Tool 1.1 – Guide to Prioritizing Research Questions

This guide includes various considerations to help you prioritize your research questions. You may not have answers to all the questions, and you may find some questions more relevant to your data analytics project than others. You'll revisit many of these topics in greater detail when you complete your Project Scope once you have narrowed your research questions.

1. **Looking forward/future reflection: Imagine you have completed analyses for this research question:**

   1.1. What are you likely to have learned? (Did you learn about a process(es), program participant characteristics, or outcome(s)?)

   1.2. If the results are different from what you expected, what will you do with that information?

   1.3. Who are the consumers or audiences for the results of the analysis?

      1.3.1. To whom are you communicating the results of your analysis? Who would want to know what you learn?

      1.3.2. Do you have access or reach to all interested audiences?

      1.3.3. How will you communicate the results? How will your communication vary for different audiences?

   1.4. How are you or others able to use the results of the analysis?

   1.5. Who has leverage or the ability to implement changes based on your analysis?

   1.6. If the results are descriptive or help you understand antecedent variables (variables that can help to explain the apparent relationship—or part of the relationship—between other variables that are nominally in a cause-and-effect relationship), what will be the next steps to advance the analysis?

2. **Looking back/prior knowledge: What insights do you or others already have about this question?**

   2.1. What/who are the source(s) of that knowledge?

   2.2. Is existing knowledge/information directly applicable to your question, or more tangential?

2.3. Is the available knowledge/information sufficient to meet your needs, or is further analysis needed? Why?

2.4. Are there assumptions that have not been confirmed or disproven with data or information (for example, policy or program regulations, conventional wisdom)?

3. **Mission alignment: Is answering this question relevant to the organization's mission and/or current goals?**

   3.1. How will addressing this question help achieve your program or organization's mission?

   3.2. How will results from this analysis inform decisions that align with organizational mission?

4. **Resources: What is needed and available to address this question?**

   4.1. **Data**

      4.1.1. What data or information are <u>needed</u> to answer this question?

         4.1.1.1. What are *ideal* data?

         4.1.1.2. What are *sufficient* data?

      4.1.2. What data or information are <u>available</u> to answer this question?

         4.1.2.1. If they are not ideal, are they sufficient? With what caveats?

         4.1.2.2. Are the available data so far from sufficient that the analysis is not worth conducting?

   4.2. **Time**

      4.2.1. When is the information needed?

      4.2.2. How long will it take to conduct analyses to address the research question?

   4.3. **Personnel**

      4.3.1. What technical and managerial expertise are needed to conduct the analyses and communicate the results?

      4.3.2. Are these personnel available? Or do you need to acquire them through hiring, contracting out, or shifting personnel?

4.4. **Financial:** How much will it cost to conduct the analysis?

    4.4.1. Data: cost of access, protection, coding, data agreements, etc.

    4.4.2. Personnel: cost of time/effort of those directly involved as well as others involved in planning, reviewing, acting on the results of the analysis

    4.4.3. Equipment: cost of software / hardware

    4.4.4. Other costs?

5. **Opportunity costs: What are the trade-offs for pursuing this question over others?**

    5.1. If you weren't conducting analyses to answer this research question, what else would you be doing with the data, time, personnel, and financial resources needed to answer the question?

6. **Other considerations?**