Sexy Technical Communications   Open Educational Resources

3-1-2016

10. Recommendation and Feasibility Reports

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Recommendation and Feasibility Reports

This chapter addresses a loosely defined group of report types that examine a situation, evaluate the evidence, and render a judgment.

Some Rather Fine Distinctions...

The reports in this loosely defined category are variously called feasibility reports, recommendation reports, evaluation reports, assessment reports, and who knows what else. They all do roughly the same thing—provide carefully studied opinions and, sometimes, recommendations. There are some subtle differences among some these types.

Feasibility report.

This type of report studies a situation (for example, a problem or opportunity) and a plan for doing something about it and then determines whether that plan is "feasible"—whether it is practical in terms of current technology, economics, social needs, and so on. The feasibility report answers the question "Should we implement Plan X?" by stating "yes" or "no," but more often, "maybe." Not only does it give a recommendation, it also provides the data and the reasoning behind that recommendation.

Recommendation report.

This type of report starts from a stated need, a selection of choices, or both, and then recommends one, some, or none. For example, a company might be looking at grammar-checking software and want a recommendation on which product is the best. As the report writer on this project, you could study the market for this type of application and

recommend one particular product, a couple of products (differing perhaps in their strengths and their weaknesses), or none (maybe none of them are any good). The recommendation report answers the question "Which option should we choose?" (or in some cases "Which are the best options?") by recommending Product B, or maybe both Products B and C, or none of the products.

Evaluation report.

This type of report provides an opinion or judgment rather than a yes-no-maybe answer or a recommendation. It provides a studied opinion on the value or worth of something. For example, for over a year the city of Austin had free bus transportation in an attempt to increase ridership and reduce automobile traffic. Did it work? Was it worthwhile?—These are questions an evaluation report would attempt to answer. This type of report compares a thing to a set of requirements (or criteria) and determines how well it meets those requirements. (And of course there may be a recommendation—continue the project, scrap it, change it, or other possibilities.)

As you can see, these distinctions are rather fine, and they overlap. In real-world writing, these types often combine—you might see elements of the recommendation report combine with the feasibility report, for example. Of course, the writers of these reports don't care which type they are writing—and well they shouldn't! They're trying to get a job done.

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Typical Contents: Recommendation and Feasibility Reports

Whatever shade of feasibility or recommendation report you write, whatever name people call it—most of the sections and the organization of those sections are roughly the same.

The structural principle that undergirds this type of report is simple: you provide not only your recommendation, choice, or judgment, but also the data and the conclusions leading up to it. That way, readers can check your findings, your logic, and your conclusions and come up with a completely different view. But, more likely, they will be convinced by all your careful research and documentation.

Introduction.

As with any technical report, the introduction sets forth the report's purpose (in this case, indicate that it's a recommendation, feasibility, or evaluation report), specifies the report's intended audience, provides a limited description of the report's context and background, forecasts the report's scope, and previews the report's contents and/or organization. See **introductions** for a more-detailed discussion of writing introductions.

Problem description/definition.

If the problem is complex, expand on the situation you briefly mentioned in the Introduction, and remind the readers why they are reading your report. What is the problem? Why is it a problem? Why does it need a solution? How will this report help address the problem?

This section's size can vary tremendously. If the audience is deeply familiar with the problem, you may be able to omit this section and summarize the problem in the report's introduction. Or you could include a short problem description section that summarizes the issue's major points. Or you may need to delve into detail in order to prove that the audience should take you and your report seriously. Alternatively, if the audience is grappling with a problem they don't fully understand, then you may need to write a detailed problem description in order to justify your report's existence.

Technical Background.

If the readers are not familiar with the issues, objects, or techniques discussed in the report, then you may need to include a separate section in which you explain any information that requires specialized skills or knowledge. This section often goes after the problem description or in an appendix. Alternatively, it may make more sense to fit the technical discussion into the comparison sections where it is relevant.

For example, a discussion of power and speed of tablet computers is going to necessitate some discussion of RAM, megahertz, and processors. Should you put that in a section that compares the tablets according to power and speed? Or should you keep the comparison neat and clean, limited strictly to the comparison and the conclusion, and put the technical discussion into a separate section?

This type of report can be put into business-letter or –memo format, or a separate report format.

Introduction:
- Topic, purpose, audience
- Situation
- Overview what will be covered

Background on the problem or opportunity leading to this report. If necessary, technical background related to the options.

Requirements for the selected options.

Point-by-point comparisons of the options.

Summary table: shows the individual conclusion in table form.

Primary conclusions: state the individual conclusions in numbered-list format.

Secondary conclusions: explain which primary conclusions take precedence.

Final conclusion: states which option is best.

Recommendation: states which option is actually recommended and summarizes key points why.

Information sources: number format enables bracketed source number citations in report body.

xxxxx: Recommendation Report

Background on xxxxx

Requirements for xxxxx

Comparisons of xxxxx

Third-level heading.

Third-level heading

Third-level heading

Conclusions

1.
2.
3.
4.
5.
6.
7.

Recommendation

Information Sources

1.
2.
3.

Figure 1: Schematic view of recommendation and feasibility reports.

Requirements / Decision-making criteria.

If your technical report requires you to make a judgment of some sort—is the project feasible? what is the best option? did the item pass or fail a test?—describe and define the factors that guide your decision. Common examples of decision-making criteria include costs, schedules, popular opinions, demonstrated needs, and degrees of quality. Here are some examples:

- If you're trying to recommend a tablet computer for use by employees, your requirements are likely to involve size, cost, hard-disk storage, display quality, durability, and battery function.
- If you're looking into the feasibility of providing every student at Austin Community College with an ID on the ACC computer network, you'd need define the basic requirements of such a program—what it would be expected to accomplish, problems that it would have to avoid, and so on.
- If you're evaluating the free bus transportation program in Austin, you'd need to know what was expected of the program and then compare its actual results to those requirements.

Requirements can be defined in several basic ways:

- *Numerical values:* Many requirements are stated as maximum or minimum numerical values. For example, there may be a cost requirement—the tablet should cost no more than $900.
- *Yes/no values:* Some requirements are simply a yes-no question. Does the tablet come equipped with Bluetooth? Is the car equipped with voice recognition?
- *Ratings values:* In some cases, key considerations cannot be handled either with numerical values or yes/no values. For example, your organization might want a tablet that has an ease-of-use rating of at least "good" by some nationally accepted ratings group. Or you may have to assign ratings yourself.

Criteria may need to be defined on a fairly granular level. For example, "chocolate flavor" may be a criterion for choosing among brands of chocolate truffles, but what defines a desirable chocolate flavor? Do you want a milk chocolate flavor? A dark chocolate flavor? White chocolate? A high or low percentage of cacao? Sweet, bitter, or spicy? Single-origin cacao beans or a blend? If single-origin, do you want Ghanian, Venezuelan, Honduran, Ecuadorian, or Filipino?

The criteria section should also discuss how important the individual requirements are in relation to each other. Picture the typical situation where no one option is best in all categories of comparison. One option is cheaper; another has more functions; one has better ease-of-use ratings; another is known to be more durable. Set up your criteria so that they dictate a "winner" from situation where there is no obvious winner.

Discussion of the options.

In certain kinds of feasibility or recommendation reports, you'll need to explain how you narrowed the field of choices down to the ones your report focuses on. Often, this section follows right after the discussion of the criteria. Your basic requirements may well narrow the field down for you. But there may be other considerations that disqualify other options—explain these as well.

Additionally, you may need to provide brief descriptions of the options themselves, along with some brief, general specifications on each option you are about to compare. DO NOT, however, actually compare the options in this section. Simply describe them.

Criterion-to-criterion comparisons.

In this section, evaluate the options acording to the decision-making criteria. DO NOT make a list of pros and cons. You can organize the comparison by criteria or by options, depending on what is most appropriate for the subject and your audience, but the best approach is usually to compare the options point-by-point.

For example, if you were comparing tablet computers, you'd have a section that compared them on cost, another section that compared them on battery function, and so on. It would be less effective to have a section that discussed everything about an iPad, another section that discussed everything about a Windows Surface, and so on, because you still need to make the criterion-to-criterion comparisons somewhere. See Figure 2 below.

Whole-to Whole Approach

Option A
Cost of Option A
Functions of Option A
Ease of use: Option A

Option B
Cost of Option B
Functions of Option B
Ease of use: Option B

Option C
Cost of Option C
Functions of Option C
Ease of use: Option C

Point-by-Point Approach

Cost: Options A, B, C

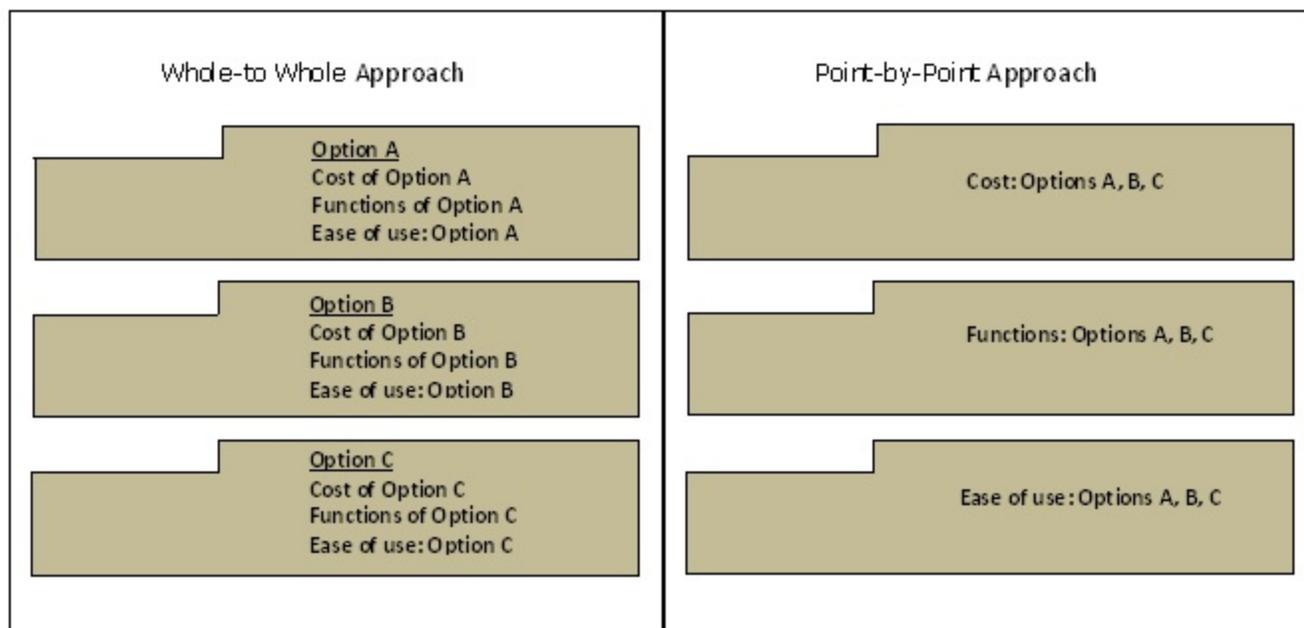Functions: Options A, B, C

Ease of use: Options A, B, C

Figure 2: Schematic view of the whole-to-whole and the part-by-part approaches to organizing a comparison.

Each of these comparative sections should end with a conclusion that states which option is the best choice in that particular category. Of course, it won't always be easy to state a clear winner—you may have to qualify the conclusions in various ways, providing multiple conclusions for different conditions.

Equipment price. The price of the highest functioning portable satellite radio/MP3 player offered by XM was $399.99 for the Pioneer Inno [2]. The price for Sirius' highest functioning satellite radio/MP3 player was $259.99 for the Sirius S50 [3]. The price range for the XM plug-and-play radios is $49.99 to $119.99 [2]. The price range for Sirius plug-and-play radios is $39.99 to $124.99 [3]. In terms of equipment prices, both XM and Sirius offer similar products from high functioning to low functioning. Because Sirius only offers one portable/MP3 player, it holds a lower average price than XM. **XM has more options for the lower priced plug-and-play radios than Sirius does, so it holds a lower average price than Sirius.**	*Section devoted to just one point of comparison: equipment price* *Both options compared on equipment price* *Conclusion on this one point of comparison: equipment price*

Figure 3: Individual comparison section.

If you were creating an evaluation report, you obviously wouldn't be comparing options. Instead, you'd be comparing the thing being evaluated against the requirements placed upon it, the expectations people had of it. For example, the city of Austin, TX, tested a program in which it provided free bus transportation in order to increase ridership and reduce automobile traffic. What was expected of that program? Did the program meet those expectations?

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Summary table.

After the individual comparisons, include a table that summarizes the conclusions from the comparison section. Some readers are prone to pay attention to details in a table rather than in paragraphs. DO NOT just create a summary table and omit the descriptive paragraphs.

Table 1. Testing results of XM and Sirius Satellite Radio		
Category	XM Satellite Radio	Sirius Satellite Radio
Music channels	4	3
Sports channels	4	2.5
Talk & entertainment channels	3.5	4
Subscription price	4	3.5
Portable radio/Mp3 player price	2.5	3.5
Plug-and-Play radio price	4	2.5
Signal	3	4
Portable radio/Mp3 player features	4	4
Plug-and-Play radio features	3	4
TOTAL	32	31
Note: 1 – Poor, 2 – Good, 3 – Very Good, 4 – Excellent		

Figure 4: Summary table.

Conclusions.

The conclusions section of a feasibility or recommendation report summarizes or restates the conclusions you already reached in the comparison sections. In this section, you restate the individual conclusions; for example, which model had the best price, which had the best battery function, and so on.

But this section has to go further. It must untangle all the conflicting conclusions and somehow reach the final conclusion. Thus, the conclusion section first lists the *primary conclusions*—the simple, single-category ones. But then it must state *secondary conclusions*—the ones that balance conflicting primary conclusions. For example, if one tablet computer is the least inexpensive but has poor battery function, but another is the most expensive and has good battery function, which do you choose, and why? The secondary conclusion would state the answer to this dilemma.

And of course, the conclusions section ends with the *final conclusion*—the one that states which option is the best choice, or whether the project is feasible, or whether the program you are evaluating is a success or a failure.

Recommendation or Final Opinion.

In a feasibility or recommendation report, the final section states the recommendation. You'd think that that ought to be obvious by now. Ordinarily it is, but remember that some readers may skip right to the recommendation section and bypass all your hard work! Also, there will be some cases where there may be a best choice but you wouldn't want to recommend it. Early in their history, labtop computers were heavy and unreliable; there may have been one model that was better than the rest, but even it was not worth having.

The recommendation section should echo the most important conclusions leading to the recommendation and then state the recommendation emphatically. Ordinarily, you may need to recommend several options based on different possibilities. This situation can be handled, as shown in the examples, with bulleted lists.
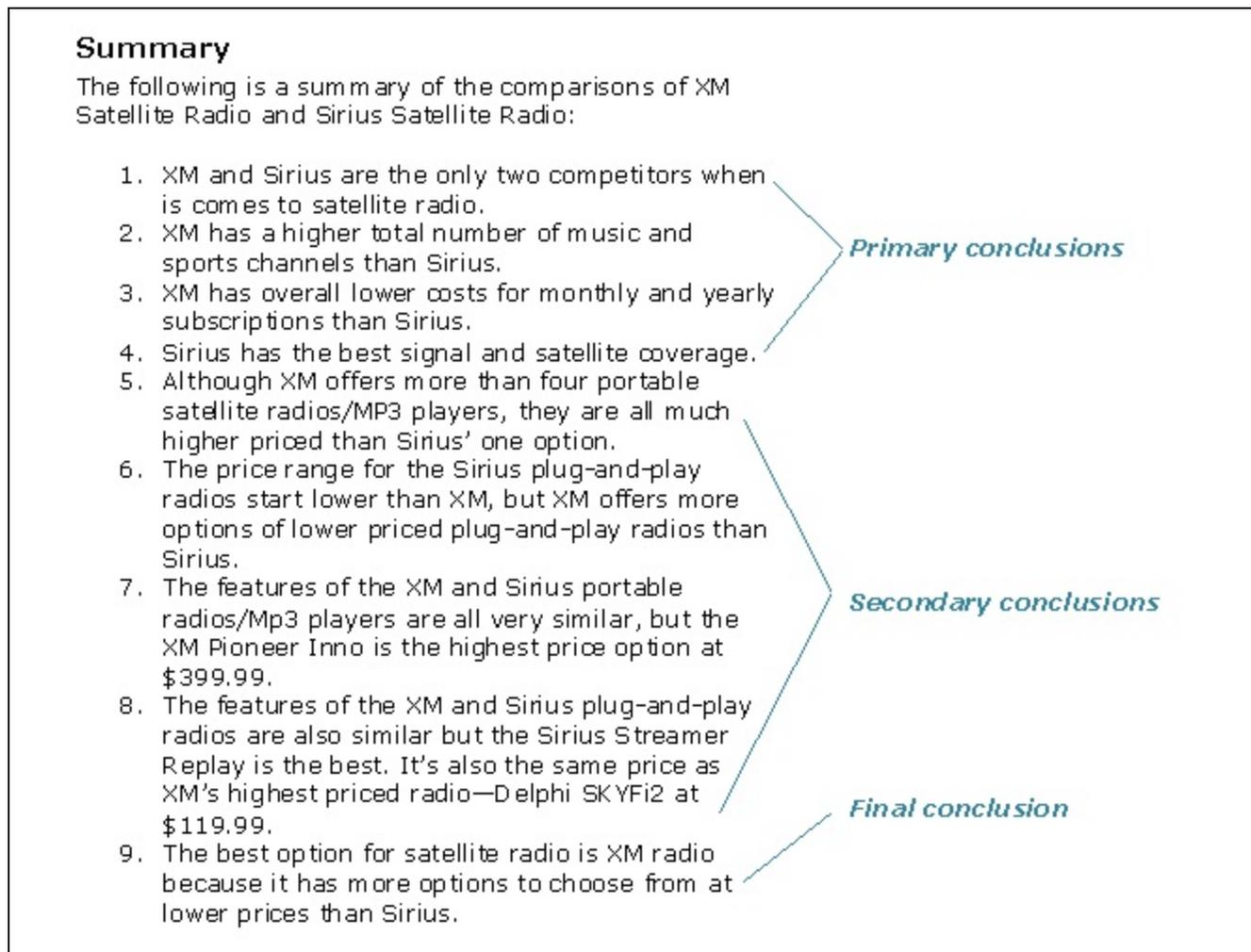
Figure 5: Primary, secondary, and final conclusions. (Notice that in conclusion 6, two categories of comparison are weighed against each other, with more options winning out over lower cost—a secondary conclusion.)

In an evaluation report, this final section states a final opinion or judgement. Here are some possibilities:

- Yes, the free-bus-transportation program was successful, or at least it was, based on its initial expectations.
- No, it was a miserable flop—it lived up to none of its minimal expectations.
- Or, it was both a success and a flop—it did live up to some of its expectations, but did not do so in others. But in this case you're still on the hook—what's your overall evaluation? Once again, you need to state the basis for that judgment somewhere in the Requirements / Decision-making criteria section.

Organizational Plans for Feasibility and Recommendation Reports

This is a good point to discuss the two basic organizational plans for this type of report:

Traditional organization.

This layout corresponds to the order that the sections have just been presented in this chapter. You start with background and decision-making criteria, define the options, then move to comparisons, and end with conclusions and recommendations.

Executive plan.

This layout moves the conclusions and recommendations to the front of the report and pitches the full discussion of background, criteria, options, and the comparisons into appendices. That way, the "busy executive" can see the most important information right away, and turn to the detailed discussion only if there are questions. (In a large report printed in hard copy, there would be tabs for each major section and appendix.)

Executive Organization	Traditional Organization
Introduction Factual Summary Conclusions Recommendations **Appendixes** **A. Shiner Facilty Background** Energy consumption Alternative fuel sources **B. Existing Heating System** Heat production Fuel consumption and costs Replacement costs **C. Proposed Wood-Fired System** Design Basis System description Boiler system HVAC Costs Investment costs Replacement costs Operation and maintenance costs	Abstract I. Introduction II. Shiner Facilty Background Energy consumption Alternative fuel sources III. Existing Heating System Heat production Fuel consumption and costs Replacement costs IV. Proposed Wood-Fired System Design Basis System description Boiler system HVAC Costs Investment costs Replacement costs Operation and maintenance costs V. Conclusions VI. Recommendations

Figure 6: Example outlines of the same report.

Report Pre-writing Strategy

When you develop a recommendation, feasibility, or evaluation report, go through this checklist and think about these issues. Make a list of your thoughts on them so you (and if you are working in a group, all your coworkers) have a master document you can refer back to.

Audience.

Describe the report's intended audience in terms of the organization they work for, their titles and jobs, their technical background, their ability to understand the report.

Situation.

Describe the situation and subject that the report will address. What problems or needs are there? Who has them? Where are they located? What will the report discuss?

Deliverable type.

Describe the report that you are writing. Is it a recommendation, feasiblility, or evaluation report?

Research subject.

Develop a research question. What, exactly, will you investigate? (Be specific!)

Available options.

Idenfity and describe the things you will be comparing. What are these things? Are you going to determine yes or no? Choose from multiple options? Decide if something is good or bad?

Criteria.

Identify specific features, values, or ideas you can use to compare the various options or make an informed decision. Which of those criteria is most important? Least important?

Information sources.

Identify places where you can get information about your research subject. IList specific books, articles, reference works, interview subjects, field observations, and other kinds of sources that you think will contribute to your report.

Graphics.

List the graphics you think your report will need according to their type and their content. Odds are, you'll need at least one table.