**Problem 4**

IMSE 991 – Multi-Attribute Decision Making

HW3

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Due: 11/27/2017

(5 points) Select one of the case studies in class discussed in class (Strategic Planning and New Product Development or the Investment Strategy for Product Development in the Aerospace Industry). Identify which, if any, of the seven rules we discussed at the beginning of class that it violated.

After a thorough assessment of case study entitled, *Investment Strategy for Product Development in the Aerospace Industry*, a diversity of both thought provoking and concerning observations were taken notice of. The only standard with which I was able to compare the case study with is the seven phase outline (Tillman, Cassone 2008). From the seven phase outline, *Table 1* was constructed with the rule and how well the study applied the rule.

*Table 1*

|  |  |  |
| --- | --- | --- |
| **Rule** | | **Satisfied** |
| **1.** | Are the methods used understandable? | 1 |
| **2.** | Is the overall decision making process easy to understand? | 3 |
| **3.** | Does the model fit in the time frame? | 5 |
| **4.** | Is the model adaptable? | 5 |
| **5.** | Does the model link to corporate objectives? | 5 |
| **6.** | Do expert opinions substitute lack of data? | 5 |
| **7.** | Is there a clear measure of improvement from the previous status of the project? | 5 |

The construction of *Table 1* was due to missing elements to the case study:

1. Applied Decision Theory Method
2. Resource Allocation Tool

The first mentioned concern was not even in the case study. Determining the goal, objectives, criteria, and weights were perfectly clear and concise. The case study even went into great detail about the surveys and Nominal Group Technique (NGT) used to generate inputs to the model. On the tail end of all of the data being processed, the slide mentioning the technique simply states “Generate Results”. I found this to violate *Rule 1* explicitly.

The second mentioned is the absence of detail mentioned toward the Resource Allocation Tool. This has a very *black box* feel to it, as the input is simply picked, then output generated. This topic could have been brought to light and capitalized on much more heavily in my opinion, therefore the score is in the cross roads of violation and success. Overall, the case study was very well organized and seemed to be designed quite elegantly. I feel the decision maker would have been pleased with the professionalism endowed, however slightly disturbed with some of the details so abstracted. I could easily see a little uneasiness about what exactly the results meant coming from the unknown method and the mystical allocation tool. Outside of the above mentioned, the study seemed very well managed and approached, and included the 5-step process to approaching Multi Attribute Decision Theory problems as well (Tillman, Cassone 2008).

Works Cited

Tillman, F., A, Cassone, D., T. (2015). *The Science of Common Sense: Best Practical Decision Science Methods*. HTX, Incorporated.