Finding Tacit Knowing in the Knowledge Continuum

By

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Abstract

The objective of this paper is to find tacit knowing in the Knowledge Continuum. The knowledge continuum is the following sequence of processes: Data → Information → Knowledge → Wisdom. The tacit knowing definition is based on Polanyiôs view of tacit knowing since he was the first to define it and there is an empirical proof of theory that his tacit knowledge dimension exists (Morgan, 2006 & 2008). Polanyi (1966) sees tacit knowing as being defined by two terms. The terms are labeled ñproximal and distalò (Polanyi, 1966, page 13). The linkage between these two terms is a tacit link. ñWe know the first term only by relying on our awareness of it for attending to the secondò (Polanyi, 1966, Page 10). After the tacit knowing link is defined in the knowledge continuum, the question that remains to be answered is whether the tacit knowing link is only from within the individual or is it observed or both?

Introduction

The objective of this paper is to find tacit knowing / knowledge in the Knowledge Continuum. The knowledge continuum is the following sequence of processes: Data → Information → Knowledge → Wisdom.

What is Tacit Knowledge / Knowing?

The tacit knowing definition is based on Polanyiôs view of tacit knowing, since, he was the first to define it and there is an empirical proof of theory that his tacit knowledge dimension exists (Morgan, 2006 & 2008). Polanyi (1966) sees tacit knowing as being defined by two terms. The terms are labeled ñproximal and distalò (Polanyi, 1966, page 13). The linkage between these two terms is a tacit link. ñWe know the first term only by relying on our awareness of it for attending to the secondò (Polanyi, 1966, Page 10). In other words, there is a tacit link between knowledge entities that we are not explicitly aware of. This linkage has grown over time to indicate that all explicit knowledge (knowledge that we are aware that we know) has a tacit component that must be used in order to be successful in using the explicit knowledge. (Gill, 2000) Thus, when we externalize explicit knowledge, it becomes information because the tacit knowledge component cannot be externalized as we are unaware of it. Once we become aware of the tacit knowledge, it is no longer tacit because it has become explicit. According to Polanyi, the entire meaning of the first and second terms has been changed for us (Gill, 2000). Morgan and Morabito (2010) found that Polanyiôs tacit knowing concept has certain characteristics:

1. ñIt is individual and not shared
2. The user is not aware that they are using it
3. It is time sensitive, because at some point in the future it may be recognized
4. Inexpressible in words and may be expressible in action (Most likely not very scalable)
5. Provides linkage between knowledge entitiesò

The Knowledge Continuum

The Data → Information → Knowledge → Wisdom continuum according to Bellinger (2004) is ñlike water, this rising tide of data can be viewed as an abundant, vital and necessary resource. With enough preparation, we should be able to tap into that reservoir -- and ride the wave -- by utilizing new ways to channel raw data into meaningful information. That information, in turn, can then become the knowledge that leads to wisdom.ò Bellinger (2004) states that ñit's probably appropriate to develop some perspective regarding this stuff called knowledge, which there seems to be such a desire to manage. Consider this observation made by Neil Fleming as a basis for thought relating to the following:

- A collection of data is not information.
- A collection of information is not knowledge.
- A collection of knowledge is not wisdom.
- A collection of wisdom is not truth. ñ

Ballingerôs (2004) view is that:

- **"Data** has no relation between the pieces of data
- **Information** relates to description, definition, or perspective (what, who, when, where).
- **Knowledge** comprises strategy, practice, method, or approach (how).
- **Wisdom** embodies principle, insight, moral, or archetype (why)ò

For the purpose of this paper:

- **Data** is all the ñstuffôthat is presented to us
- **Information** is how we structure the stuff presented to us
- **Knowledge** is created by the successful application of information
- **Wisdom** is the ability to skip the information and knowledge steps

Creating Information Process:

Letôs start with the creation of the information process from the data presented to us

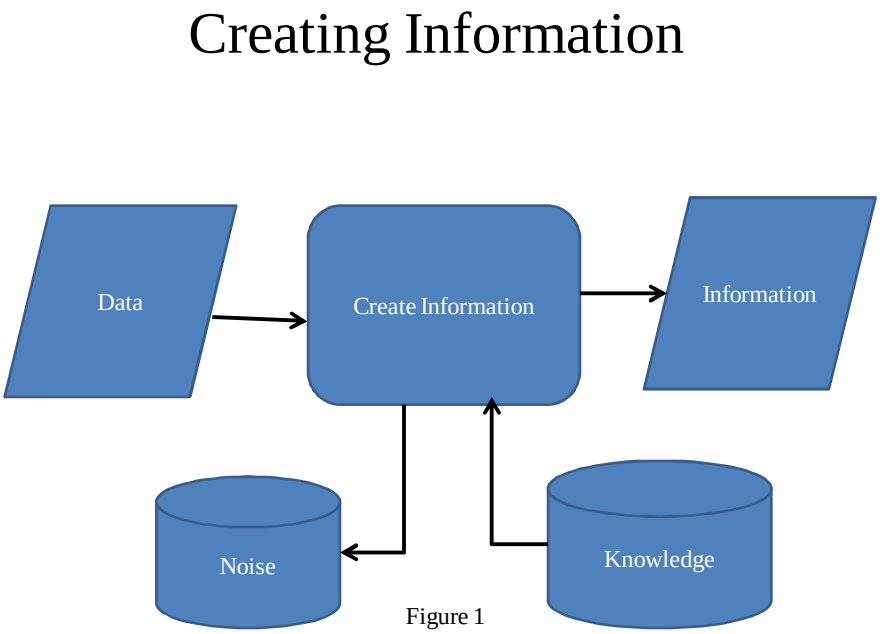


Figure 1

In creating information, we process all the data that we receive against our knowledge base to determine what makes sense to us. All the data that does **not** make sense to us is noise. We store the noise for reprocessing later, when we have new knowledge. During this process, some noise may be discarded, but that is not recommended. During the creation of information, we may find some correlation between various pieces of data, which facilitate the creation of the information.

Creating Knowledge Process:

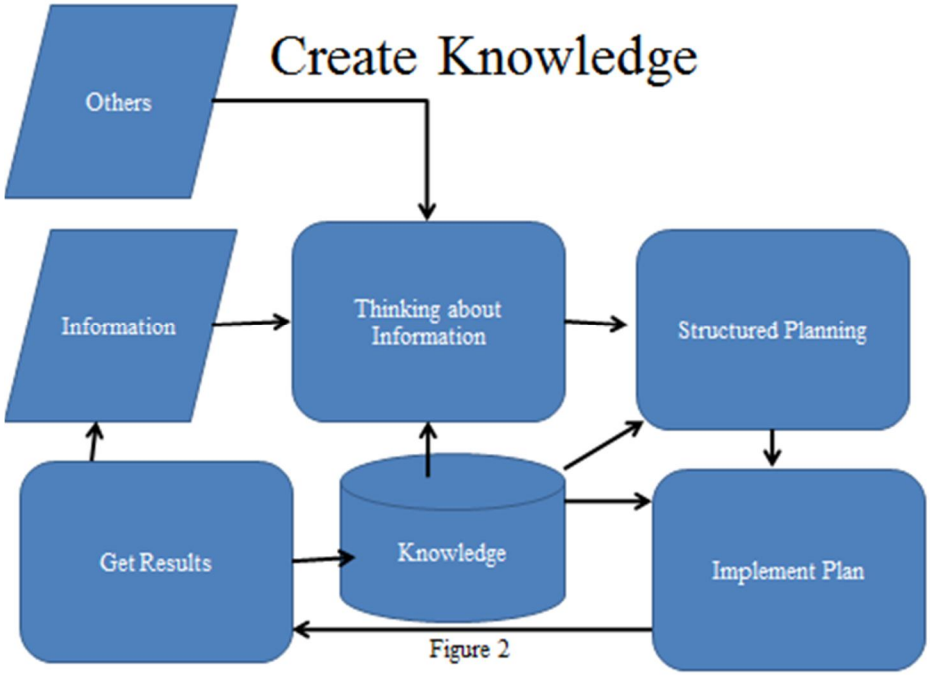


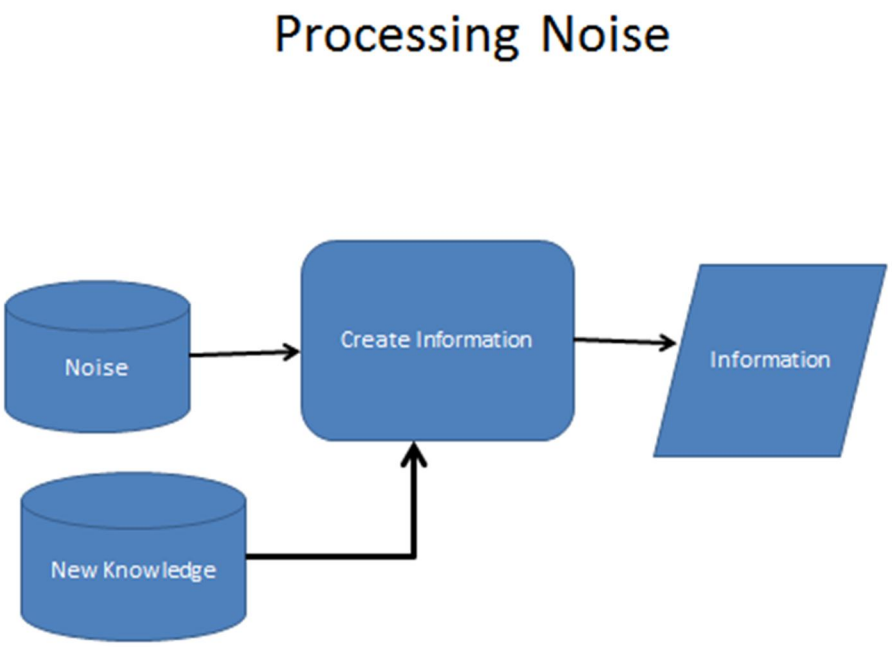
Figure 2

There are two (2) sources for information input to this process. The first is the information that was created from the data in Figure 1. The second source is Others (people, documents, pictures, etc.). This source provides information, but may not be accompanied by supporting data. Morgan, Merino, Morabito, and Reilly (2001) defined this information that becomes knowledge as Coalescent Knowledge. In 2009, Morgan completed an empirical proof that coalescent knowledge existed and presented it at an Academy of Management Annual Conference. Coalescent knowledge has the following characteristics: Shared, Expressible by words or action, Private or Public, Scalable (2 to many), and Facilitates the opportunity for individuals to act as if they have one mind. Therefore, knowledge is made up of three entities: Explicit (Individual) or Coalescent (Shared), and Tacit (Individual).

In this process, the information is analyzed for validity and possible application. If the information has a viable application, then structured planning takes place to evaluate its potential. The next step is to implement the structured plan and get results. If the structured plan results are in line with the expected results from the plan, then the information becomes knowledge. In order to have knowledge, we must have two entities (Tacit and Explicit or Coalescent). Since the tacit entity does not exist in information, it must have been regenerated during the process of using the information. Since, the regeneration process is controlled by the userôs culture, knowledge, and values, the regeneration of the tacit entity may occur differently for different people. This explains why different people do not obtain identical results when using the same information.

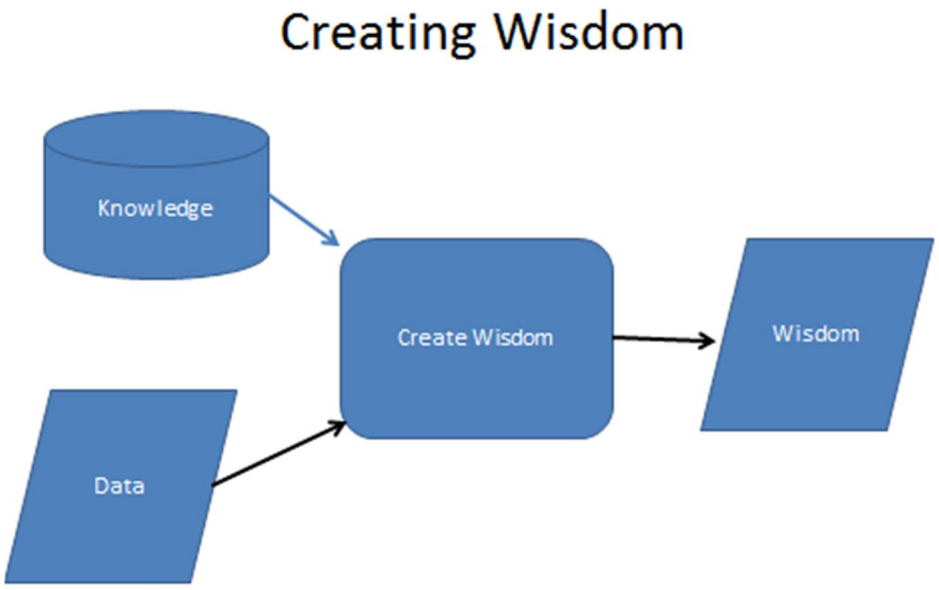
The results may not validate the planôs expectation. In this case, we have new information that enters the process again. At some point in time the information may become knowledge or be sent to the noise storage for future processing.

Noise Processing



After new knowledge is created, the noise storage data should be reprocessed to determine if new information is contained in the depository. If new information is found, then it will be handed off to the knowledge creation process for processing

Creating Wisdom Process



There could be an argument that wisdom is created by using the information and knowledge creation process so frequently to process the same information, that a person would soon recognize the data items and go to the knowledge conclusion, thus skipping the information and knowledge creation processes. The learning effect (Reid, Sanders, 2010) that permits a person to reduce the amount of time that it takes to do a task will facilitate the changing of the knowledge creation process. After a period of time, the information and knowledge creation processes would not be recalled as part of the process. In this case, the person has been able to link the data to a knowledge conclusion without using the entire process. This link would be a tacit link (Tacit knowing). A second argument could be made that some people can see the relationship in the

data based on their knowledge, culture, and values. These individuals exhibit tacit knowing based on their ability to see the linkage. In many cases, these conclusions are not readily accepted by others, since they cannot see the linkage. In most cases, a person must start with the conclusion and work backwards to the data to establish a logical path for others to follow. Therefore, the tacit knowing / knowledge are really the linkage to a conclusion or result that the individual and others do not see. If repeated frequently it would be considered wisdom.

Conclusion

The objective of this paper was to find tacit knowing / knowledge in the Knowledge Continuum. This was accomplished in the knowledge creation process, which created the tacit component to make information into knowledge. In addition, in the wisdom process, experience can cause individuals to skip steps / processes in arriving at conclusions. Some individuals, without the experience component, have the ability to actually skip the information and knowledge processes to arrive at the correct conclusion. In most cases, tacit knowing is a personôs ability to draw an accurate conclusion when the steps are not visible to them or others that are observing the process.

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