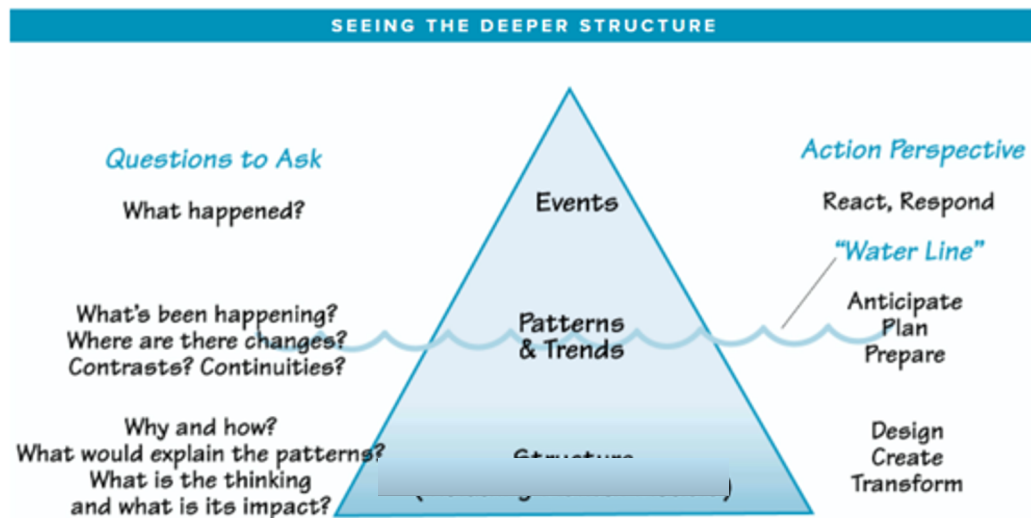


## WGU's Four-Step Tool (based on "[Six Steps to Thinking Systemically](#)" by Michael Goodman and Richard Karash)

### STEP 1: Complete an Iceberg Tool for this case study.

*The Iceberg Tool is a way to see how the structure (that is, the background of the case) ties together the individual events and the patterns and trends that emerge from recurring events. Using the Iceberg Tool allows you to see the basic facts and interconnections, an important first step.*

### Iceberg Tool to Understand Patterns and Structure



Iceberg tool shows events at the top, patterns and trends at the water line, structure near the bottom and less visible.

### Questions to Ask

1. What are the key events in this case study?

#### **Jamal's Onboarding:**

- Jamal joins Jaechap Advisors as a data analyst.
- Initially faces challenges with the sophisticated analytics software.

#### **Proficiency with Current Software:**

- Over time, Jamal becomes proficient with the existing software.
- Successfully uses the software to complete essential work functions.

#### **Manager's Proposal for Change:**

- Manager Maria suggests transitioning to a new software program.
- Anticipates potential challenges in adapting to the new system.

#### **CEO's Directive:**

- CEO Pat emphasizes the need to keep the department up-to-date with advanced analytic tools.
- Advocates for the adoption of new software to stay competitive.

#### **Discussion on Learning Curve:**

- Concerns raised about the time it would take for the team to become skilled with the new program.

- Balancing the short-term ease with the current software against potential long-term benefits of the new system.

**Competitiveness and Future Projections:**

- CEO Pat underscores the importance of staying competitive in the market.
- Emphasizes the role of advanced features in providing accurate data projections and analysis.

**Client Expectations and Future Demands:**

- Recognition that client expectations are evolving.
- Acknowledgment that the current service level may not meet future demands.
- Need to get ahead of clients' demands by adopting new and improved software.

**Focusing Statement:**

The central question arises: What is the best way for Jaechap Advisors to remain competitive now and in the future?

2. What patterns do you notice in the key events of this case study?

**Learning Curve and Skill Development:**

- Jamal's initial struggle with the sophisticated analytics software represents a learning curve.
- Over time, there is a pattern of skill development as Jamal becomes proficient with the existing software.

**Resistance to Change:**

- Manager Maria and the data analytics team express concerns about the potential challenges of transitioning to a new software program. This resistance to change is a recurring pattern throughout the case study.

**Competitiveness and Market Dynamics:**

- CEO Pat consistently emphasizes the need for Jaechap to remain competitive in the market.
- The pattern suggests a focus on market dynamics and the importance of staying ahead of competitors.

**Balancing Short-term Ease and Long-term Benefits:**

- There is a recurring pattern of balancing the short-term ease of using the current software against the potential long-term benefits of adopting a new system. This pattern is evident in discussions about learning curves and maintaining productivity during the transition.

**Client-Centric Approach:**

- The case study exhibits a pattern of considering client expectations and future demands.
- CEO Pat emphasizes the need to anticipate and meet evolving client needs.

**Strategic Decision-Making:**

- The pattern of strategic decision-making emerges, particularly in CEO Pat's advocacy for advanced analytic tools.
- The decisions are driven by the overarching goal of positioning Jaechap for future success.

**Focus on Efficiency and Productivity:**

- Throughout the case study, there is a pattern of concern for maintaining the team's current level of efficiency and productivity during any software transition. This reflects a commitment to minimizing disruptions in service delivery.

**Overall Dynamic Tension:**

- A recurring dynamic tension exists between the desire for short-term ease and the necessity of adopting new and advanced tools for long-term competitiveness.

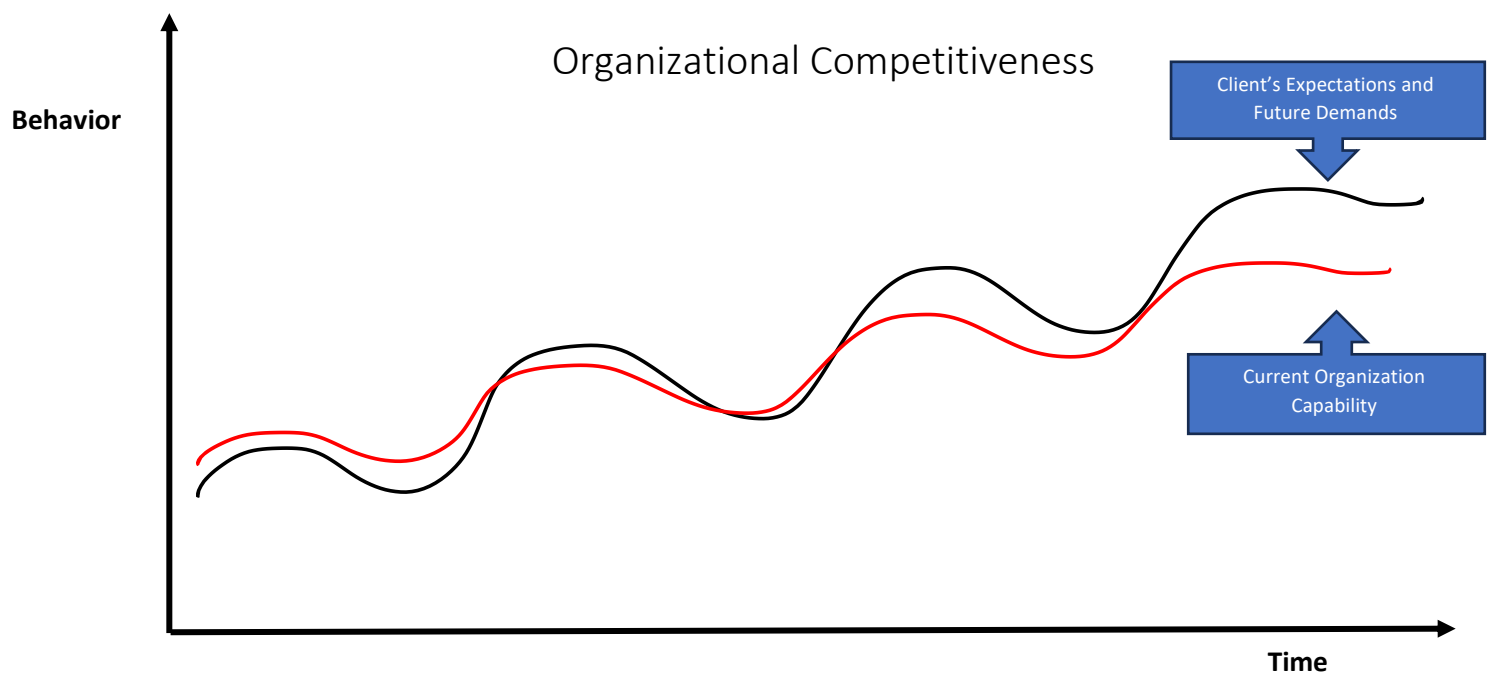
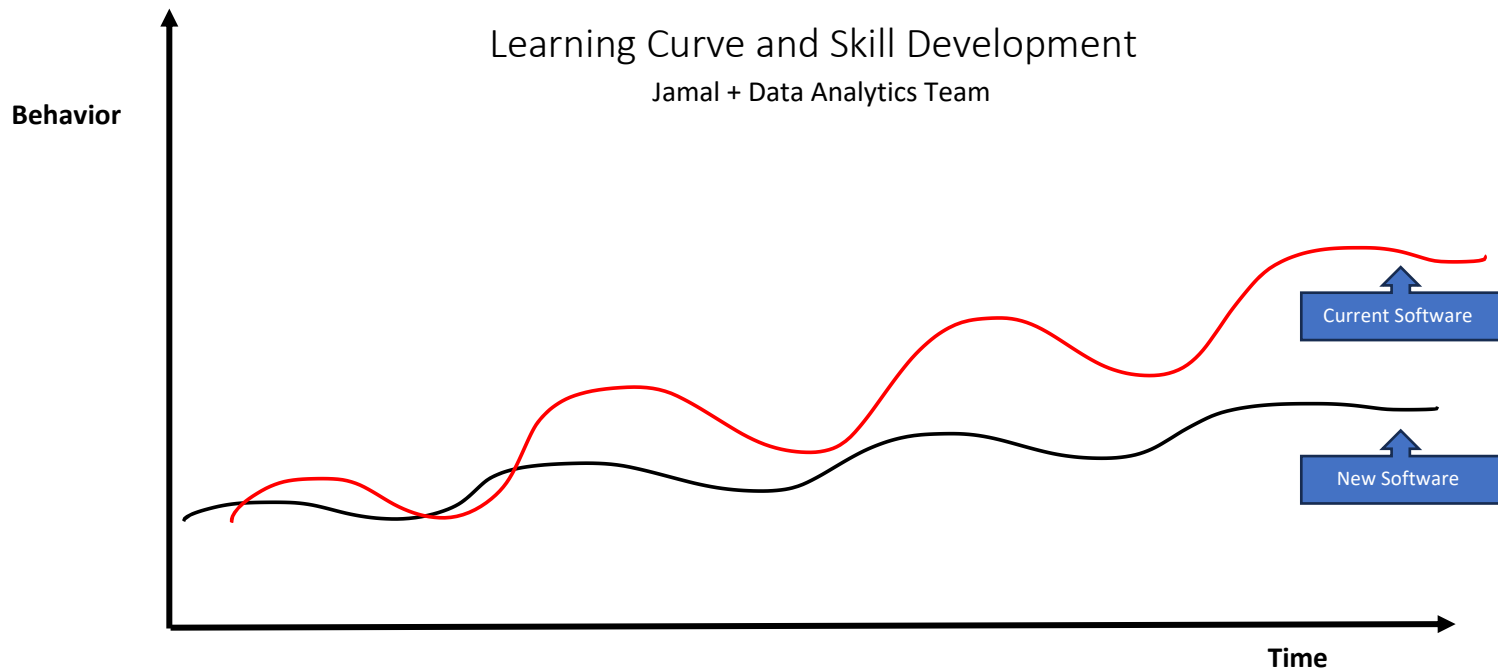
3. What structure(s) explain the patterns of events in this case study?

The fundamental structure involves a reliance on short-term solutions, exemplified by the team's reluctance to adopt a new software program due to concerns about immediate disruptions. This resistance is rooted in a prevailing mental model that prioritizes the comfort of maintaining the status quo over the perceived challenges

of embracing change. Despite CEO Pat's consistent emphasis on strategic decision-making to address long-term needs, the existing mental model and resistance create a structural tension. The critical task is to shift the business's mental model, encouraging an understanding of the imperative to embrace change for sustained competitiveness and future success.

**STEP 2: Draw “Behavior Over Time” Diagrams.** (Use as many blank BOT graphs as necessary, given the case study)

*The BOT diagram helps you identify how human behavior plays out over a specific time period; here, the time is the period in which the case study occurred. It is best to group similar events or patterns together in a diagram; for example, you might create one BOT diagram showing the actions of different team members (all actions) and another for the investments made in marketing campaigns and the resulting return on those investments (all money).*



Behavior Over Time diagram; the x-axis is labeled “time”; the y-axis is labeled “behavior”.

**STEP 3: Select the systems archetype that best fits the case study.** You may wish to refer to Section 2, Lesson 2.1.

*The value of the eight systems archetypes is that they represent common problems within systems. If you can find an archetype that fits the system and the problem(s) you are confronting, you can use established ideas for dealing with the problem(s).*

*Examine each archetype carefully, comparing its causal loop diagram and text description with the given case study to see which one is the best fit.*

1. Which archetype did you select?

Shifting the Burden

2. Why does this archetype best fit the given case study? Explain how its causal loop diagram and text description match up with the facts of the case study.

The "Shifting the Burden" archetype fits the case study, as it reflects the organization's tendency to rely on a short-term solution of maintaining their current software, rather than adopting new tools to avoid immediate disruptions. The causal loop diagram shows a reinforcing loop where resistance to change perpetuates the avoidance of the fundamental solution. The text description highlights the preference for familiar software due to its current effectiveness, which sidesteps the challenge of learning a new system. This avoidance creates a reinforcing loop, which further reinforces the reliance on existing software, potentially neglecting the need for long-term competitiveness. In essence, the archetype captures the organization's behavior of shifting the burden from the challenge of adapting to new technology to the short-term ease of maintaining the status quo. This reveals a dynamic tension between immediate comfort and the necessity of embracing innovation for sustained competitiveness.

3. What is the main problem that needs to be addressed in this case study?

The main issue that needs to be tackled in this case study is the organization's resistance to adopting new analytical tools and transitioning to a different software program. This reluctance is driven by the desire to maintain the current software that has proven effective, and to avoid the perceived challenges and disruptions associated with learning a new system. However, this mindset may hinder the organization's ability to remain competitive in the long term. The challenge is to find a solution that addresses the immediate concerns of the team regarding efficiency and productivity during the transition while ensuring that the organization stays at the forefront of analytical capabilities to meet both current and future client needs.

#### STEP 4: Generate a solution to the problem.

*Systems thinking is a mindset and a process focused on identifying and solving problems. Without problems, there is little need to think systemically. In this step, you consider a full range of possible solutions and select the best one.*

1. What solution do you propose for the problem in this case study?

An effective solution for the case study's issue could be a phased implementation plan. This plan would allow the data analytics team to gradually shift to the new software with minimal disruptions to their productivity. To facilitate a smooth learning curve, comprehensive training programs and support systems should be implemented. Also, creating a positive narrative around the new software's benefits, emphasizing its cutting-edge features and improved capabilities, can help mitigate resistance. A collaborative approach can be fostered by incorporating feedback loops for continuous improvement and acknowledging the team's concerns.

2. What are the strengths of this solution?

- Firstly, it recognizes the need for a gradual shift, which minimizes disruptions and allows the data analytics team to adapt at a comfortable pace.
- Secondly, comprehensive training programs and support systems are included to facilitate a smooth learning curve, addressing potential challenges associated with the adoption of new software.
- Thirdly, creating a positive narrative around the benefits of the new software, emphasizing its cutting-edge features and improved capabilities, serves to motivate and alleviate resistance.
- Additionally, a collaborative approach, incorporating feedback loops and acknowledging the team's concerns, fosters a sense of involvement and ownership in the transition process.

3. What are the challenges of this solution?

A possible challenge that may arise during the software transition is the risk of prolonged dual-system operation. This refers to the situation where the team continues to use the old software while adopting the new one. Such dual usage can result in inefficiencies, which could hinder the organization's ability to take full advantage of the advanced features of the new tools. Despite adopting a gradual approach and presenting a positive narrative, managing resistance during the transition could be problematic, as team members may still face difficulties adjusting to the change.

4. What other alternatives did you consider **AND** why is your selected solution superior to each of them?

An immediate full-scale transition to the new software was one option, but could cause significant disruptions and potential resistance from the team due to the abrupt change. Another option was to maintain the current status quo and delay the transition indefinitely, avoiding short-term disruptions but compromising long-term competitiveness. Instead, a phased implementation plan was selected to strike a balance between these extremes. It offers a gradual shift, minimizing disruptions while providing necessary training and support for the team. This approach takes into account the team's concerns, fosters a collaborative environment, and allows for continuous improvement through feedback loops. The chosen solution combines the benefits of a smooth transition with minimized disruptions, addresses potential resistance, and provides a comprehensive strategy for long-term success.

5. What do you project the impact of your proposed solution will be on the overall system described in this case study?

The proposed solution is a phased implementation plan that is expected to positively impact the overall system described in the case study. The plan allows for a gradual transition to the new software, minimizing disruptions and providing the data analytics team with the necessary time and support to adapt smoothly. Comprehensive

training programs and support systems will address the learning curve, ensuring that team members become proficient with the new tools. A positive narrative about the benefits of the new software has been developed to mitigate resistance and instill enthusiasm for the change. The collaborative approach incorporates feedback loops and acknowledges concerns to foster a team-oriented mindset and a sense of ownership in the transition process.