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**STRATEGIC DECISION MAKING  
USING SENSE-MAKING MODELS: THE CYNEFIN  
FRAMEWORK**

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**Abstract:**

In every organization the activity is always based on a number of daily decisions, but sometimes serious decision-making problems are needed to be taken, usually under risk and uncertainty. The paper presents a number of basic decision making models have been developed to aid business managers, with a highlight on their pros and cons.

Today's business environment has a fluid, ambiguous and uncertain nature, so classic rational decision models simply won't work well in many situations. In this respect, the paper further analyses an innovative strategic decision process model named *Cynefin* that reflects current concerns and practice in management and organizational theory and was relatively recent developed to helps leaders determine the prevailing operative context in order to make the most appropriate choices.

**Key words:** *decision-making, decision-making models, Cynefin framework, risk and uncertainty.*

## **1. Introduction**

In every organization the daily activity is always based on a number of “tactical level” decisions, but sometimes serious decision-making problems are needed to be taken. As individuals we analyzed the problems and chose the best decision among multiple alternatives, but in an organization, the problems are more complex and the decisions are usually taken under risk and uncertainty.

Every decision we make is influenced by several factors and using trade-offs we must minimize the negative consequences of our actions [1]. The decision process leading to solutions can be imagined in four stages: the perception of the need for a decision or an opportunity, the formulation of action alternatives, evaluation of the alternatives in terms of their respective contributions, and the choice of one or more activities to be carried out [2].

The decision-making process in an organization should be clear, consistent, detailed and also transparent suitable for quickly solving different issues. A considerable difficulty in decision making is the failure to act until it's too late, moment when information and options are severely limited. When an organization is working in a “reactive” mode, problems are identified only when they started to have a negative impact on the activity. Proactivity can be a great advantage in decision making, but it seem to imply the existence of a decision intelligence process that is lacking from many organizations.

When it comes to past performance, many managers tend to attribute favorable scores to their own actions and decisions and do not take into consideration the influence of external factors such as circumstantial events and pure luck.

## 2. Basic Decision-Making Models

During time, a number of basic decision making models have been developed to aid business managers to take informed and best possible decisions. The first decision making model is based on the *Classic Decision Making Process*. The “classic” decision making process is based on John Dewey’s [3] formulation of the problem solving process. It is the archetype of the rational-analytic approach to decision-making and it still can be found in many organizations.

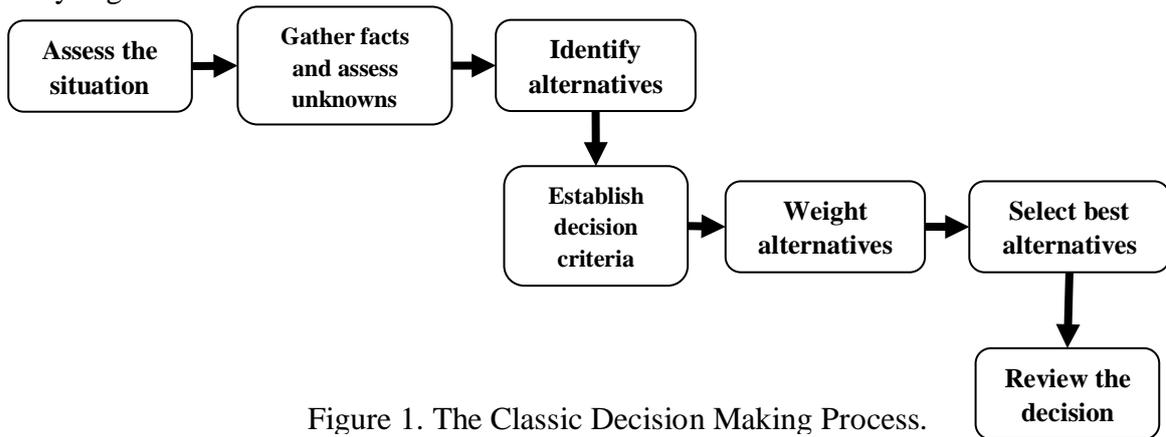


Figure 1. The Classic Decision Making Process.

Even if the model is simple, easily to understand, appeals to the belief in rationality, is widely known and managers are comfortable with it, it has some serious limitations such as: a) does not reflect the reality of strategic decision making situations and it assumes causal linkages are knowable (known); b) does not reflect the political aspects of strategic decision making and it ignores intuition (so called “gut” instinct).

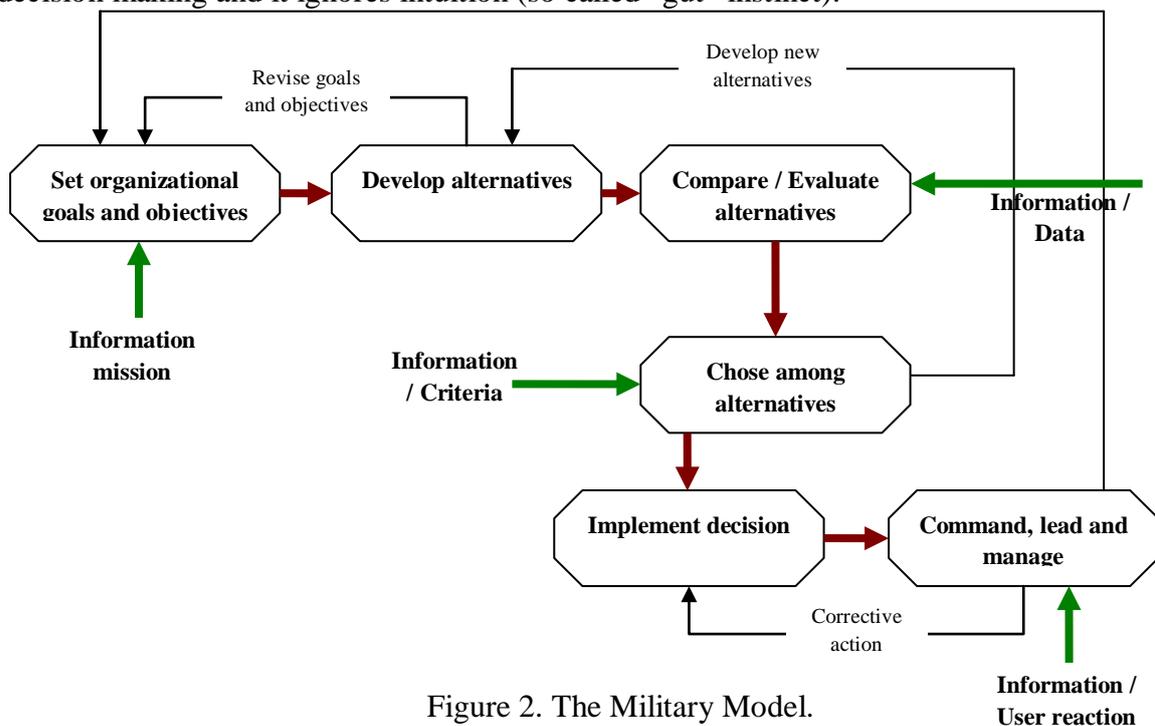


Figure 2. The Military Model.

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A second decision making model is the *Military Model*, which is a variation on the classic model. Figure 2 depicts the military model adapted from the one presented at the U. S. Army War College.

The model has some advantages, such as the emphases on organizational goals and objectives as a major factor in decision making and the importance of execution to make the decision happen. It has the same disadvantages as the classic model, being almost worthless in ambiguous situations. Also it concentrates more on the ability to process and analyze data and less on the ability to distinguish patterns.

The third and maybe the most frequently utilized model of the decision-making process is *Mintzberg's General Model of the Strategic Decision Process*. For managers who like to visualize their strategies, the graphic representation of the model is quite complicated, not so easy to be understood hence provides little viewable procedural guidance. It consists of three phases (identification, development, selection) and seven routines (recognition, diagnosis, search, design, screen, evaluation-choice, authorization) [4].

The model defines decision as a commitment to a line of action - not just a simple choice from alternatives, highlights the dynamics of the decision-making process (interrupts, timing delays and speed-ups, feedback delays, comprehension cycles, failure recycles), highlights the importance of decision control, decision communication and political supporting routines (planning, switching, exploration, investigation, dissemination, bargaining, persuasion, co-optation) and suggest several patterns of strategic decisions.

### **3. The Cynefin Framework**

There is a fact underlined by many researchers that today's business environment has a fluid, ambiguous and uncertain nature. As a direct consequence, the decision making models that does not take such factors into account are ineffective when it comes to strategic decision-making process analysis. "*The issue in decision making is knowing when to run like hell and when to stand still*" [5]. It's increasingly difficult to "know when to run" in today's environment, where complex, fluid situations lead to instability and unpredictability. Classic yesterday's rational models simply won't work well in many situations today.

In this respect, an innovative strategic decision process model named *Cynefin* was relatively recent developed by Cynthia Kurtz and David Snowden of IBM's Global Services division. The origin of the Welsh name *Cynefin* (pronounced Cunevin) deserves an explanation. Its literal translation is habitat or place but it actually means a place of your multiple belongings. Your root is in many different paths that profoundly influence who you are. It's a good name for a complexity model and also for a complex system.

First a couple of key points about the model. First of all it's a sense making model, not a categorization model. The difference is that a classic model is a classic 2x2 matrix. In those models the framework precedes the data. As a result it is very fast, because we just drop the data into the appropriate box and decide accordingly. The danger is that actually we won't see subtle differences until it is too late so we will be caught out.

So categorization is good for exploration but its pretty poor for exploration or during times of change. In a sense-making framework on the other hand the data precedes the framework and the pattern of the framework itself emerges from the data. So, there is an important distinction: categorization models - framework precedes data; sense-making models - data precedes framework and of course one can become the other.

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In order to build the Cynefin framework we take in consideration three basic systems: *ordered systems*, *complex systems* and *chaotic systems* (figure 3 a).

We create a new category called *disorder* and after that we divide *ordered systems* in two: *simple* and *complicated systems* (figure 3 b).

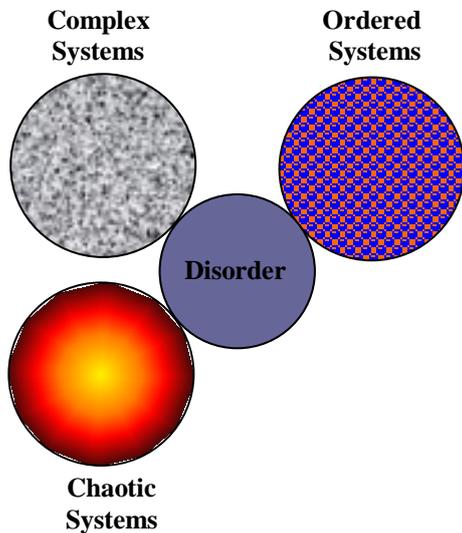


Figure 3 a. The Cynefin Framework

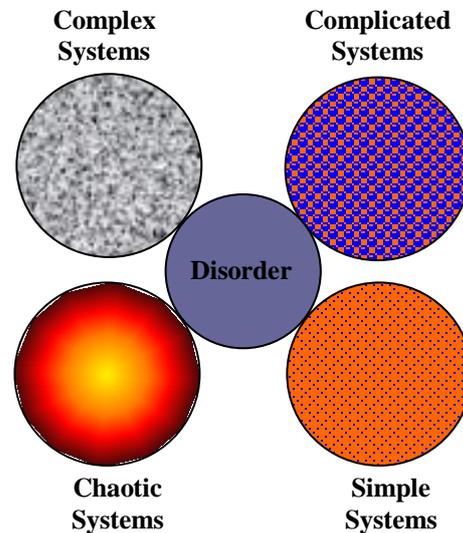


Figure 3 b. The Cynefin Framework

The Cynefin framework suggests four basic approaches to strategic decision-making based on the characteristics of the situation analyzed (figure 3 c):

1. *Complex*: probe to clarify patterns; sense the patterns; respond by stabilizing desired patterns (manage the outside environment);
2. *Knowable*: sense incoming data; analyze that data; respond in accordance with expert advice or based on the analysis (respond to the outside environment);
3. *Chaos*: act quickly and decisively; sense reactions to that action; respond further as appropriate (feel your way along);
4. *Known*: sense incoming data; categorize it in accordance with known schema; respond with predetermined practices.

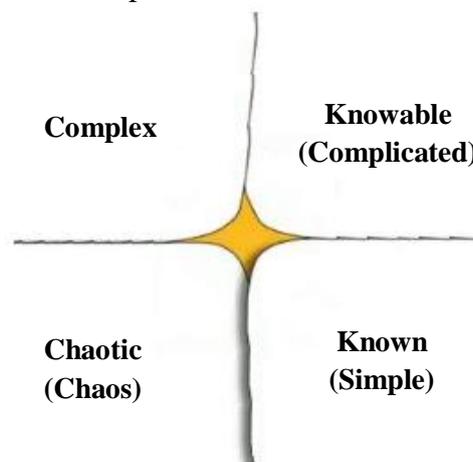


Figure 3 c. The Cynefin Framework.

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In a *simple* domain this is an ordered system that means the relationships between cause and effect exists, is predictable, repeatable and could be determined in advance. In a simple order that relationship is self evident to any reasonable person and as a result the decision model is **Sense-Categorize-Respond**. We see what's coming in, we make it fit in previously determined categories and we decide what to do. The model here is that we apply best practices, which is legitimate in this domain, but illegitimate in other domains.

In a *complicated* domain there is a relationship between cause and effect, there is a right answer but it is not self evident so we either have to deploy an analytical method like **Sense-Analyse-Respond** or calling experts who build expertise in that domain and can make the right decision. We apply here good practice.

The distinction between good and best practice is actually quite important. In a complicated domain there are several different ways of doing things, all of which legitimate if you have the right expertise and try to force people to adopt one of them is actually quite dangerous, because it will annoy people to the point they will want to apply best practice where it shouldn't be applied.

*Complexity* on the other hand is a system without causality, is a system of light constraints so the decision model here is **Probe-Sense-Respond**. We conduct failsafe experiments, we didn't do failsafe design. If an experiment succeeds we amplify its importance if it fails we dump it. We shouldn't even do an experiment without identify amplification and dumping strategies in advance. Of course what happens here is that we get emergent order something that comes out to emergent practice, a new way of doing things, is novel. It may be some combination, but it's different and it is unique.

In a *chaotic* environment if we enter deliberately its renovation, but if we enter accidentally we need to stabilize our position quickly because no cause-effect relationships can be determined. The decision model here is **Act-Sense-Respond**. We move very quickly to stabilize the situation any practice will be completely novel in terms of the way things work.

You'll notice that gives an easy way of deciding how to work, but give us a divergent (sometimes called requisite applicability). It basically says depending on which space you are in you should think differently, you should analyze things differently rather than one size fits all which should be the traditional management theory.

The central space - *disorder* is a space of not knowing which domain we are in, and we are there most of the time. The trouble is that we will interpret the situation according to our personal preference for action. The danger is that we spend a couple of years in a pure bureaucratic process based drill we tend to see all problems as a failure process. If we are deep experts than any problem is failure to give us enough time or resource to make analysis. Natural complexity workers are battlefield commanders, politicians. Their reaction to a crisis is to get lots of different people from lots of different backgrounds with desperately hope that someone will come up with the right solution - quite a good strategy.

What we get in a normal decision environment is that people are in a disordered space assessing the situation according to their preference for action.

One of the main functions of the Cynefin Framework is to allow people to say: "Hang on a minute it is complex, therefore we probe" or "Hang on a minute it's complicated, which expert should be we bring in".

In figure 3 c we observe a boundary or a cliff between the simple domain and the adjacent one - the chaotic. The reason is: the simple domain could easily collapse into chaos because success could bring an unfounded sense of security. The drift describes

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catastrophic failures such as dominant technologies that were abruptly disrupted by more dynamic alternatives.

The Cynefin framework reflects current concerns and practice in management and organizational theory, but it is relatively new and was not yet thoroughly tested in strategic decision-making settings. Its “revolutionary” character and added value is determined by the challenges made upon some basic historically assumptions: the world is ordered and knowable, people are always and completely rational and actions always point to underlying intent and never reflect happenstance [6]. Also offers a good framework for the situations strategic decision makers face currently.

#### **4. Conclusion**

A well known idea is that what works well in one set of circumstances could miserably fail in others. The idea contradicts the logic and we end up asking why these approaches fail even when logic indicates they should be prevalent? The answer rests in the level of unpredictability and disorder existing in the world. The main reason for these failures is the application of a common leadership approach to all the scenarios - “One shoe fits all” strategy.

The Cynefin framework helps leaders determine the prevailing operative context so that they can make appropriate choices [7]. To conclude, each domain requires different actions. *Simple* and *complicated* contexts assume an ordered universe, where cause-and-effect relationships are perceptible, and right answers can be determined based on the facts. The ordered world is a fact-based management environment.

In *complex* and *chaotic* contexts is no apparent relationship between cause and effect, the domains are unordered and the road ahead is determined based on emerging patterns. The unordered world appears as a pattern-based management environment.

The only way out from the *disorder* context (when we manage to recognize we are inside it) is to decompose the situation into distinctive parts and allocate each of it to simple, complicated, complex or chaotic contexts. Leaders find themselves in familiar situations specific to each domain (context) and can make decisions using contextually based ways.

By using the Cynefin Framework managers can sense which situation they are in, so they can avoid the problems, make better decisions and adjust (or abandon) their preferred management style which is inadequate to the context.

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