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|  | **MS in Business Analytics & Project Management** |

**OPIM 5641- Business Decision Modeling**

**Fall 2016**

**Icebergs for Kuwait**

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**Project Proposal**

**Background**

The Middle-Eastern countries especially Kuwait is facing extreme water scarcity and is looking for options to provide pure water to residents in the most economical way. A traditional approach to address this problem is desalinating sea water from the Persian Gulf, but past studies have suggested a more cost efficient option of towing icebergs from Antarctic.

The Antarctic ice sheet is one of the two polar ice caps of the earth. It covers about 98% of the Antarctic continent and is the largest single mass of ice on the planet. It covers an area of almost 14 million square kilometres and contains 30 million cubic kilometres of ice. That is, approximately 61% of all fresh water on earth – an amount equivalent to 70% of the volume of world’s oceans.

**Case Parameters**

As business consultants, multiple parameters including towing vessel details, the rate at which the iceberg melts, fuel cost for the towing vehicles and the volume of ice have to be considered to conduct detailed analysis and come to a conclusion on whether this approach will be beneficial for the Government of Kuwait and help them in reducing current cost and minimizing oil quantities required for desalination.

**Decision**

We will determine the economic viability of the new process and also provide the best possible means to tow the icebergs from the Antarctic to the Gulf. We will use all the optimization and analytical techniques learnt in class to accomplish the requirements.

**Deliverables**

Our final set of deliverables will include a spreadsheet containing various analysis on the case study, final recommendations in a report and a presentation showcasing the results.