CHAPTER 6

Presenting Data in Tables

This chapter studies how to present data using tables. This includes studying the purpose of tables, table taxonomy, table anatomy, table design, wide and multi-page tables, and packages for spreadsheets and multi-page tables.

6.1 Why Use Tables?

Tables are a common way to communicate facts in newspapers, reports, journals, theses, and so on. Tables have several advantages.

- Tables list numbers in systematic fashion.
- Tables supplement, simplify, explain, and condense written material.
- Well-designed tables are easily understood.
  - Patterns and exceptions can be made to stand out.
  - They are more flexible than graphs. For example, in a graph it may be difficult to mix numeric information about data in different units such as the total consumption of petrol in Ireland in tons in the years 1986–2008 and the average number of rainy days per year in the same country.

6.2 Table Taxonomy

There are two kinds of tables: demonstration tables and reference tables. The following explains the difference between the two.

demonstration tables A demonstration table organises figures to show a trend or show a particular point. Examples are: (most) tables in technical reports, theses, and tables (shown) in meetings.

reference tables A reference table provides extra and comprehensive information. Examples are: train schedules, telephone directories, and stock market listings.

As a general rule a demonstration table in a thesis should be presented in the main text because you want to make a point with the information in the table. Likewise, a reference table in a thesis is probably best presented in an appendix because the data are “additional.” However, exceptions are possible.
Table 3.1. GP and diabetic services, 2000

<table>
<thead>
<tr>
<th>Towns</th>
<th>Number</th>
<th>Number providing diabetic services</th>
<th>% Providing diabetic services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town A</td>
<td>40</td>
<td>38</td>
<td>95</td>
</tr>
<tr>
<td>Town B</td>
<td>29</td>
<td>27</td>
<td>93</td>
</tr>
<tr>
<td>Town C*</td>
<td>29</td>
<td>25</td>
<td>86</td>
</tr>
<tr>
<td>Town D</td>
<td>34</td>
<td>29</td>
<td>85</td>
</tr>
<tr>
<td>Town E</td>
<td>36</td>
<td>30</td>
<td>83</td>
</tr>
<tr>
<td>Town F</td>
<td>62</td>
<td>32</td>
<td>52</td>
</tr>
<tr>
<td>Total</td>
<td>230</td>
<td>181</td>
<td>82</td>
</tr>
</tbody>
</table>

Source: Health Authority annual Report, 2001
* Two practices closed in April.

6.3 Table Anatomy

Figure 6.1 depicts a typical demonstration table, which is based on [Bigwood, and Spore 2003, page 27]. The table has several components.

**number and title** In this example, the number and the title are listed at the top of the table. You may also find them at the bottom. The title should describe the purpose of the table. The table’s number is used to reference the table further on in the text. It also helps locating the table.

There are also two other styles of tables. In the first you will find a separate legend, which is a description of what is in the table. In the other style, which is the default in \LaTeX, tables have captions, which are a combination of number, title, and legend. Good captions should provide a number, a title, and a short explanation of the data listed in the table.

If you include a table, you should always discuss it in the text.

- If the table is relevant, does have a message, but is not referenced in the text, then how are you going to draw your reader’s attention to the table? After all, you would want your reader to notice the table.
- If the table is not relevant to the running text, then why present it?
- If you don’t discuss a table in the running text, then this may confuse and irritate the reader because they may waste a lot of time trying to find where this table is discussed in the text.

**column headings** The column headings are used to describe properties of the rows in the table. In this example, there are four column heading: ‘Towns,’ ‘Number,’ ‘Number providing diabetic services,’ and ‘% providing diabetic services.’ Horizontal lines separate the column headings from the number and title and from the row heading of the table.