INTRODUCTION TO CYNEFIN FOR ITSM



No one can deny the impact technology has had on the modern world. The steady advancement of technology has made the unimaginable a matter of daily life. In the space of 50 years, we went from giant, room-filling computers which took days of cranking and winding to solve a single equation to pocket-sized devices capable of ordering pizzas in seconds.

Technology has aided in connecting the entire world in a single network while providing invaluable information accessible at a moment's notice to anyone across the globe. The benefits of technology are countless, but that isn't to say that technology hasn't introduced its own issues. While technology has become powerful enough to aid humanity in nearly every aspect of life, it has also resulted in the compounding complexity of systems.

The complexity of systems is what allows them to address difficult problems, but this same complexity also results in the inevitability of failure. Complex systems are built upon other systems with their own complexities and flaws, and as these systems evolve, their flaws change. Most often, the flaws are simply quirks of the system which are solved through redundancies and ample patience. However, these flaws can compound upon each other at times, causing significant failure that requires a response.

In times of failure, it's often difficult to assess the situation and determine the cause of the failure due to the aforementioned complexity of the systems within which we work. This is why sense-making frameworks were developed to aid in gaining an understanding of a situation. The Cynefin Framework has proven especially adept at helping executives to assess a situation quickly, while deciding the best course of action.

What is Cynefin? (And How Do You Pronounce It?)

Cynefin (pronounced kuh-nev-in) is a Welsh word that means "habitat" or "place". More specifically, cynefin means a place of multiple belongings and refers to the idea that we are the products of our own complex histories. This is important to know because the Cynefin Framework is built specifically for making sense of complex systems, taking into account the various essential and intertwining aspects of a business.

The Cynefin Framework is geared for aiding executives in gaining a sense of context, allowing them to view issues from new perspectives, incorporate complex concepts, and apply this newfound insight to address real-world issues. It is a "sense-making" model that breaks every problem down into one of four system categories: simple systems, complicated systems, complex systems, and chaotic systems.

Cynefin Framework: Simple Systems

The first category in the Cynefin Framework is called a simple system. Within a simple system, the relationship between cause and effect exists, This relationship is predictable, repeatable, and understood. The simple order category is established to be one where this cause-effect relationship is clear to anyone with a basic understanding of the system. The decision model for this category is: Sense - Categorize - Respond. These types of issues are resolved through the application of best practices.

Cynefin Framework: Complicated Systems

In the complicated domain, there still exists a relationship between cause and effect like in a simple system. The difference is that this relationship is not self-evident. In other words, there is a correct answer or solution to the problem but finding that answer and applying the solution will require expertise. The decision model for complicated systems is: Sense - Analyze - Respond. An expert within the domain of the issue is required to analyze the problem and utilize "good practice," which is one of the potential various answers to complicated situations.

Cynefin Framework: Complex Systems

The Cynefin Framework distinguishes between complex and complicated by looking once again at the cause-effect relationship. In a complex system, cause and effect are only obvious in hindsight. Complex systems often have unpredictable and emergent outcomes where causality is difficult to ascertain. The decision model for a complex system is: Probe - Sense - Respond. Experiments are made within this system, and their outcomes are analyzed.

The outcome of the experiment dictates whether that experiment is amplified or dampened to adjust the system. The order that is derived from this model results in what are called "emergent practices" or novel approaches.

Cynefin Framework: Chaotic Systems

In a chaotic system, no cause and effect relationship can be determined. Issues that occur within these models are unpredictable and nearly impossible to nail down. Due to this, it is essential that these issues be acted upon immediately to attempt to stabilize the situation. The decision model for

chaotic systems within the Cynefin Framework is: Act - Sense - Respond. Agility is essential for addressing these situations, and the solutions that are discovered are considered to be "novel practices" due to the likelihood that they will only apply to that specific problem.

Applying the Cynefin Framework in ITSM

The Cynefin Framework provides a means by which a problem can be quickly identified, and the steps to solving it are made immediately clear. This approach moves away from the traditional management methods of one size fits all and moves executives towards the concept of changing the way in which they address a situation depending on the nature of the issue itself. Different types of issues require different methods of analysis to best address them.

The Cynefin Framework seeks to aid executives in changing their perspective from their preconceived notions, allowing them to apply different methods for solving problems to address the nature of the issue itself. This also encourages others working on the issue to think about the nature of the problem to then decide whether they need to change their approach to solving the situation by methods such as bringing in an expert or beginning with probing the situation.

IT Service Management (ITSM) involves all activities which concern designing, deploying, and supporting the IT service lifecycle. Employing the Cynefin Framework at all stages of the ITSM lifecycle will aid in quickly addressing and resolving issues as they arise. ITSM and <u>DevOps</u> practices focus on leveraging agility through the application of organization-wide mindsets, focusing on communication and collaboration. Put simply, the Cynefin Framework provides a means for quickly assessing a situation and determining the best course of action for addressing it.