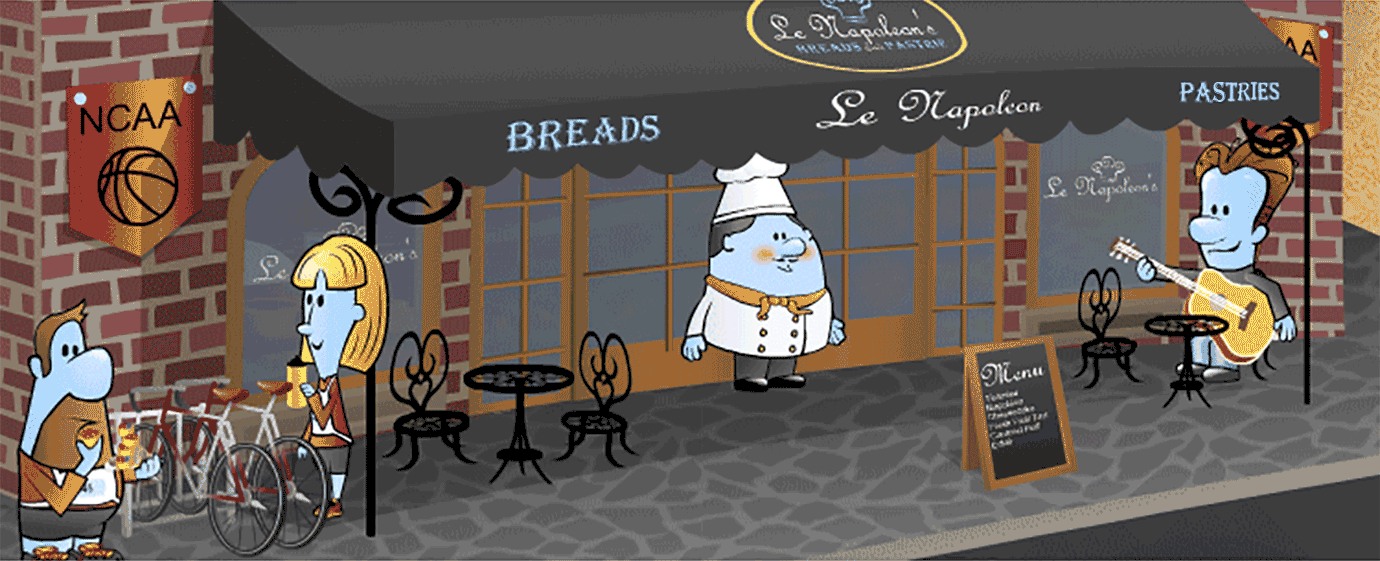
## Introduction

Le Napoleon is considering opening up a new bakery in Bloomington, Indiana. You have been hired to develop a model to determine whether opening the new bakery is a good idea. As we build our model, you will see many of our intelligent modeling rules in action, and you will learn about many of Excel's outstanding model-building capabilities, such as data tables, spinners, comments, etc.



Let us use the 7 step model-building process described in Chapter 4 to help get us started

**Steps 1-3 Of The Model-building Process**

**Step 1:** What do we want to use the model to accomplish?

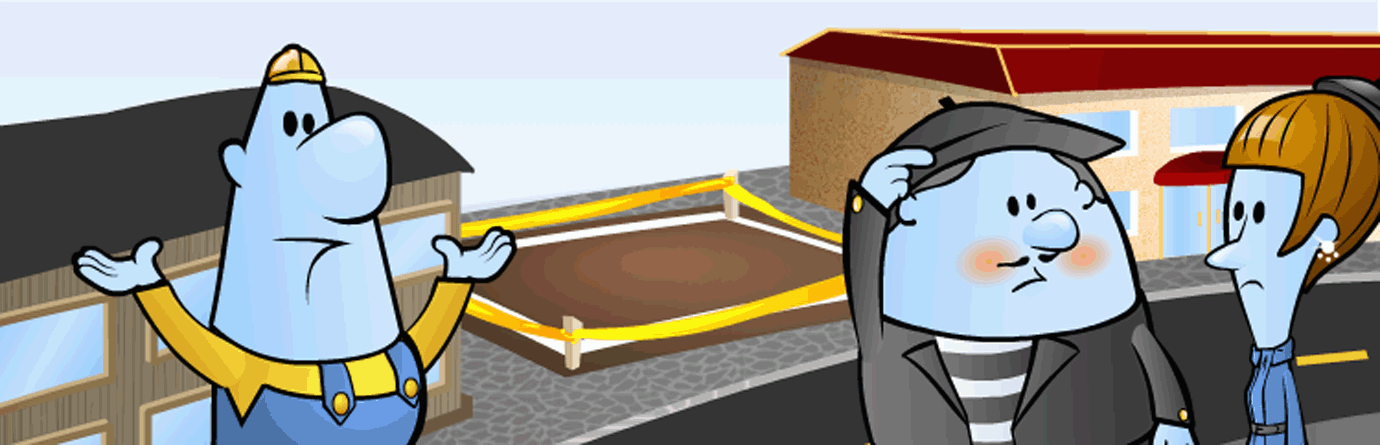
We want to determine whether or not Le Napoleon should open the new bakery.

**Step 2:** To accomplish our goal, what output quantities must be computed?

If the NPV of the cash flows from the bakery is positive, the bakery will enhance overall profitability (even if it may have a negative short term effect) and probably should be built. Recall from the chapter Useful Excel Functions that maximizing NPV instead of the sum of profits ensures that we properly account for the time value of the money.

Since you have not yet begun your studies many of you do not know how to compute cash flows. In this example, we will assume no taxes and no depreciation of the bakery building costs, which we will assume are immediately expensed. We will also ignore changes in working capital. (Do not worry if you do not understand these terms; after taking accounting you will!) Under these assumptions cash flows equal profits, which are simply calculated as revenues less expenses.

**Step 3:** What inputs and decision variables need to be determined in order to compute the needed outputs?



Le Napoleon must determine the size of the bakery and the price to charge for pastries. We will make the bakery size and pastry price for each year of operation decision variables. Determining our spreadsheet inputs will be easier once we have started to work on Step 4 of the model-building process.