaction of the parts create the behavior that emerges?"

"When things go wrong, how can I focus on internal causes rather than dwell on external blame?"

Uses understanding of system structure to identify possible leverage actions



A Systems Thinker uses system understanding to determine what small actions will most likely produce desirable results.

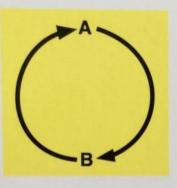
Questions to ask...

"Where might a small change have a long-lasting, desired effect?"

"How can we use what we know about the system to identify possible leverage actions?"

"Are there other small changes that we have not yet considered that could bring us desirable results?"

Identifies the circular nature of complex cause and effect relationships



A Systems Thinker sees the interdependencies in a system and uncovers circular causal connections.

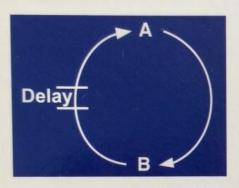
Questions to ask...

"How do parts affect one another?"

"Where does circular causality/feedback emerge?"

"Is one feedback loop more influential over time than another? If yes, how?"

Recognizes the impact of time delays when exploring cause and effect relationships



A Systems Thinker understands that often cause and effect are not closely related in time.

Questions to ask...

"If we make a change to the system, how long before we see the results that we desire?"

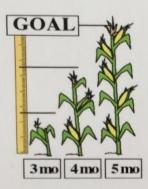
"How can we identify the role of time delays in the effects we expect to see?"

"Will the change we propose show immediate results or will we need to wait to see improvement? If we need to wait, for how long?"



What questions do you have?

Checks results and changes actions if needed: "successive approximation"



A Systems Thinker establishes benchmarks to help assess gradual improvement.

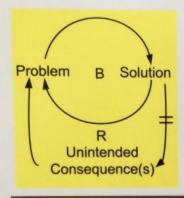
Questions to ask...

"What indicators will we expect to see as we look for progress?"

"Have we scheduled time to pause, assess the effects of our current plan and take necessary action?"

"When considering changes, are we accessing other systems thinking habits?"

Considers short-term, long-term and unintended consequences of actions



A Systems Thinker looks ahead and anticipates not only the immediate results of actions but also the effects down the road.

Questions to ask...

"Are there unintended consequences that could lead to new actions?"

"What are the unintended consequences of the proposed action and what trade-offs should we consider?"

"What are possible long and short-term consequences of the proposed actions?"

"Are we willing to accept short-term pain for long-term gain?"

Considers an issue fully and resists the urge to come to a quick conclusion



A Systems Thinker takes the necessary time to understand the dynamics of a system before taking action.

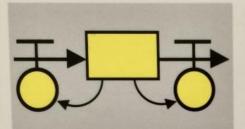
Questions to ask...

"How much time do we need to allow for consideration of this issue?"

"How can we manage the tension that exists when issues are not resolved immediately?"

"How can I help others be patient while living with unresolved issues?"

Pays attention to accumulations and their rates of change



A Systems Thinker sees quantities of material or information that have built up or diminished over time.

Questions to ask...

"What elements in a system can I see, feel, count or measure as amounts that change over time, e.g., level of happiness?"

"How quickly (or slowly) do these accumulations increase and decrease?"

"How does an accumulation impact other elements in a system?"

"What might happen if an accumulation reaches a tipping point?"

Makes meaningful connections within and between systems



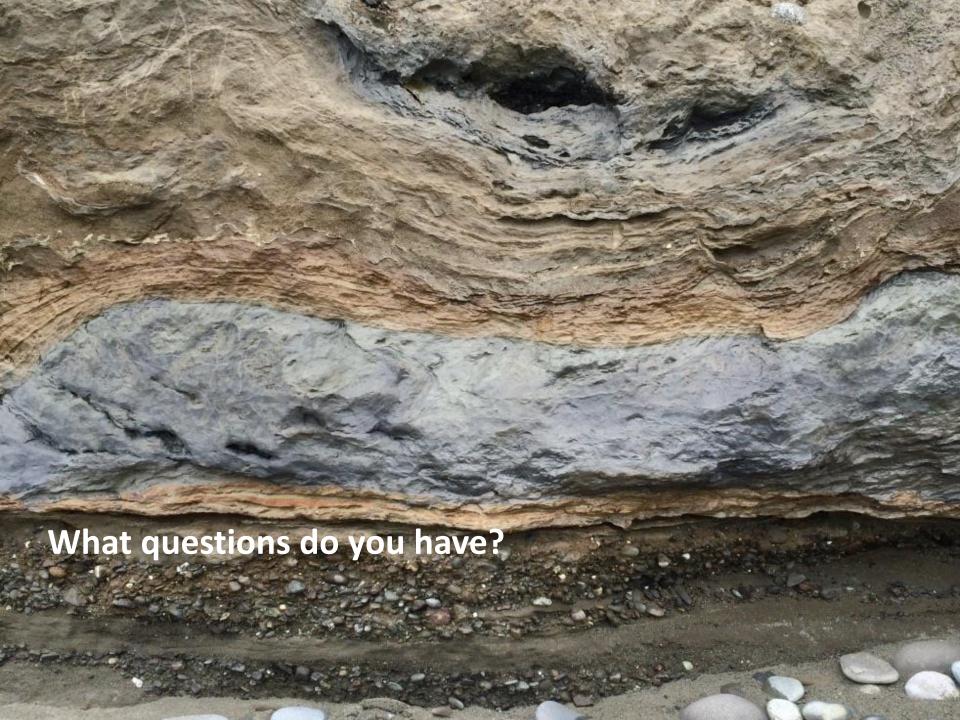
A Systems Thinker sees how concepts, facts, and ideas link together, which can lead to new learning, discoveries and innovations.

Questions to ask...

"What are the relationships among pieces of the system and how do they affect understanding of the whole?"

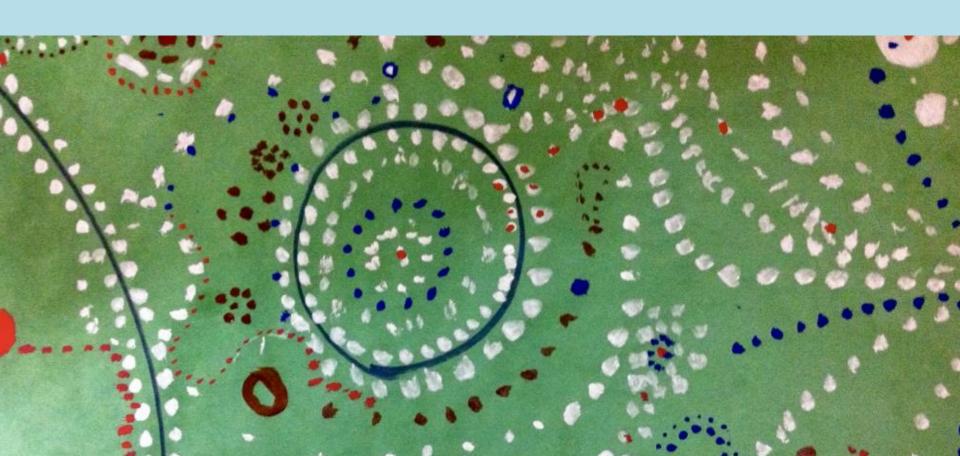
"How can different perspectives of a system work together to benefit the system?"

"How does understanding of one system transfer to understanding of another system?"



What is an insight that you gained today? What is one key learning for you?

What is something that shifted for you – a shift in perspective, thinking, understanding?





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