**Project Report**

The final report must include the following sections of the “data mining process” reviewed in class:

Problem or Business Understanding:

* Identify, define, and motivate the business problem that you are addressing.
* How (precisely) will a data mining solution address the business problem? Data Understanding:

• Identify and describe the data (and data sources) that will support data mining to address the business problem. Include those aspects of the data that we routinely talk about in class and/or in the homeworks.

Data Preparation:

• Specify how these data are integrated to produce the format required for data mining. (NB: data preparation can be time consuming. Get started early)

Modeling:

* Specify the type of model(s) built and/or patterns mined.
* Discuss choices for data mining algorithm: what are alternatives, and what are

the pros and cons?

* Discuss why and how this model should “solve” the business problem (i.e.,

improve along some dimension of interest to the firm). Evaluation:

• Discuss how the result of the data mining is/should be evaluated. How should a business case be developed to project expected improvement? ROI? If this is impossible/very difficult, explain why and identify any viable alternatives.

Deployment:

* Discuss how the result of the data mining will be deployed.
* Discuss any issues the firm should be aware of regarding deployment.
* Are there important ethical considerations?
* Identify the risks associated with your proposed plan and how you would

mitigate them.

Be as precise/specific as you can. The write-up should be about 10 (max. 15) double- spaced pages, plus any appendices you would like to include. Use external sources where appropriate, and provide clear citations and bibliography. All group members should contribute to the analysis and write-up. The report should include an appendix describing the contributions of each team member.