BIDSS Assignment 03

1. Share About Yourself

My name is Trevor Hofmann, I am presently a Systems Administrator for Amarillo Independent School District. I live in Amarillo. I’m working on my Master of Science in Computer Information Systems. I received my undergraduate in August 2017 in Computer Information Systems as well.

I expect to learn a more round and full understanding of business intelligence and decision support system, and how they can be applied to business to assist with decisions.

I am apprehensive about potentially assuming that I already have a good understanding of something and missing out on something new that I did not know.

1. Investigate BIDSS

Everyone makes decisions from the time you get up to the time you go to bed. When we make decisions that can be low impacting or highly impacting and for those, we prefer to make as informed of a decision as possible. An organization is the same way and they have similar tools to achieve this Business Intelligence (BI) and decision support system (DSS). I think it best to start by defining business intelligence and decision support systems. Here is the definition from “Whatis.com”:

*Business Intelligence (BI) is a broad category of applications and technologies for gathering, storing, analyzing, and providing access to data to help enterprise users make better business decisions.*

*A decision support system (DSS) is a computer program application that analyzes business data and presents it so that users can make business decisions more easily.*

Now these tools have a fair amount of simulaities. They both center around using technology and data to make well-informed decisions. Due to this overlap it is difficult to see where they are different.

A decision support system (DSS) is normally a tool used in solving an immediate problem. It has automation but much of the initial data or where the data is must be entered manually.

Business Intelligence (BI) as the definition says is a much broader term. It typically involves not just analyzing data but also storing the data in a data warehouse. It is much more automated and can present a multidimensional view of your historical data. BI would normally be used to give insights on data so problems can be found, the systems can be made more efficient, and/or gauge the overall performance. BI is much more proactive and can pull in many sources of data.

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DSS is an older process that is still very good at what it does. BI on the other hand is much newer and many people have be trending towards it. BI is commonly used for sales and inventory, visualizing data, and even sending reports about the data. DSS should be used when you have a question or problem you need more information on. Like the college wants to know how many students will end up registering for classes to prepare for them. Or a farmer wants to know the times they should be planting and harvesting during the year.

1. Identify and Develop a Case

I presently work for the Amarillo Independent School District and there are many eamples of how BI/DSS could apply. There is a very large amount of data that is captured by both the district and the state. Everything about a student is documented like attendance, performance, and many personal details. We also track everything a user (staff and students) does on a machine, especially internet browsing, but also every click. We also have cameras around every corner and inside and outside every building. All this data is being constantly collected.

With everything about a student being tracked a BI/DSS solution could easily assist with analyzing things like attendance and performance. You could then take that data and present it to most of it graphically or even gain insights into things that could cause lower performance and reduce those things. It could also be used to present to the state how well or poorly the district is doing.

When a user logs into a machine everything is logged. Most students in middle school and above are given Chromebooks to take home and use outside of school. This means that you could analyze the data on when a student uses their Chromebook and see if any student is accessing it in the middle of the night and what they are doing at that time. You could then connect this to the student’s performance and see if their performance is slipping in connection to staying up late on their Chromebooks. You could then bring the student into their counselor’s office and review what could be happening. You could very possibly catch things like family issues well before the student brings them up and start resolving them sooner.

With having cameras everywhere at over 50 campuses it is nearly impossible to have someone sitting there staring at screens with the cameras up. You could use a facial recognition service to analyze this data and flag potentially people who should not be on campus. You could also use it to find when and where a student was last seen on campus.

References

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