

THE APPLIANCE CORPORATION OF AMERICA



The Appliance Corporation of America (APCOA) is a manufacturer of home appliances. It has about 15,000 employees worldwide with annual sales of \$10 billion. Its customer service system works as follows.

Say you are the owner of an Appliance drying machine. You are concerned about a strange rattling noise your dryer makes. So you call their customer service number, 800-543-7902, and are greeted by a recorded message that asks you to hold on until the next customer service representative becomes available. After a few minutes you get a chance to speak with one. He obtains from you your name, address, phone number, and the details of your purchase, and then asks you what the problem is. After you explain the problem, he looks up the name and telephone number of a technician who is an expert with dryers. You are then connected to the technician. You explain the problem to the technician. If it is a minor problem, the technician provides you with instructions on how to solve it. Otherwise, if the dryer requires on-site repair, the technician connects you back to a customer service representative, who will schedule an APCOA repair technician for an appointment. The repair technician visits you, asks you some questions, examines the dryer, diagnoses what is wrong, and goes back to the office to get the parts, unless they happen to be already loaded in his truck. When the parts are not in stock, they need to be ordered, which could take weeks.



The Appliance Corporation of America: The Assignment

Imagine you have been assigned the role of a consultant to APCOA for improving the business processes and systems explained in the case. Your assignment is this: Write a report for the *Information Systems Steering Committee* explaining how you will use MIS/IT-based solutions to address the issues in the case. Assume that your target audience has recently taken the MIS and is already familiar with all the concepts, terminology, and theories covered in this course. The paper should be at least 22 pages, with the following contents and format.

Contents

Following the cover page and the table of contents, the first 20 pages will have the following contents:

Application domain to be applied to the case	Academic/Scholarly Journals	Trade/Popular Magazines
1. Transaction Processing Systems	page 1	page 2
2. Enterprise Systems	page 3	page 4
3. E-Business	page 5	page 6
4. Database Management Systems	page 7	page 8
5. Management Reporting Systems	page 9	page 10
6. Decision Support Systems	page 11	page 12
7. Knowledge Based Systems	page 13	page 14
8. Expert Systems	page 15	page 16
9. Automation	page 17	page 18
10. Collaborative Support Systems	page 19	page 20

For instance,

- page 2 will feature a relevant application of transaction processing systems from a trade or popular magazine to the APCOA case
- page 11 will feature a relevant application of decision support systems from an academic, scholarly journal to the APCOA case

To distinguish academic journals from mere magazines, consult <http://zimmer.csufresno.edu/~sasanr/Courses/scholarly-journals.htm>

Page 21 will be a narrative description of the customer support system that you are proposing to replace the existing system, and which incorporates most or all of the ideas discussed in the first 20 pages. It is acceptable to devote more than one page to this matter. Hence this section may take pages 21 and 22 of your report.

The last page will be a swimlane process map of the narrative discussed on page 21.

Format

Each of the first 20 pages should have the following format:

A. Heading

The heading will consist of two elements separated by a slash (/). The first element will indicate the name of the application domain being used, the second element will indicate the type of source, whether it is Academic or Trade. For instance:

- heading for page 2: Transaction Processing Systems/Trade
- heading for page 11: Decision Support Systems/Academic

B. Source

Identify the source thoroughly (if a web-based source, do not just list the URL; include as much information as available, such as title, author, date, etc.). You should strictly adhere to the APA style of citation, as explained at:

http://en.wikipedia.org/wiki/Apa_style

Bibliographic research is an individual effort. There should be no consultation or information exchange with others in selecting your sources.

It is not acceptable to list a website as an item, no matter how useful that website is in providing services related to APCOA's issues. You are finding ideas, concepts and principles pertaining to the APCOA case. You are **not** referring APCOA to useful websites and inviting them to explore those websites! Hence, by "source" is meant an article or book (whether printed or online does not matter).

Also, none of the 20 sources to be used may include any of the following:

- any article from Wikipedia (or other, similar public-driven, unedited sources), or from "practical websites" such as <http://www.howstuffworks.com/>
- any handout material produced by me
- any required reading from class

However, you ARE welcome to use any article from my website that was not referenced or discussed in class.

C. Issue

In a paragraph, identify and discuss what issue in the case is relevant to the contents of this source. For each issue, start with a short, direct quote (placed in quotes) from the case itself so the reader knows what part of the case you are referring to. Following the quote, explain in some detail why this is an issue and what its significance is. Analyze the issue within the context of APCOA without any reference to the source you have found.

D. Content

In another paragraph (at least 5-7 sentences), summarize the contents of the source, without any reference to APCOA, in your own words. Do not copy/paste from external sources.

E. Relevance

In another paragraph (at least 5-7 sentences), relate the contents of the source (C) to the issue identified earlier (B): How do the ideas offered in the source help resolve those issues?

You can apply a great deal of what you learn in this course to this case. It is strongly advised that you take separate notes, recording your ideas for this case *as they occur to you* during the course of the semester. You will be graded on

- **Scope** (the number of issues you identify/analyze/resolve)
- **Content** (the quality of your solutions)
- **Organization** (the logical flow of your ideas)
- **Communication** (the clarity of your writing)
- **Writing mechanics** (lack of typographical and grammatical mistakes)

Do not address any issues pertaining to systems development and implementation, such as whether your proposed system should be outsourced or developed in-house. Consider your output as a high-level systems analysis and design report that will be considered for implementation if its contents are viewed favorably by its audience.

Please keep in mind that the target audience of your report is familiar with the basic concepts of this course, but they do not specialize in MIS/IT. Hence you should explain in plain English any bit of jargon (or acronym) that has not been discussed in the MIS course. Please try to explain it in your own words rather than copy it verbatim from an assigned reading or website.

In analyzing this case, you may at times feel that the information you need to proceed meaningfully has not been given. This is typical of analyzing written cases (vs. doing real-world projects), no matter how long or short the case. If and when you come to such points, please proceed by making an assumption. But state your assumption explicitly and factually. Please highlight each assumption made in the following format:

Assumption: _____

Examples:

Assumption: APCOA dryer parts are not proprietary and can be purchased and used in repair by APCOA's competitors.

Assumption: The customer service reps have little or no technical training.

Assure that your report has an appropriate cover page, table of contents, and page numbers.



Tips on Bibliographic Search

Adjectives

smart
embedded
high-tech
internet-ready
connected
networked

Nouns

appliance
home
dryer
systems

NOTE!

Google has a search option for those who want to search specifically for more academic or "scholarly" information on the web:

<http://scholar.google.com>

Conduct searches with pairs of words consisting of one word from the **Adjectives** list followed by a word from the **Nouns** list. Examples:

- Smart appliance
- Connected home
- High-tech dryer

Other relevant search terms would be:

- Call center
- Customer service
- Appliance repair
- Automated diagnostics
- Customer Relationship Management

The following trade journals contain good material:

- www.appliancemagazine.com
- www.cio.com (under Research Centers, click on CRM)
- <http://itmanagement.earthweb.com/>
- <http://www.fastcompany.com>
- www.computerworld.com
- <http://knowledge.wharton.upenn.edu/>

The following companies are similar to APCOA and their web sites contain relevant material. Explore these websites as though you were the customer calling APCOA, realizing that these websites can NOT be cited as any of your 20 sources.

- GE
- Whirlpool
- Maytag
- Electrolux
- Sears

Also, read <http://zimmer.csufresno.edu/~sasanr/Courses/Bibliographic-Search.htm>