Stratagame Project

Data gathering and analysis

WHAT DO WE MEAN BY DATA GATHERING

Essentially, collecting data means putting your design for collecting information into operation. It consists of searching for or gathering and synthesizing information from a wide variety of sites and sources in an objective and impartial manner to reach a conclusion, goal or judgment, and to enable strategic and leadership decision making.

You've decided how you're going to get information – whether by direct observation, interviews, surveys, experiments and testing, or other methods – and now you and/or other observers have to implement your plan.

If you are making observations, for example, you will need to define what you are observing and make adjustments to make observations at the appropriate times, so that you actually observe what you need at that time. You will need to record the observations appropriately and organize them so that they are very useful. Recording and organizing data can take different forms, depending on the type of information being collected. The way you collect your data should be linked to the way you plan to analyze and use it. Regardless of which method you decide to use, data collection should take place simultaneously, if possible, or shortly thereafter, so that nothing is lost and memory is doesn't fade.

WHAT DO WE MEAN BY ANALYZING DATA?

Analyzing information involves examining it in a way that shows the relationships, patterns, trends, etc. that can be found within it. This can mean subjecting you to statistical operations that can tell you not only what kinds of relationships seem to exist between the variables, but also at what level you can rely on the answers you are getting. It may involve comparing your information with that of other groups (a control or comparison group, state-level figures, etc.), to help draw some conclusions from the data. The aim, in terms of your assessment, is to get an accurate assessment to better understand your work and Its effects on the people you care about, or to better understand the overall situation.

There are two types of data you are likely to be working with, although not all assessments will necessarily include both. Quantitative data refers to information that is collected as numbers, or that can be translated into numbers, which can then be displayed and analyzed mathematically. Qualitative data are collected in the form of descriptions, anecdotes, opinions, quotations, interpretations, etc., and generally cannot be reduced to numbers, or are considered more valuable or informative if left as narratives. As might be expected, quantitative and qualitative information should be analysed differently.

WHY SHOULD YOU COLLECT AND ANALYZE DATA?

- The data can show whether there has been any significant change in the dependent variable(s) over which you want to influence. Data collection and analysis helps you to see if your performance has had the expected results.
- It may uncover factors that may be associated with changes in the dependent variable(s). Data analysis can help uncover unexpected factors; for example, overexertion.
- It may show connections between various factors that may have an effect on the results of your evaluation. Some types of statistical procedures look for connections ("correlations" is the research term) between variables.
- It can help clarify the reasons why your work was effective or, perhaps, less effective than you expected. By combining quantitative and qualitative analysis, you can often determine not only what worked or did not work, but why.
- It can give youcredible evidence about the results you hope to achieve.

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