Abstract

**Para1: restatement of the problem**

1. 背景

例2:……is a real-life common phenomenon with many complexities.

例3：An (effective plan) is crucial to………

1. 有什么问题亟待解决

例4: After mathematically analyzing the …… problem, we would like to present our conclusions, strategies, (and recommendations )to the …….

例5：Our goal is... that (minimizes the time )……….

1. 我们解决了这个问题的重大意义

反面说明。如果没有……

Without implementing defensive measure, the university is exposed to an expected loss of $8.9 million per year.

1. 综述：用了哪些模型，解决了什么问题

**Para2: evaluations——分问题，依次阐述，每个问题写一段**

使用了什么模型，分析了什么数据，得到了什么结论

1. We determine/find/propose....
2. 解决问题We address the problem by....
3. 模型化We formulate the problem as a.....(model) in which .....
4. 划分阶段We divide the .... into three stages/phases.....
5. **建立模型Formulate/develop/build/propose/employ/use/establish/incorporate**
6. **分析模型analyse/examine/explore/investigate/ discuss/consider/**

**3．总结该模型的结果/得到什么结论**

a. 说明不是最优但能产生作用

例：We show that this strategy is not optimal but can be improved by assigning different numbers……

b. 说明如果用这个模型，结果如何

例1：If Delta Airlines were to utilize the naïve strategy at Atlanta International Airport, the cost would be ……

例2：We modify the model to reflect (some trend such as exponentially increasing……) and generalize the model to (other field).

例3：Our results are summarized in the formula for the optimal number Bof tollbooths for

c．通过其上情况的列举得到的结论

例：For various situations, we propose an optimal solution.

d. 得出了结论

例1：we elicit that a conclusion.

例2：We conclude with a series of recommendations for how best to…

e.进一步说明其他因素对模型的影响

例：In addition to the model, we also discuss policies for …..

f.用真实数据检验模型

例:To demonstrate how our model works, we apply it to ………..

**Final Para：conclusions and generalization**

a. 说明结论的可行性

例：Our suggested solution, which is easy to implement, includes a detailed timetable and the arrangement of pipes.

**b.说明算法的广泛性**

**例1：Our algorithm is broad enough to accommodate various airport concourses,** flight schedules, and flight delays.

例2：Our analysis began by determining what factor impact……, Our conclusions are presented……

**c.说明模型可用于其他领域**

例：Since our model is based on…… **it can be applied to (other domain).**

algorithm 运算法则

a method of evaluating 评价方法

appropriate 近似的

**configurations 布局**

**parameter 参数，主要的决定因素**

accuracy 精确性

strengths and weaknesses 优点和缺点

**contact 相关的**

**contract 建立，构造**

rational 合理的

**countermeasure 对策**

criterion 标准，准则

**Assumptions**

**引出：**

We make the following assumptions about…… in this paper.

1. **对什么什么不予以考虑**

We do not take into account interactions between factors.

..........can be neglected.

1. **为了简化模型，虽然现实中确实有影响，但是是合理的。**

例1：In fact （in reality）these factors has effects on one another, but in order to simplify the model ,we ignore the interactions between the factors mentioned above.

**c. 近似**

例1：……can be approximated as a liner function of ….

例2： …are assumed to be the same. In practice, there is a slight difference.

**d. 细致考虑（可附原因）**

例1：An airport consists of 1 to 10 concourses which consists of 2 to 50 gates. Gates in the same concourse are located close to one another, while the travel time between concourses can be quite lengthy. Hence, we assume that inter-concourse travel is much lengthier than inter-concourse travel.

例2：A average fast walking speed is 250ft/min(3mph), but average speed when arms are immobilized (as when pushing a wheelchair) is only 180 ft/min (2 mph) [Gross and Shi 2001]. We assume that an escort walks at these speeds.

例3：An escort can tolerate only one wheelchair at a time. U.S. Dept. of transportation guidelines discourages leaving WPs unattended. Hence, the escort takes a WP to the connecting flight and remains until the flight leaves.

**e.直接定义(假设)：**

例1：we define……to measure the……

例4：it is reasonable to assume that….are independent and identically distributed

总结：

Additional assumptions are made to simplify analysis for individual sections. We will discuss them in the next section.

**Example**

**Under the trend of** worldwide urbanization, urban planning **has raised many concerns/is under the spotlight**. Smart growth was first proposed in 1990’s given that the traditional urban sprawl plan **will no longer meet requirements** of the city’s development. In this paper, we developed a series of models to help implement smart growth theories into city design.

1. We assume that .... and use.....equation

equation

**Where**..

1. Putting these equations together, because of the law of ...., **yields:**

Formula

1. Putting (2) into (1), we have:
2. From the equations above, we can conclude that.....
3. To figure out the new pressure, we use....., which means....
4. Solving for.....we obtain/get/have.......
5. At this value of x, the constraint reduces to....
6. Recalling that in this equality only n is the function of f, we substitute for n and solve for f. the result is....