

# Motion Picture Industry

The motion picture industry is a competitive business. More than 50 studios produce a total of 300 to 400 new motion pictures each year, and the financial success of each motion picture varies considerably. The opening weekend gross sales (\$millions), the total gross sales (\$millions), the number of theaters the movie was shown in, and the number of weeks the motion picture was in the top 60 for gross sales are common variables used to measure the success of a motion picture. Data collected for a sample of 100 motion pictures produced in 2005 are contained in the file named *Movies*. Table 2.18 shows the data for the first 10 motion pictures in this file.

Motion Picture	Opening Weekend Gross Sales (\$millions)	Total Gross Sales (\$millions)	Number of Theaters	Weeks in Top 60
<i>Coach Carter</i>	29.17	67.25	2574	16
<i>Ladies in Lavender</i>	0.15	6.65	119	22
<i>Batman Begins</i>	48.75	205.28	3858	18
<i>Unleashed</i>	10.90	24.47	1962	8
<i>Pretty Persuasion</i>	0.06	0.23	24	4
<i>Fever Pitch</i>	12.40	42.01	3275	14
<i>Harry Potter and the Goblet of Fire</i>	102.69	287.18	3858	13
<i>Monster-in-Law</i>	23.11	82.89	3424	16
<i>White Noise</i>	24.11	55.85	2279	7
<i>Mr. and Mrs. Smith</i>	50.34	186.22	3451	21

## Managerial Report

Use the tabular and graphical methods of descriptive statistics to learn how these variables contribute to the success of a motion picture. Include the following in your report.

1. Tabular and graphical summaries for each of the four variables along with a discussion of what each summary tells us about the motion picture industry.
2. A scatter diagram to explore the relationship between Total Gross Sales and Opening Weekend Gross Sales. Discuss.
3. A scatter diagram to explore the relationship between Total Gross Sales and Number of Theaters. Discuss.
4. A scatter diagram to explore the relationship between Total Gross Sales and Number of Weeks in the Top 60. Discuss.