

Assignment 2

Due Date: 5pm on Friday 6 May, 2016

Case Scenario: Easley Shopping Centre

The town of Easley, South Carolina, has experienced tremendous growth over the past few years. After a long and spirited discussion, the town council has unanimously decided to build Easley's first big shopping center. On the recommendation of the town planner,



Jimmy Barnes, the council has decided to hire the Ray Development Company (RDC) to help in the shopping center's planning and construction. RDC has a great deal of experience in building malls and shopping centers in the southeastern U.S, and the town council is confident they will help Easley identify the right stores for its new shopping center.

Jennifer Ray, president of RDC, has quickly identified and signed two major anchor stores as well as several other attractive tenants for the shopping center. After assigning suitable spaces to these tenants, Jennifer has 32,000 square feet of space still available for allocation. She and Jimmy are now tasked with deciding which stores to locate in this available space. Due to the significant market interest in Easley's new shopping center, Jennifer and Jimmy are confident that they will not have any trouble finding tenants to suit whatever allocation plan they decide to use.

After extensive study, Jennifer has drawn up a list of 20 different stores she thinks she and Jimmy should consider for the available space. Table 9 below lists these stores in alphabetical order, along with the floor space required by each store, the annual rent the store would pay for the space, the expected annual sales at the store and the expected upfit cost to renovate the allotted space to make it suitable for the store.

As per the leasing agreement developed by RDC, each store would pay the town an annual rent for its allotted space. The town council has mandated that the total rent payments each year must be sufficient to cover the annual fixed cost of maintaining the shopping center. This cost, which includes items such as security, janitorial services, maintenance and utilities, is estimated to be \$500,000 per year. In addition, the town council has specified that the total upfit amount spent on renovating the space to suit these stores cannot exceed 60% of the actual total annual rent that would be collected.

In order to make the shopping center attractive to a broad range of customers, Jennifer believes it must adhere to certain conditions in terms of the mix of stores. Taking into account the tenants that have already been signed for the shopping center, she thinks the remaining space should contain at least two stores each in the apparel, food and specialty types and at least one store each in the housewares and services types. She also thinks that there should be no more than three stores of any type and that the number of food and services stores should not exceed the total number of stores in the other three types.

RDC has proposed an arrangement under which the town would receive a fixed percentage of the total annual sales generated by the stores. The town council therefore wants to identify the solution that would generate the maximum total sales from these stores.

TABLE 9 Details of Possible Stores at Easley Shopping Center

| STORE | STORE TYPE | SQ. FT. NEEDED | ANNUAL RENT | ANNUAL SALES | UPFIT COST |
|----------------------|------------|----------------|-------------|--------------|------------|
| Bath & Body Products | Specialty | 2,000 | \$ 35,000 | \$ 650,000 | \$40,000 |
| Beauty Parlor | Service | 3,000 | \$ 50,000 | \$ 500,000 | \$35,000 |
| Children's Clothing | Apparel | 4,800 | \$ 70,000 | \$1,750,000 | \$35,000 |
| Chinese Fast Food | Food | 2,400 | \$ 40,000 | \$ 800,000 | \$27,000 |
| Electronics Store | Specialty | 6,400 | \$ 80,000 | \$1,300,000 | \$75,000 |
| Game Arcade | Service | 6,000 | \$ 70,000 | \$1,250,000 | \$40,000 |
| Hardware Store | Housewares | 7,200 | \$ 95,000 | \$1,200,000 | \$55,000 |
| Hobby Store | Specialty | 3,600 | \$ 50,000 | \$ 550,000 | \$29,000 |
| Ice Cream Store | Food | 1,600 | \$ 30,000 | \$ 500,000 | \$20,000 |
| Kitchen Store | Housewares | 6,400 | \$ 80,000 | \$ 900,000 | \$42,000 |
| Lingerie Store | Apparel | 3,600 | \$ 55,000 | \$1,250,000 | \$30,000 |
| Luggage Store | Housewares | 4,000 | \$ 70,000 | \$ 650,000 | \$34,000 |
| Men's Clothing | Apparel | 7,000 | \$100,000 | \$2,000,000 | \$40,000 |
| Pizza Parlor | Food | 4,800 | \$ 62,000 | \$1,200,000 | \$31,000 |
| Shoe Store | Apparel | 4,800 | \$ 60,000 | \$1,400,000 | \$40,000 |
| Sports Bar | Food | 4,000 | \$ 80,000 | \$1,300,000 | \$50,000 |
| Tex-Mex Fast Food | Food | 2,400 | \$ 35,000 | \$1,100,000 | \$35,000 |
| Toy Store | Specialty | 4,800 | \$ 70,000 | \$1,000,000 | \$50,000 |
| Travel Agency | Service | 2,000 | \$ 30,000 | \$ 400,000 | \$15,000 |
| Women's Clothing | Apparel | 7,000 | \$120,000 | \$2,250,000 | \$65,000 |

Requirements:

1. Create a spreadsheet model for this problem and solve it to determine the optimal solution.
2. Prepare a documentation sheet to support your model.
3. Prepare a three page report to the Town Council. Can you recommend an alternate plan to Jennifer's that would maximise total sales from the stores? Provide support for your answer.

Assignment Deliverables:

1. Your spreadsheet model for this problem scenario with the ability to generate the optimal solution.
2. Your documentation sheet for instruction and support for your model.
3. Your three page business report to the Town Council containing Jennifer's plan for the ideal arrangement of stores and your alternate recommendation.
 - Note: the three page business report should include an executive summary, introduction, methodology, results/findings, discussion, conclusion and recommendations.
 - A title page, table of contents, reference list and appendix containing supporting documentation may be submitted. These do not form part of the three page restrictions. Note the reference list should contain references used in the body of your report.
4. Please include an assignment coversheet with your submission. Both word and pdf versions of the coversheet can be downloaded from the assessment link and should be submitted with your assignment to the Safe Assign link.

Additional Resources you may find useful:

Preparing a documentation sheet: accessible from LearnJCU

Report Writing:

https://learnjcu.jcu.edu.au/bbcswebdav/pid-2216330-dt-content-rid-3366714_1/orgs/CBLG-help/Module%207%20-%20Write%20Reports-1.pdf

Top Ten Tips for Writing Effectively:

https://www.jcu.edu.au/_data/assets/pdf_file/0019/115462/jcu_131682.pdf

Referencing LibGuide:

<http://libguides.jcu.edu.au/apa>