

2DO



Data Driven Organization - 2DO

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"We are drowning in information, while starving for wisdom. The world henceforth will be run by synthesizers, people able to put together the right information at the right time, think critically about it, and make important choices wisely." - E. O. Wilson

The following framework aims to leverage data as a critical asset to build a data-driven organization focused on fulfilling its overarching goals and objectives. The result is an informed organization with the knowledge to illuminate understanding, enabling it to identify opportunities to make wise decisions. Even though it is rudimentary to most, the cognitive process has bogged down, given the growing volume of data and the resulting complexity of the interdependent information relied upon for even the most basic decisions. As the world quickly transitions from the industrial age to the age of knowledge, the challenge before us is daunting.

The criticality of making informed decisions in a society saturated with information has created a risk-averse culture intolerant of anything less than pure knowledge upon which to base exacting decisions. Thus, their dependence on collecting data, cataloging information, and correlating knowledge to contextualize understanding has created a demand curve that knows no bounds. In a simpler time, the information cycle was driven by the daily newspaper; in today's world of instantaneous internet access, which has driven a 24/7 insatiable appetite for perfect awareness and an impatience for less-than-perfect knowledge, which permeates all aspects of day-to-day life. With all the information germane to any topic or question readily available, the tolerance for mistakes has created a risk-averse environment and a hard-to-manage demand signal.

Today's high-paced, interlinked world requires an adaptive approach to derive a competitive advantage. The growing mass of data and the complexities of information have increased the difficulty of knowing what the current facts are and of understanding the interdependent relationships to fully appreciate the impact of actions taken, measured against the results to be achieved. With full knowledge and understanding, decisions become relatively simple. However, the task of acquiring data fit for purpose and structuring them into operationally relevant information that informs the cognitive process for determining strategic trade-offs is no easy task.

**“Everything in strategy is very simple,
but that does not mean that everything is easy”**

– Carl Von Clausewitz

By establishing processes and platforms to support cognitive processes, we can more effectively assess timely facts that inform decisions and identify how they influence the environment in ways that positively fulfill our goals and objectives. Even with the ability to discover data and search the internet, we find ourselves challenged by knowing what to ask and how to apply it to our circumstances. With a dynamic environment changing and evolving at the speed of light, the growing list of dependencies makes it hard to conceptualize. Thus, we must examine and know the facts that support the variables, understand the relationships, and provide timely updates to not only ascertain answers to questions but also be aware of and appreciate the operations.

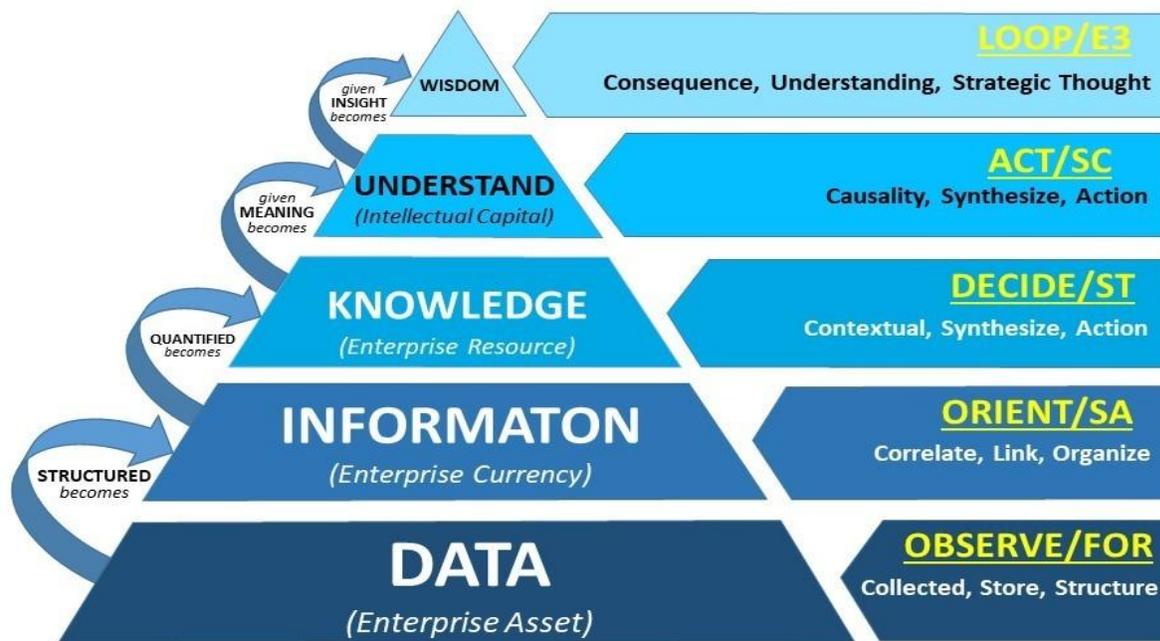
Like an algebraic formula, we must provide timely updates to the variables involved and collect the necessary facts (data) to assess the extent to which their operators (relationships) causal effects that affect the outcomes or consequences. Then we must properly understand those relationships to appreciate the implications of those dependencies. Once we establish the equation, we must find a way to pull timely, factually correct data and then properly inject it into the right formula to produce the proper answer to the appropriate question.

Given full awareness of our environment and with an understanding (*prescriptive modeling*) of the associated dependencies, we can become aware through probabilistic determining (*predictive modeling*) as to what to expect and know what options and opportunities exist (*potential modeling*) and how they can be applied to derive the propensity for the desired outcomes (*strategic tradeoffs*). It is through our ability to understand the causality of actions relative to the results to be achieved that we can determine the potential consequences of these influences and their effects on our organization.

We need to be mindful that the aforementioned effects are appropriately measured and reliable only in closed systems, given the ever-changing nature of our environment in open systems and the varied influencers that are hard to identify and approximate. Thus, we must constantly update the data and the effective variables given the dynamic

relationships in this highly pervasive, continually evolving environment. Therefore, it becomes essential to link data autonomously to ensure currency if we are to analyze information (via Artificial Intelligence-AI) accurately, given the continual adaptations in our efforts to understand and learn the trends associated with causality and consequence (*Machine Learning-ML*) in this highly adaptive environment. By illustrating real-time knowledge that informs understanding, we can now assess data, characterize information, enlighten knowledge, empower understanding, and Evolve (ACE) wise decisions.

DATA - Maturation



Frame of Reference (FOR) - Situational Awareness (SA) - Strategic Tradeoffs (ST) - Strategic Choices (SC) - Enlighten Empower Evolve (E3)

A platform and process to continuously update the implications of actions taken, and illustrating how the influencers affect the environment in unforeseen ways, we begin to understand the complexities associated with our efforts to support, enhance, and evolve (**SEE**) this ecosystem. By assessing the impact of unintended consequences in today's interlinked world, we become aware of how this organism operates and gain an appreciation of its characteristics, which enlightens us to actions that empower us to effect, evolve, and transform our circumstances to produce outcomes aligned with our objectives. Given the complexities associated with the open system and the unpredictability of influencers beyond our control, we struggle to assess how the manifestation of causality affects our ability to **A.C.E.** operations in an effort to shape and transform paradigms and perspectives. (see *article on A.C.E. the information domain* <https://www.linkedin.com/pulse/ace-information-domain-assessing-characterizing-become-nevin-taylor/>)



“If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle.” Sun Zu

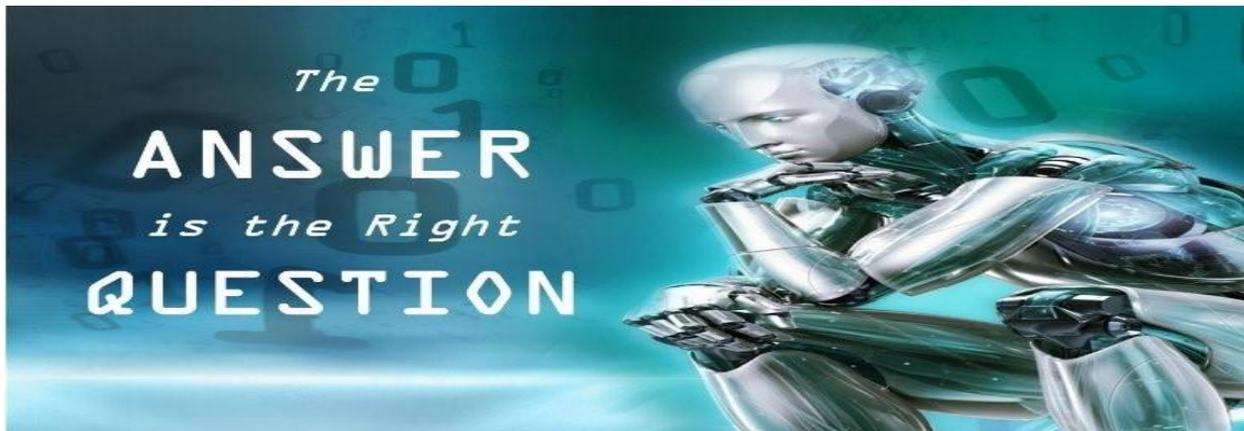
By creating a foundation upon which to assess facts as they evolve, characterize relationships and their interdependencies to elevate of our Frame Of Reference (*FOR*) heightened awareness, the propensity to make informed decisions affords an enlightened approach to assess the strategic tradeoffs. Thus, appropriately constructed, this enterprise information model will allow us to define and deconflict data sets, ensuring we communicate on a standard set of terms through an enterprise data dictionary (*EDD*).

By structuring the relationships as we know them, we can identify where they reside and when they were last updated in a common reference point, an information asset catalog (*IAC*). This provides a means to measure their dependencies on decisions that inform our understanding of their characteristics throughout the maturation process. These steps offer a means to make data visible so that it can be discovered, information accessible and searchable, and understandable by assimilating it within context. The result is an opportunity to assess options that serve objectives, making wise decisions that fulfill organizational goals. It is through a journey of exploration that organization evolve and transform to derive competitive advantage in today’s volatile, uncertain, complex, and ambiguous environment (*VUCA*).

“The Concepts and experimentation are intended to be innovative and must be pushed to their extremes. Most experiments fail, yet through failure springs success. That is acceptable and is part of the price we pay for unregimented thinking and open-minded, disciplined experimentation.”

Secretary James Mattis

In summary, today's CDO must present the foundation of fact (data fit for purpose) as we know it. Additionally, they must provide a structured approach to illustrate the relationships (*operationally relevant information*) as we understand it, and then measure the veracity and dependencies (*knowledge in action*) to determine their confidence in it as a measure of its trustworthiness. As they link it in real-time, they ascertain its maturation as a manifestation of the adaptive evolution in their efforts to A.C.E. wise choices not just in the here and now but as an influence that shapes the future. In the end, it is about exploring the question rather than searching for the correct answer, which affords the strategic imperatives to be adopted to transform the environment in ways that serve the organization's goals and objectives.



<https://www.linkedin.com/pulse/answer-right-question-nevin-taylor/>

The growing dependency on the information environment and the digital domain requires us to leverage tools and new techniques to keep pace in our efforts to gain and even maintain our competitive advantage. Today's quest for data is growing beyond our ability to quench, which catalyzes us into the age of knowledge. In today's more for less competitive environment, our ability to work smarter is unfortunately often overshadowed and even distracted by the necessity to work harder. In this new world transformed by technology, the days of brawn over brains are gone, as we realize that this new environment no longer assures the survival of the fittest but the most enlightened.

Gone are the days when data was merely managed and stored; the demand for data has increased, as has the creation and aggregation of data at an unprecedented rate, leaving us drowning in data and starving for wisdom. Data is the fuel that feeds the quest for information that, when appropriately applied, provides the requisite knowledge to enlighten understanding. To that end, I believe good decisions must be predicated on knowing the facts that inform understanding and illustrate the options to capitalize on opportunities as they present themselves. Given the rapid growth of data that doubles every two years, the related complexity is mind-boggling. Thus, we must create tools to assist in the collection, cataloging, and correlation that contextualize the causality and potential consequences of actions taken, measured against the desired results to be achieved. It is through this heightened awareness that timely, relevant decisions can be made, predicated on one's situation and circumstances.

It is thus crucial that leaders are aware of their environment, and must SEE (*support, enhance and evolve*) to capitalize on those opportunities that provide for the competitive advantage and the fulfillment of those goals and objectives that serve their organization's purpose. Through clarity of thought and a concise, unambiguous message, they provide the requisite support by teaching, helping, empowering, Empowering and Mentoring **T.H.E.M.** to contribute in a way that maximizes their potential. It is thus essential to evolve and transform their organization if they hope to remain competitive in their efforts to create their future, or they will succumb to the harsh reality that they will devolve to a footnote in history. Therefore, they need to understand that the past informs the present, but their vision will drive the organization forward to embrace, if not create, its own future.

- **Leaders establish a Purpose – Vision . . .**
- **Managers align the Process – Efficiencies. . .**
- **Supervisors capitalize on Potential – Effectiveness . . .**

Ultimately, theirs is the vision of the future of unlimited possibilities, unencumbered by the impediment of fixing rather than solving their problems. This is done by establishing open communication that facilitates coordination, creating a collaborative environment that synchronizes efforts to capitalize on the synergistic byproduct of a team-focused effort. One must be cautious to avoid the propensity of becoming distracted by yesterday's success at the expense of today's necessities.

Their focus must be on looking forward to preclude finding themselves living in the past, quickly constricted by it, and even condemning them to not just making history, but becoming a part of it. Through a thoughtful approach to exploring potential solutions, inspirational leaders serve to encourage their teams to engage in planning and programming courageously, focused on building their organization in preparation to capitalize on opportunities.

- **PEOPLE** *est a culture that creates capabilities that assure goals/objectives engagement*
- **PROCESSES** *align sequences and synchronization operations to optimize efficiencies*
- **PLATFORMS** *assure consistent engagement to capitalize and harvest effectiveness*



To that end, it is essential to develop a platform to collect and define data in an enterprise data dictionary (*EDD*), correlate and structure information in an info asset catalog (*IAC*), and contextualize and present it in a knowledge ops portal (*KOP*). This offers the means to provide the enterprise with a tool to discover the mass (Volume) of data by making it **VISIBLE** to measure its quality (*Veracity*). The second step in this process is to structure it in a way that makes information **ACCESSIBLE** and provides a means to identify its relationship and measure its dependencies upon it. And finally, it is essential to illustrate the facts that inform knowledge, contextualizing them in a way that evolves **UNDERSTANDING**. By **LINKING** this in space and time, we can elevate situational awareness, evolving knowledge into contextual understanding to make wise decisions. It is through this process that we can assess the **TRUSTWORTHINESS** to unlock the V.A.U.L.T. to expertise throughout all phases of the cognitive process.

- **Collect FACTS** (*data fit for purpose*):
- **Correlate DEPENDENCIES** (*operationally relevant information*):
- **Contextual AWARENESS** (*Knowledge in Action*):

This process affords the means to leverage data to inform us of available options, understand when best to accomplish them, and make wise decisions that fulfill the goals and objectives that serve the purpose of the organization. The results will be to optimize effectiveness, serve as a catalyst for change, and ensure the organization's future prosperity, to the mutual benefit of its customers, employees, and stockholders.

