

# Accounting Information Systems

INFO 7225 | Spring 2022

## Decision Table & Decision Tree

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# Decision Table: Introduction

- ▶ **Table of conditions and processing tasks**
- ▶ **Indicate what action to take for each possibility**
- ▶ **Used when computer program involves many conditions and subsequent courses of action**
- ▶ **Used as an alternative to program flowcharts or in addition to the flowcharts**

**Example. Prepare a decision table for the following scenario:**

A credit union pays interest to its depositors at the rate of 5% per year. Accounts of less than \$5 are not paid interest. Accounts of \$1,000 or more that have been with the credit union for more than 1 year get paid the normal 5%, plus a bonus of 0.5%.

[illegible]

**Example. Prepare a decision tree for the following scenario:**

A credit union pays interest to its depositors at the rate of 5% per year. Accounts of less than \$5 are not paid interest. Accounts of \$1,000 or more that have been with the credit union for more than 1 year get paid the normal 5%, plus a bonus of 0.5%.

## 12-26. Filzen Company (Create a Process Map, a Decision Table, and a Decision Tree)

The Filzen Company sells construction supplies to building contractors, mostly on a wholesale basis. The company has been in business for over 30 years. The current owner is Joshua Filzen, although the company was originally founded by his father, James Filzen. When he retired in 2014, the elder Filzen handed the business over to his son, who has run it ever since.

The company operates in Small County—a rural area where most people in the building trades know each other well. For this reason, the company extends credit to its regular customers, many of whom have done business with it for years. Most settle their accounts about once a month.

You work for a small CPA firm, whom Joshua has hired to look at its accounting procedures and to make recommendations based on its findings. You've been assigned to the consulting team, and your first job is to document the company's authorization procedures for credit purchases.

The rules are as follows:

- (1) Purchases of less than \$100 that are made by known customers in good standing are approved automatically.
- (2) Purchases between \$100 and \$500 require authorization by a supervisor. Purchases over \$500 must be approved by Jason Bergner, the accounts-receivable manager. Credit purchases attempted by new customers not yet approved for credit or by customers not in good standing are denied.

### Requirements

1. Create a process map for this task, using the symbols in Figure 12-13.
2. Create a decision table for this task. Hint: see Figure 12-16.
3. Create a decision tree for this task. Hint: see Figure 12-17.

## 12-26. The rules are as follows:

## Decision Table

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## 12-27. Stingy Upstate University (SUU) (Create a Process Map, a Decision Table, and a Decision Tree)

The approval rules for reimbursing those faculty members at Upstate University who attend professional conferences are somewhat complicated and, in the opinion of most, “hardly generous.” For example, the maximum allowed for breakfast, lunch, or dinner is \$8, \$10, and \$12, respectively. In addition, no reimbursements are made for breakfast if the traveler leaves home after 10 am, for lunch if the traveler leaves home after 2 pm, or for dinner if the traveler leaves home after 8 pm. Finally, no reimbursements are made for “business lunches” or similar meals if their costs are included as part of the conference registration fee.

When Upstate University faculty file for travel reimbursements, they must file a form that requests the time they left home and the time they left the hotel to return home. They must also provide a copy of their conference registration receipt, showing what meals were included in the program.

### Requirements

1. Develop a process map that displays the logic for deciding whether or not a given meal should be reimbursed.
2. Develop a decision table for these same reimbursement rules.
3. Develop a decision tree for these same reimbursement rules.





**12-27.** The approval rules for reimbursing those faculty members at SUU who attend professional conferences are somewhat complicated and, in the opinion of most, “hardly generous.” For example, the maximum allowed for breakfast, lunch, or dinner is \$8, \$10, and \$12, respectively. In addition, no reimbursements are made for breakfast if the traveler leaves home after 10 am, for lunch if the traveler leaves home after 2 pm, or for dinner if the traveler leaves home after 8 pm. Finally, no reimbursements are made for “business lunches” or similar meals if their costs are included as part of the conference registration fee.

**Decision Tree**

**Thank you!**  
**Questions?**