

Digital Skills

by ABC XYZ

Submission date: 30-Nov-2021 04:21PM (UTC-0500)

Submission ID: 1716715304

File name: DIGITAL_SKILLS.docx (203.56K)

Word count: 2106

Character count: 10933

In today's workplaces, data plays an important role

Since data is utilized to derive significant assumptions and to make vital business choices in contemporary workplaces, it has a critical function to play. Students in today's society must be able to handle data effectively in order to get meaningful information and knowledge (Sun, 2020).

Managing data in order to generate useful information

Data must be handled correctly in order to generate information, knowledge, and wisdom. The most fundamental measurement is data, which is often reported in numbers. Unless the data is transformed into information, these figures are of little value to anybody. Knowledge cannot be created without information (Cormier, 2019)

Grit by Angela Duckworth

It is the goal of this presentation to demonstrate the relevance of data management in today's businesses. This presentation seeks to show how the study on Angela Duckworth's grit was used to generate useful information and knowledge. To demonstrate the DIKW pyramid, data taken from Angela Duckworth's grit study will be utilized (Du, 2020).

The DIKW Pyramid

To better comprehend how data is utilized as a primary resource to develop information, knowledge, and wisdom, the DIKW pyramid is used as a framework. This pyramid demonstrates that data is at the base of knowledge and information management, which shows that data is vital (Sun, 2020).

The Importance of Data

What exactly is data?

The fundamental facts and statistical information that are used for analysis or reference are known as data. In other words, data is seen as a set of numbers that may be used to execute a variety of calculations in order to obtain usable data. When it comes to developing knowledge and information, data is the most important factor (Du, 2020)

Learn from Your Mistakes

As a result of the ability to create graphs or bars, data may be used to identify patterns in data. Businesses may use the data to make key choices that will help them improve their productivity (Cormier, 2019).

It Helps Solve Issues

In order to have a better understanding of a variety of characteristics of a workplace, it is necessary to collect and analyze data. As a result, data informs businesses of the challenges they face and helps in the development of plans to address specific issues (Sigurdson & Petersen, 2018).

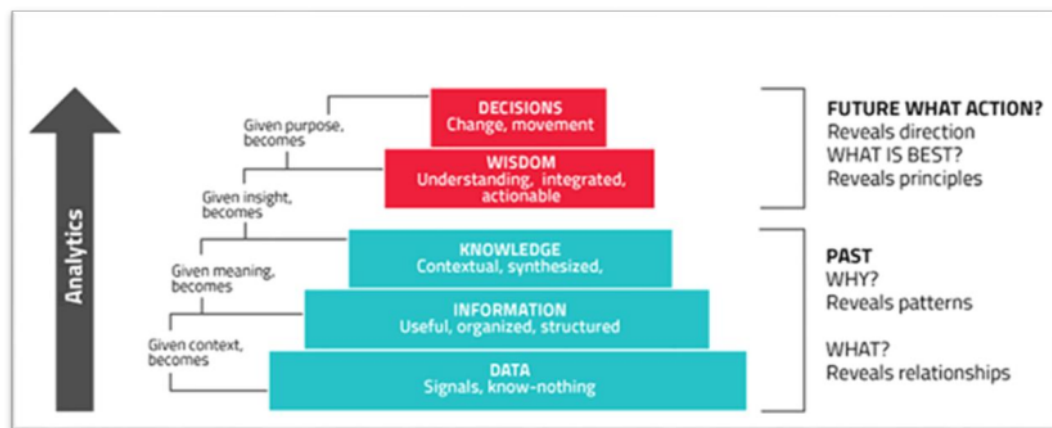
Back up your claims

Research and inquiry are necessary to prove a certain point, yet making an argument is simple. Data may be used to support claims since it is employed in research to support a theory (Sigurdson, 2018).

Helps you find information from many different sources

In order to support a given theory, every study requires data. When researching a certain topic, researchers might utilize data to choose which sources of information they want to employ, depending on the data that is necessary for that topic (Cormier, 2019)

DIKW



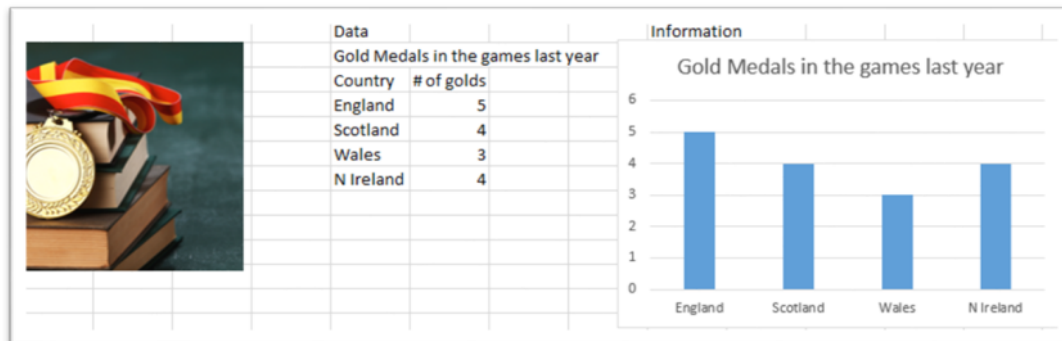
In knowledge management, the DIKW model is a fundamental framework that explains how data is transformed into information. The pyramid shows that data is the most important part of knowledge management, which is why it sits at the bottom of the pyramid. In order to produce information, data is necessary. The DIKW pyramid demonstrates that data is necessary for information and information is necessary for knowledge. For knowledge to be generated, data must be gathered and analyzed. This depicts how data is transformed into information and knowledge by way of the DIKW pyramid's connection with data. According to the Pyramid of Wisdom, wisdom is found at the summit of the pyramid. Based on what you know and what you've learned, you've got wisdom. Because of this, the DIKW model helps us understand the value of data and how it may be utilized to develop critical information and knowledge (Cormier, 2019). This DIKW pyramid indicates that data alone is not crucial for collecting knowledge and information from many resources, but the proper analysis of data enables it to be vital for making wise judgments. Duckworth's grit has been documented in the following slides using a questionnaire (Sigurdson, 2018).

Data

Academic Levels	GRIT SCORES	Academic Levels	GRIT SCORES
5	2.5	3	1.7
5	2.5	3	2.7
5	2.5	3	3.7
5	2.5	3	3.7
5	2.5	3	3.7
5	2.5	3	2.7
5	2.5	3	2.7
5	2.5	3	2.7
5	3.1	3	2.7
5	3.1	3	2.88
5	3.1	2	3.88
6	3.1	2	2.5
7	4.1	2	2.5
8	4.2	2	2.5
8	4.2	2	2.5
8	4.2	2	2.5
8	4.2	2	2.5
8	4.2	2	2.5
8	4.2	2	2.5
8	4.2	2	3.1
8	4.2	2	3.1

Diverse figures and measurements obtained from various experiments are considered data, according to the standard definition. The findings of an experiment are shown on the next slide, and it is evident that they are just numbers. Participants in the research were asked to complete a questionnaire in order to assess their degree of grit. Both the questionnaire and the grit test were used to develop this research project's questionnaire, and the questionnaire was used to determine the grit scores of those who participated in the study project. It is critical that the data be thoroughly examined and analyzed before any inferences or information can be drawn from them. Without further investigation, the information is of no use to anybody or anything. A questionnaire was utilized to obtain information on Angela Duckworth's grit, and the findings of that questionnaire are shown on this slide. For this investigation, two kinds of information were acquired. In one category, a participant who has achieved a high level of academic achievement is shown. The grit level of the participants is shown in the other category. This data has a large range of values, and it is hard to draw any inferences based just on the raw data, as can be seen immediately. The information included in this data must first be transformed into information before it can be utilized. (More, 2020).

Information



As seen in this presentation, data may be transformed into useful information. The trend of data may be shown in diagrams, infographics, graphs, & bars. Gold medals earned by nations are shown in the graphic. It is clear that England is the country with the most gold medals. That data by itself can tell us what is going on since it has to be transformed into information before we can make any conclusions.

Knowledge

It helps make a decision

Because information is regarded a precondition for knowledge, knowledge can only be gained via the acquisition of data. It's impossible to make judgments based just on facts; knowledge is essential. In the end, knowledge is the ability to put what we've learned from a given piece of information into practice (More, 2020).

Knowledge is derived from information and experience

As stated in the DIKW pyramid, knowledge can only be gained via information. Knowledge may be gleaned from a variety of sources of knowledge. Primary and secondary sources are the most common sources of information. Knowledge may be derived from the data gathered from many sources (Merkus, 2019).

It's the ability to comprehend a wide-ranging topic

In contrast to knowledge, information is a refined form of facts that provides an in-depth grasp of the subject matter at hand. In contrast, knowledge is the ability to comprehend a wide range of topics (Merkus, 2019).

Predicts better

Knowledge, rather just information, is more useful in making predictions and judgments since it is based on understanding and experience, than the polished form of facts (Van Meter, 2020)

Wisdom

The DIKW pyramid's apex

According to the apex of a DIKW pyramid, wisdom can only be attained by the collection of data, the generation of data, as well as the accumulation of data and information. Data, information, & knowledge are tied to the past, while wisdom is linked to the future because it is a course of attack for the future, according to the DIKW pyramid. (Frické, 2019).

Reflects the current and future times

To recap, wisdom is concerned with the future, as stated previously. Use facts, information, and expertise to help you plan your next course of action (Yang, 2019).

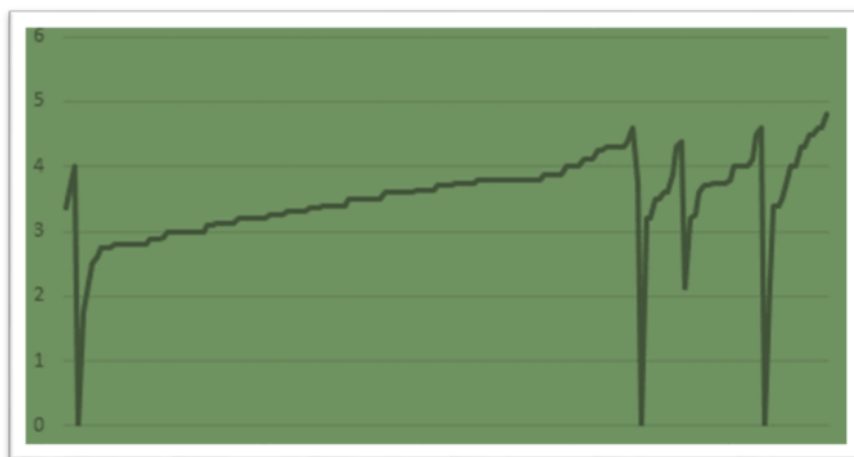
Applying Knowledge in the Workplace

Knowledge management relies on data as its foundation, and information is generated from data. Knowledge is derived by the accumulation of information. As Frické explains, wisdom is the ability to put knowledge into practice (Frické, 2019).

Answers the Specified Issues

Wisdom is the last step of the DIKW model because it enables a person to grasp how a certain activity might be performed to achieve desired outcomes. It addresses problems such, "What is the best course of action for achieving a given goal?" (Van Meter, 2020).

Analyzing the Information

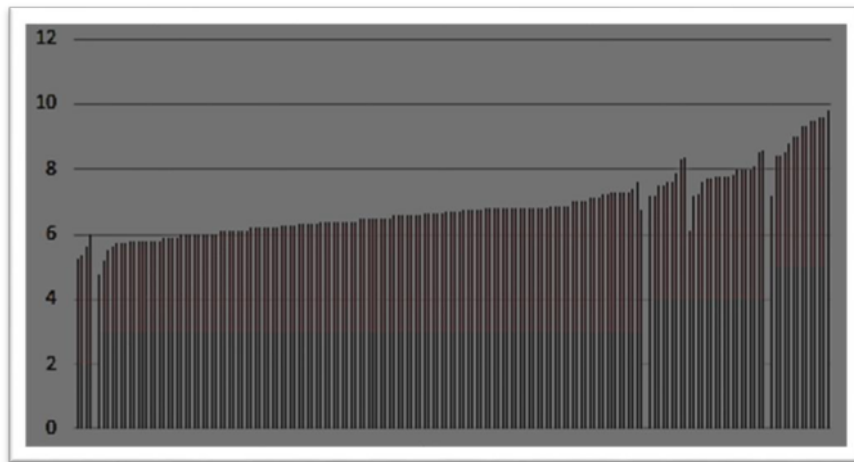


The following table summarizes the most recent grit study. To collect data for this investigation, we used a series of surveys. As shown by the available data, there seem to be four distinct academic levels, numbered two, 3, 4, and 5. The graph shows the data collected from pupils. Grit was highest

in academic level 5, and lowest in academic level four, according to the graph. The graph shows that there has been no change in the level of academic persistence. As a result of this research, we may be able to draw meaningful inferences from the data we have collected (Van Meter, 2020). According to the study of data, it is necessary to turn data into information in order for it to be useful. As shown by the DIKW paradigm, data management is a critical component of data understanding. Making key business decisions requires more than just data; it also requires data to be translated into information & knowledge.

The study of the data indicates that data must be transformed into information in order to have any relevance. The DIKW model demonstrates that data management is an essential part of data comprehension. Data alone is not sufficient for making critical business choices, but it must be transformed into information and knowledge in order to appreciate its significance (Merkus, 2019).

Analyzing and Comparing Information



Through data comparison, we may discover valuable information from the data that can be used as a resource for future research. Comparison charts show the grit score based on high academic levels and show how academic levels and grit scores are correlated with one another. Individuals' grit scores tend to rise as they go up the academic ladder, as seen by this chart. Since statistics and information support this premise that academic levels and grit scores are linked, this assumption may be accepted as knowledge. For example, grit scores tend to be greater for those who are more educated and those who are less educated tend to be less determined.

For knowledge management, the DIKW framework states that good data management is crucial for transforming raw information into meaningful information and then further analyzing the data to get knowledge. Grit scores are correlated with academic levels, according to the DIKW pyramid in this study, which used Dukworth's research (Frické, 2019)

Conclusion

As of Right Now, Data Management is a Big Deal, Knowledge Management relies on the DIKW pyramid, Businesses need more than just data, Effective data management is vital for transforming data into knowledge. Data management is critical in today's workplace because it enables businesses to stay on top of changing market conditions. Because data alone does not give the information organizations need, it is useless. Practicing and understanding the analysis of data is essential for drawing meaningful conclusions. When it comes to making critical judgments, the DIKW pyramid demonstrates the process by which data is transformed into information and information into wisdom (Yang, 2019). To better comprehend how data is transformed into knowledge and wisdom, the DIKW pyramid was used in this presentation to explain the many steps involved in the process. For this presentation, we drew on the results of Angela Duckworth's grit scores study to help us understand the data. Since data handling abilities are regarded crucial in today's business and workplace environments, it is important for people to apply and acquire relevant data handling skills to achieve their professional objectives (L., 2020).

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