

# How to keep the data miners from overwhelming the organization



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The significance of adequate and reliable data for planning in contemporary business and organizational operation is germane to effective actualization of organizational objectives and long-term goals. Information technology in contemporary times is inevitable in the tackling of high level of uncertainties and risk management. Thus, in effective rivalry competition in a stiff industry a valid database is required for planning to carve a niche for the organization. Database for organization planning abounds in different dimensions and quantities.

Thus, this already known database is available to an organization and its rivals. According to Thearling (1995), “ in most standard database operations, nearly all of the results presented to users is something that they knew already existed in the database. A report showing the breakdown of sales by product line and region is straightforward for the user to understand because they intuitively know that this kind of information already exists in the database”. Thus, it requires the generation of new data, which is known to rivals for an organization to carve a niche for itself over its competitors -. This is where Data Mining comes in.

Data Mining involves a process of developing raw untapped database, which is germane for effective problem solving and planning. Thearling (1995), defines Data Mining that it is a process of extracting information from a data that user did not know existed. It becomes advantageous to the organization carrying out the data mining process, since “ it is a much bigger leap to take the output of the system and translate it into a solution to a business problem” (ibid). To, LIS (2001), Data Mining is synonymous to knowledge discovery in databases. Knowledge discovery in databases entails a process

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of identifying valid, novel, potentially useful, and ultimately understandable patterns or models in data (Fayyad et al, 1996, cited in Thearling 1995).

Data Mining entails a step in the knowledge discovery process consisting of particular data mining algorithms that, under some acceptable computational efficiency limitations, find patterns or models in data.

(LIS, 2001). The challenge of keeping the mined data tailored to suit the need and effective operation of an organization is one that needs to be checked and enforced. Thus, as a way of preventing the data mining process from overwhelming the organization, in its activities and strategic processes, adequate sequence in the data mining process need to be put in place. This essay would take a look at ways of keeping the data miners from overwhelming the organization.

#### OVERWHELMING AN ORGANIZATION THROUGH ITS DATA MINING

PROCESS Adequate care need to be put in place as data miners engage on the process of data mining for their clients. When the process is done in a way that overwhelm the organization's strategic plans and operations, the different perspective and targeted aims of the data mining and strategic operation of the organization tends to hampers the successful and effective outcome of the process of data mining and the operations of the organization in its activities. Organization uses data mining in diverse ways; for fraud detection, how to manage its credit and financial operation, for web mining etc. these usage of data mining for an organization is done to assist the strategic plans of the organization in the effective attainment of the organization's objectives and long term goals. But in situation when the data mining process overshadowed or done in a way that contradicts the

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operations of the organization this would result in the waste of resources and expended time on the data mining programme; since it would be of no positive contribution to the effective actualization of the organization's objectives and goals. According to Lavrac et al (2004), data mining can only be deployed successfully when it generates in sights that are substantially deeper than when the company already knows about its business.

Designers and analysts have to learn a good deal about the situation of the client before they can assess the viability of a data mining approach. It then requires that the data miners deeply understand the organization they are working for. The implication of overwhelming an organization by the data mining process has grave consequences that may result in the ineffective operation of the organization. The overwhelming of the organization by data miners would result in poor virtualization of the data mining output in an effective and meaningful way, and it tend to prevent the effective interaction and synchronization of the organization planning process and the users of the mined data.

According to LIS (2001), the regular problem-solving goal of an organization differs from the data-mining goal. For instance, the regular problem-solving goal of an organization may be to increase sales; the supporting data goal would be to determine customer properties with respect to their purchasing power. Also, where the regular problem solving goal is aimed at preventing credit card fraud,; the data mining supporting goal would tend to concentrates on ways of finding critical patterns for fraudulent card usage or by building an accurate algorithm fro automatic fraud detection. In situation where the date mining process is used to overwhelm the organization the <https://assignbuster.com/how-to-keep-the-data-miners-from-overwhelming-the-organization/>

regular objectives and regular problem-solving goal would tend to be overshadowed.

Normally, the data mining is used by the data miners to assist the organization to effectively achieve its goals and objectives, but when the process is used in overwhelming the organization's regular operations this tend to lead to a situation of expending energy in opposing direction, hence, the ineffective operation of the general activities of the organization. HOW TO PREVENT DATA MINERS FROM OVERWHELMING THE ORGANIZATION In order to prevent data miners from overwhelming the organization it is necessary that the data miners understand the organization and its operations. In this view Lavrac (2004), argues " Designers and analysts have to learn to a good deal about the situation of the client before they can assess the viability of a data mining approach. This implies that successful data mining projects in industry preferably should be done by consultants who already have a deep understanding of the client's business". Since the data miner is left with voluminous data to operate with, it requires that they adequately understand their clients in order that they use the data in coming out with an effective mined data that would not overwhelm the organization and its operational activities.

According to Soulie (2006), " in contemporary times the data mining- based applications is strongly linked to the ever increasing availability of large volumes of data. In the last ten years, companies have heavily invested in the implementation of very large data warehouses, where the largest databases now a days reach 20 to 100 Tbytes and comprise millions of customers and thousands of variables. Sizes typically keep tripling every two

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years”. Thus, with the increasing volume of data available to data miners in order to prevent them from overwhelming the organization they need to adequately understand the organization they are working for and know the objectives and long-term goals they intend attaining. This would make the data miners know which data-mining pattern would greatly enhance the operation of the organization and also ensure the effective attaining of the data mining goals and the organization’s regular objectives and goals.

Another way of preventing an organization from being overwhelmed by data miners is through the carrying out of a pilot study to pretest the outcome of the application of the data mining on the operations of the organization.

Data mining is not an end in itself; it is a means to an end. Hence, it is a tool use to support an organization’s strategy to bring about an effective operation in the organization. Thus, it is right to some extent to argue that data mining is not a solution to an organization’s problem (Thearling, 1995), but a means of empowering the organization to effectively achieve its goals and objectives through vibrant strategies. Thus, the use of pilot study stands as a way of ensuring that the adopted model of data mining is compatible and will be effective to aid the organization in its operations. According to Lavrac (2004), “ Before starting along term data mining project it is wise to carry out one or more small pilot projects with a relatively small data set and a small team consisting of a data mining expert and a domain expert with some technical support”.

It become necessary that the conduct of pilot study is carried out by a small team that could be managed effectively. The pilot study would position the data miner to know how to model the data mining as a way that would be <https://assignbuster.com/how-to-keep-the-data-miners-from-overwhelming-the-organization/>

effective in empowering the organization in tackling its problem. Hence, this will prevent the scenario of overwhelming the organization through the data mining process. It is germane that the data miners adopt the right tool for processing the data mining for the organization according to the organization's structure and the problem it is involved in.

thus, each client of the data miners need to be studied and the right tool applied in the creation of a database for it to utilize. As a way of selecting the right model technique for data mining for an organization, LIS (2001), has it that “ one has to have in mind the main task of the project and its relation to main divisions of data Mining tools according to the type of the problem”. Hence DM modeling tool should be chosen according to the type of knowledge discovery task one wants to achieve, i. e. prediction or description (ibid).

**CONCLUSION** Data Mining is a technique adopted by data miner who uses statistical data and techniques in creating a database for an organization, which assist the organization in carrying out an engaging itself in effective planning. With the support of data mining an organization can carry out an effective strategic management in which case it would be able to efficiently manage its resources in coping with the environmental variables in the industry where it operates in. thus, it requires that the data miners adequately understand the organization and its problem before processing its database. This alongside with the utilization of the right DM tool, and the engagement on a pretest through pilot study, would prevent the data miners from overwhelming the organization and its operations.

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