Different kinds of Triangulation

Triangulation can be used to deepen the researchers’ understanding of the issues and maximize their confidence in the findings of qualitative studies. There are five types of triangulation:

**Data Triangulation**
Data triangulation involves using different sources of information in order to increase the validity of a study. This type of triangulation, where the researchers use different sources, is perhaps the most popular because it is the easiest to implement.

**Methodological Triangulation**
Methodological triangulation involves the use of multiple qualitative and/or quantitative methods to study the program. If the conclusions from each of the methods are the same, then validity is established. While this method is popular, it generally requires more time and resources.

**Investigator Triangulation**
Investigator triangulation involves using several different ‘investigators’ in the analysis process. While this is an effective method of establishing validity, it may not always be practical to assemble different investigators given time constraints and individual schedules.

**Theory Triangulation**
Theory triangulation involves the use of multiple perspectives/disciplines to interpret a single set of data. This method can be time-consuming and may not be feasible in all situations.

**Environmental Triangulation**
This type of triangulation involves the use of different locations, settings, and other key factors related to the environment in which the study took place, such as the time, day, or season. The key is identifying which environmental factors, if any, might influence the information that is received during the study. If the findings remain the same under varying environmental conditions, then validity has been established. It is only used when it is likely that the findings may be influenced by environmental factors.

**What are advantages?**
The benefits of triangulation include greater confidence in the validity of the data, a deeper understanding of the issue at hand, and innovative perspectives on the study topic (Thurmond, 2001: 254 in Guion et al. 2013). These benefits largely result from the diversity and quantity of data that can be used for analysis.

**What are disadvantages?**
One of the primary disadvantages of triangulation is that it can be time-consuming, and therefore expensive.