



# EWS Identifying system for early signals

*To select profitable projects is in many companies difficult. Especially when situation changes it is essential to locate competence and resources right. BayMiner EWS (Early Warning Signals) using probability calculus to produce risk models, offers a way to manage risks and screen tender inquiries for small projects economically in a distributed organisation.*

BayMiner EWS benefits:

- Better risk management saves costs.
- Customer satisfaction improves.
- The small units of the organisation benefit from the competence of the bigger ones.

The ROI (Return Of Investment) of a BayMiner EWS project is usually about a month.

*Are these problems familiar for you?*

- Imprecise orders cause profitability problems.
- Networking causes new risks.
- You do not trust your statistics anymore.

The task is to find out as early as possible what distinguish the risk projects from the normal projects. But you do not know which variables include the necessary information. Using BayMiner an expert can in some seconds identify those variables that contain useful information. BayMiner experts help if needed.

Already with a small amount of example cases you get a well functioning risk model. Using traffic lights the risk model operating in the end user's company intranet guides the user to take the right actions concerning the tender inquiry under examination. From some hundreds example cases with less than twenty variables, BayMiner can usually produce a model that predicts well. When more data is accumulated the prediction becomes more accurate.

**BayMiner is safe to use.**

Classic computerized risk-management systems calculate points. These suffer from a remarkable shortcoming; if you use about ten variables a single variable with a poor score does not have strength enough to get the overall score to lower enough; if you have a few variables they do not contain all risk information. BayMiner EWS uses probability calculus to produce a network which sensitivity remains good although several variables are considered.

**Selection of the data is a central task**

With about ten well-selected questions BayMiner EWS can identify 75 % of the unprofitable projects. You get the risk model immediately in use when data is collected. The development of the risk models is so economical that you can develop several for various purposes and get the investment back with the first.



### **The expert saves time**

BayMiner's automation saves time. You do not need to know statistics or have a university degree to be able to interpret the results; it is enough that you understand your business well.

All advanced project companies produce already now much data for reports. Using this data the company can start an EWS project and get in some months a functioning tender inquiry screening system in use.

### **Selecting the variables for a first test**

Select from the main categories below some few variables each, depending on how easy it is to get the data out from your databases. A row constitutes a project.

- Financial data such as prices, costs, contribution margins.
- Classes you use in your segmentation.
- Main characteristics of the project such as type, purpose of use, type of client.
- Realized risks such as penalties, claims, costs due to delays.

### **The company saves time**

The company does not need to start an IT-project. If the company has several IT-projects under way, it is worthwhile to steer a part of the scarce resources to a BayMiner EWS project as it improves profitability rapidly and shortens with small investments the ROI of already realized IT-investments. To get started it is enough to select the start data well and learn the basics of the BayMiner method.

### **Why not classic data mining?**

Classic data mining sacrifices trustworthiness for speed. Prediction systems developed based on these technologies function well with existing data but when situation changes the predictions are poor. Differing from these BayMiner identifies automatically the joint importance of variables to produce the best result. The updating of a risk model is also very fast.

### **Easy to report**

BayMiner finds easily hidden information. If you need to report your results you can download the original data-table with the members of the groups (clusters) you are interested in marked for easy identification. For the reporting of these you can then use reporting tools your organisation is used to.



Clear risk assessment saves company resources.