

What is Information?

an essay and case study

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Introduction

Before studying information as an academic discipline, I never gave thought to it being anything more than 'stuff' that might be contained in a book, newspaper, or weather report. Many laypeople would share the sentiment as noted when my classmates were posed the question before formal study on the matter began. Throughout the course we have been learning of information from other abstract perspectives, considering underlining philosophies of information and its ontological and metaphysical arguments, and debating theoretical and systematic methods to codify information science as an academic domain similar to physics, the performing arts and literature.

What is information? Information is anything that helps individuals live better lives. It is sense made from collections of seemingly random facts or the result of contextualizing data. It is the precursor of knowledge in a progression leading to wisdom. These three paradigms of information have been heavily discussed throughout the course, and other major courses within the degree program. I would like to define information mainly through a case study of the DIKW pyramid, highlight thoughts from a preeminent scholar of the field all while injecting various lessons gained from class.

What is Information?

As a minister, I am challenged to present what may be deemed information on a weekly basis to my congregation. Having to juggle many responsibilities, I am often pressed for time and am unable to devote the time I would prefer to study and research. Renowned information science scholar Prof. Marcia Bates introduced the idea of 'berrypicking' as a more intuitive and efficient way of information seeking; *"This model will guide our thinking better in the design of effective interfaces"* (Bates, 1989). The search for information can be a tremendously tedious and time consuming task. More efficient means of search/workflow is greatly appreciated. I raise this information seeking model up as support to define information on the premise that information is also a culmination of things stitched together by the seeker to make those things relevant and meaningful, a connecting of dots. I have successfully introduced over my near ten year tenure as pastor various secular ideas which echo or undergird sacred principles. To Christians, the biblical book of Proverbs is seen as a book of wisdom. Given our lectures and readings, the DIKW pyramid and any reference to wisdom has for me been a constant berry picked.

Case Study

"When wisdom entereth into thine heart, and knowledge is pleasant unto thy soul; Discretion shall preserve thee, understanding shall keep thee: To deliver thee from the way of the evil man, from the man that speaketh froward things..." (Proverbs 2:10-12 NKJV). I have been able to use to great effect, lessons taught in this course to help my congregation glean new information and become more knowledgeable about the Bible. If Information can be

defined as data with meaning, could it not suffice to say that various scriptures of a holy book are just data points until those scriptures are understood in meaningful ways? And if this proves to be the case, would the reach for knowledge not be a logical next step... and then onto wisdom? I would say so. Notions of understanding, knowledge, and wisdom are the motifs presented throughout Proverbs.

For 6 weeks during Lent this semester I used the DIKW pyramid in conjunction with another tool, the 5 w's and h technique (who, what, when, where, why, and how) to form a very basic but highly effective information processing system for understanding scripture. It has been one of the most successful and impactful applications of my college education. This system is outlined in 5 steps simply below.

1. Pick a scripture you wish to study.
2. Using the 5 w's and h, form your own questions. Be creative and clinical. Really stretch your inquiry to include very basic to very original and even 'far out there' ideas. Ex, 'Who wrote the scripture, who are the people mentioned in the scripture, who was/is the scripture written for, who should read/who might benefit from reading...
 - a. Who?
 - b. What?
 - c. When?
 - d. Where?
3. Note questions a, b, c and d are all data points. The answers identify characters, setting, situations, time and other pieces that paint the picture of the scripture's meaning. Begin to make inferences about them and match them with appropriate context to better

understand what the scripture is really about. Once you have given proper context, the scripture can now be seen as “information”.

4. Ask and process the final two questions in a similar way;
 - a. Why?
 - i. The why questions begin to create knowledge sets, or groupings of information. Asking, “why is wisdom important”, brings together pieces of information that we could better understand and begin to consider how to shape our actions.
 - b. How?
 - i. The primary how question asked of any portion of the bible studied should be ‘how can I apply this scripture to my life?’ and other how questions should evoke action, which is the pinnacle of the pyramid. Wisdom is doing something with knowledge, and knowledge is understanding what things are and how they are connected.
5. Repeat.

This system, which is now a default for bible study sessions, has been most welcomed by the congregation as one of the best ways they have ever considered understanding the bible. All regular bible study attendees have shown greater interest in reading and gaining knowledge based on this system and all have shown a greater level of biblical literacy since its inception. As a result, I have seen an increase in participation and more informed responses and dialogue during our study sessions.

Lofca and Bates

Again, it was a surprise to hear the term information defined in such new ways during the first few classes. Throughout our classes we have learned many approaches to understanding and codifying information as a thing or idea, but also a process. It has been taught that information science is a multi-disciplinary field drawing from established domains such as communication studies, philosophy, cognitive science, computer science and others... thus information itself is right to be viewed as the sum or product of interdisciplinary parts. Dr. Lofca in his lectures championed Dr. Marcia Bates numerous times as one of the most important figures in the information science field, and her work warrants such acclaim.

Defining information remains such a contested project that any claim to present a unified, singular vision of the topic would be disingenuous. Seven categories of definitions are described: Communicatory or semiotic; activity-based (i.e., information as event); propositional; structural; social; multi-type; and deconstructionist. (Bates, 2010)

This preface to an article so titled 'Information' lets us know the challenge of defining, and opportunity of exploring what it is. I appreciate her own definition where she says it is a 'pattern of organizing matter and energy'. This is a far cry from my former understanding of information simply being 'stuff in a newspaper'. Her definition is further qualified by saying it is not the physical material that composes it; rather information is the pattern of organization of that material, not the material itself.

Conclusion

Information is anything that helps individuals live better lives. It is sense made from collections of seemingly random facts or the result of contextualizing data. It is the precursor of knowledge in a progression leading to wisdom. Information is a way to organize material so that it aids our understanding of it. Information is a necessary step toward knowing and being able to act on said knowledge. Information is not limited to one domain or area of knowledge but is interdisciplinary in all ways conceivable. It is more than mere 'stuff'. Information is what drives knowledge forward and produces wise people and societies.

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