

# BRN1 — BRN1 TASK 1: BUSINESS CASE ANALYSIS

OPTIMIZATION — D605

PRFA — BRN1

Preparation

**Task Overview**

Submissions

Evaluation Report

## COMPETENCIES

### 4165.1.1 : Analyzes a Business Case

The learner analyzes a business case to recommend a particular optimization approach.

## INTRODUCTION

In this task, you will identify the need to solve an optimization problem indicated in one of the provided scenarios. You will describe what kind of optimization problem you identified in the scenario, as well as the components, constraints, and features that inform an optimization approach. Finally, you will recommend an optimization approach.

## SCENARIO

Three scenarios are provided for your choice.

## REQUIREMENTS

Your submission must represent your original work and understanding of the course material. Most performance assessment submissions are automatically scanned through the WGU similarity checker. Students are strongly encouraged to wait for the similarity report to generate after uploading their work and then review it to ensure Academic Authenticity guidelines are met before submitting the file for evaluation. See [Understanding Similarity Reports](#) for more information.

### Grammarly Note:

Professional Communication will be automatically assessed through Grammarly for Education in most performance assessments before a student submits work for evaluation. Students are strongly encouraged to review the Grammarly for Education feedback prior to submitting work for evaluation, as the overall submission will not pass without this aspect passing. See [Use Grammarly for Education Effectively](#) for more information.

### Microsoft Files Note:

Write your paper in Microsoft Word (.doc or .docx) unless another Microsoft product, or pdf, is specified in the task directions. Tasks may not be submitted as cloud links, such as links to Google Docs, Google Slides, OneDrive, etc. All supporting documentation, such as screenshots and proof of experience, should be collected in a pdf file and submitted separately from the main file. For more information, please see [Computer System and Technology Requirements](#).



You must use the rubric to direct the creation of your submission because it provides detailed criteria that will be used to evaluate your work. Each requirement below may be evaluated by more than one rubric aspect. The rubric aspect titles may contain hyperlinks to relevant portions of the course.

- A. Identify a business need in the given scenario that could benefit from an optimization approach.
  - 1. Explain why the business need you have identified can be addressed using an optimization approach.
  - 2. Identify the linearity of the optimization problem you have found.
  - 3. Identify the type of optimization problem you have found.
- B. Identify the optimization objective, decision variables, and **two** or more constraints that are components of your optimization approach.
  - 1. Explain any end point considerations in your optimization approach.
- C. Recommend an optimization method that is appropriate for the problem you identified.
- D. Acknowledge sources, using in-text citations and references, for content that is quoted, paraphrased, or summarized.
- E. Demonstrate professional communication in the content and presentation of your submission.

File Restrictions

File name may contain only letters, numbers, spaces, and these symbols: ! - \_ . \* ' ( )  
File size limit: 200 MB  
File types allowed: doc, docx, rtf, xls, xlsx, ppt, pptx, odt, pdf, csv, txt, qt, mov, mpg, avi, mp3, wav, mp4, wma, flv, asf, mpeg, wmv, m4v, svg, tif, tiff, jpeg, jpg, gif, png, zip, rar, tar, 7z

RUBRIC

A:IDENTIFICATION OF BUSINESS NEED

NOT EVIDENT

A business need that could benefit from an optimization approach has not been identified.

APPROACHING COMPETENCE

A business need that could benefit from an optimization approach has not been completely or correctly identified.

COMPETENT

A business need that could benefit from an optimization approach has been completely and correctly identified.

A1:EXPLANATION OF OPTIMIZATION APPROACH

NOT EVIDENT

APPROACHING COMPETENCE

COMPETENT