

# The L<sup>A</sup>T<sub>E</sub>X Template for MCM Version v6.3.1

## Summary

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**Keywords:** keyword1; keyword2

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February 21, 2022

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# **1 Introduction**

## **1.1 Background**

which means , to develop a model that uses only the past stream of daily prices to date to determine each day if the trader should buy, hold, or sell their assets in their portfolio.

## **1.2 Problem Statement**

## **1.3 Problem Analysis**



## **2 Assumption**

## **3 Data Processing**

### **3.1 Data Screening**

### **3.2 Data Visualization**

### **3.3 Mining Time Series**

## **4 PartModel Development**

### **4.1 Time Series Model ARIMA - Data Forecasting**

#### **4.1.1 Stability Test**

#### **4.1.2 White Noise Test**

#### **4.1.3 Train the Model With All the Data**

#### **4.1.4 Model Validating**

#### **4.1.5 Model Prediction and Visualization**

#### **4.1.6 Batch prediction of data**

### **4.2 Investment Decision Model - Dynamic Programming**

#### **4.2.1 Buy and Sell Standard Setting**

#### **4.2.2 Portfolio Optimal Ratio Identification**

#### **4.2.3 Positioning Standard Identification**

#### **4.2.4 Daily Portfolio Determinations**

## **5 Part:Strategy Evaluation**

### **5.1 Set Perturbation Terms**

### **5.2 Comparison Illustrates the Best Strategy**

## **6 Part:Sensitivity Analysis**

### **6.1 Assuming Changes In Commission**

### **6.2 Visualization Results**

## **7 Evaluate of the Model**

### **7.1 Strengths and weaknesses**

### **7.2 Sensitivity Analysis**

## **8 Conclusions**

the procedure of the boarding airplane, as described above we can get to the optimization boarding time. We also know that all the service is automate.

- **Improve the quality of the airport service**  
Balancing the cost of the cost and the benefit, it will bring in more convenient for airport and passengers. It also saves many human resources for the airline.
- 

## References

- [1] D. E. KNUTH The T<sub>E</sub>Xbook the American Mathematical Society and Addison-Wesley Publishing Company , 1984-1986.
- [2] Lamport, Leslie, L<sup>A</sup>T<sub>E</sub>X: “ A Document Preparation System ”, Addison-Wesley Publishing Company, 1986.
- [3] <https://www.latexstudio.net/>

# Appendices

## Appendix A First appendix

In addition, your report must include a letter to the Chief Financial Officer (CFO) of the Goodgrant Foundation, Mr. Alpha Chiang, that describes the optimal investment strategy, your modeling approach and major results, and a brief discussion of your proposed concept of a return-on-investment (ROI). This letter should be no more than two pages in length.

Dear, Mr. Alpha Chiang

Sincerely yours,

Your friends

Here are simulation programmes we used in our model as follow.

### **Input matlab source:**

---

```
function [t,seat,aisle]=OI6Sim(n,target,seated)
pab=rand(1,n);
for i=1:n
    if pab(i)<0.4
        aisleTime(i)=0;
    else
        aisleTime(i)=trirnd(3.2,7.1,38.7);
    end
end
```



end

---

## Appendix B    Second appendix

some more text **Input C++ source:**

---

```
//=====
// Name       : Sudoku.cpp
// Author      : wzlf11
// Version     : a.0
// Copyright   : Your copyright notice
// Description : Sudoku in C++.
//=====

#include <iostream>
#include <cstdlib>
#include <ctime>

using namespace std;

int table[9][9];

int main() {

    for(int i = 0; i < 9; i++){
        table[0][i] = i + 1;
    }

    srand((unsigned int)time(NULL));

    shuffle((int *)&table[0], 9);

    while(!put_line(1))
    {
        shuffle((int *)&table[0], 9);
    }

    for(int x = 0; x < 9; x++){
        for(int y = 0; y < 9; y++){
            cout << table[x][y] << " ";
        }

        cout << endl;
    }

    return 0;
}
```

---