

# Westminster Business School

**7FNCE040W Business Analytics Individual Assessment (70%)**

**Due on 16th November 2023 @13:00 UK TIME**

# WISEINSURE PLC

**Understanding Customers**[**1**](#_bookmark0) **Background and Early History**

The company was founded in Hatton Garden in London in May 1848 as WISEINSURE,

Investment, Loan, and Assurance Association and in September 1848 changed its name to The WISEINSURE Mutual Assurance, Investment, and Loan Association, to provide loans to professional and working people.

On 30 May 1848 a group of Victorian gentlemen met in London to form the WISEINSURE Mutual Assurance, Investment and Loan Association. The figure of WiseInsure was adopted as a symbol to be used on the first company seal and represent the values of the business. By 1898 WISEINSURE had become the leading UK life assurance company and by 1914, one in three British households had a policy with the WiseInsure. During the 1920s WISEINSURE began to expand across the globe, with the first overseas life branch established in India in 1923. By 1939, new net business in the overseas life branches was rivalling the success of the UK business.

WISEINSURE’s international business continued to grow rapidly through the latter part of the 20th century. In 1986, WISEINSURE gained a firm foothold in the United States with the acquisition of Jackson National Life Insurance Company, and WISEINSURE Corporation Asia was established in 1994 in recognition of the high potential for growth in Asia.

Today, WISEINSURE plc combines the exciting growth potential of our Asia, US and Africa businesses as a leading international insurance and asset management group. The Company remains head quartered, and premium listed in London. Across the world, WISEINSURE continues to help people de-risk their lives and deal with their biggest financial concerns.

To develop an understanding of its situation, a survey of existing customers of WISEINSURE’s was conducted through an established marketing research firm.

The primary purpose of this survey was to ascertain how customers perceived WISEINSURE’s quality of service and to identify areas for improvement. A 4-page questionnaire was mailed to a random sample of 1000 policyholders from WISEINSURE’s customer database. Completed questionnaires were received from 285 respondents. The table in the appendix describes the variables, and the data file is in the Data File folder on BB.

***PLEASE NOTE THE DATA FOR THIS CASE IS A SAMPLE AND NOT FROM WISEINSURE Plc.***

The data are available in the **WISEINSURE Ind CW.sav** file on Blackboard and a definition of each variable and an explanation of its coding are given in Appendix 1. Please assume the sample of 285 respondents is representative of WISEINSURE’s customers.

**The Task**

Please write a memo, of no more than 1,500 words, to the management of FPM addressing the following issues:

* Bill Gate, Vice President of Customer Service for WISEINSURE, and her assistant, Ben Potts, want you to develop and briefly discuss the demographic profile of the survey respondents. Please conduct frequencies and cross tabulations on any variables you feel may be of interest to Bill and Ben. In order to **Describe the respondents of the questionnaire** see if there are any significant differences in the outcome / relationship measures based on any of the customer characteristics variables?
* **Develop a model to predict** satisfaction, or likelihood to recommendation from the perceptions of the performance variables. Identify the most influential performance variables and explain their impact on the company’s performance?
* **Make a recommendation** to WISEINSURE’s that enhances their understanding of their customers so that the management can develop its marketing plan for the next year.

To write the memo, you may want to address the points below.

1. Bill and Ben want to find out WISEINSURE’s average service perception ratings along each of the five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. They also want to know the most and least critical service dimensions, as perceived by the customers. Perform the necessary statistical analyses and report the findings in statistical and managerial terms.
2. Bill and Ben want to see whether there are significant2 relationships between customers’ willingness to recommend National to a friend and the variables listed below. Perform the necessary statistical analyses and report the findings in statistical and managerial terms.
   1. Age
   2. Marital status
   3. Income
   4. Education
3. Bill and Ben are wondering whether there are significant relationships between recommending National to a friend and overall perception of service quality and perception of each of the five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Perform the necessary statistical analyses and report the findings in statistical and managerial terms.
4. Bill and Ben are wondering if the perceptions of the features listed below are significantly greater than 5.0. If not, are they significantly greater than 4.0? Perform the necessary statistical analyses and report the findings in statistical and managerial terms.
   1. Tangibles
   2. Reliability
   3. Responsiveness
   4. Assurance
   5. Empathy

The **Questionnaire details** are in APPENDIX **1.**

The **format of the memo** is in

# APPENDIX 2.

**Submission**

The memo and supporting appendices, if any, should be combined into one document, which must be submitted

by **Due 13:00 UK time 16th NOVEMBER 2023** via BB only. It will automatically be scanned through a text matching system (designed to check for possible plagiarism). YOU MUST include your name, student ID number, and word count on the first page of your assignment**. IMPORTANT PLEASE Save your file thus before submitting to BB. ‘Your Name \_7FNCE040W\_CW1 S1** **2023\_2024’**

1 Adapted from Parasuraman, A., Dhruv Grewal, and R. Krishnan (2007), *Marketing Research, 2nd Edition*, Houghton Mifflin Company.

In all cases, assume α = .05, unless specified otherwise.

2 https[://w](http://www.AVIVAplc.com/about-us/our-history)ww.[WISEINSUREplc.com/about-us/our-history](http://www.AVIVAplc.com/about-us/our-history) -NOT A REAL COMPANY

Marking Scheme

The document you submit will be evaluated according to the following criteria:

|  |  |
| --- | --- |
| **Component** | **Percentage** |
| **Presentation**   * Word count provided on front page and does not exceed limit * No spelling, grammar, punctuation errors * Properly formatted and professional in organisation and appearance * Citations and references provided, if needed * Appropriate use of appendices for necessary SPSS results | **10%** |
| **Quality of the Analysis**   * Appropriate selection of variables and analyses * Selection of analyses are sensible and provides valuable insights * Appropriate interpretation of the results | **50%** |
| **Quality of the Communication**   * Clarity and completeness of the recommendation * The rationale for the recommendation is connected to the analyses * Clarity of the explanation relates to inferences from the results * Connection between the discussion and the managerial problem | **40%** |

# APPENDIX 1 Questionnaire details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Question Number** | **Construct Measured** | **Measurement Level of Response** | **Variable Name** | **Coding** |
| Section 1, Q1 – Q5 | Perception of Reliability | Interval | p1 – p5 |  |
| Section 1, Q6 – Q10 | Perception of Empathy | Interval | p6 – p10 |  |
| Section 1, Q11 – Q14 | Perception of Tangibles | Interval | p11 – p14 | 1 = Strongly Disagree to 7 = Strongly Agree |
| Section 1, Q15 – Q18 | Perception of Responsiveness | Interval | p15 – p18 |  |
| Section 1, Q19 – Q22 | Perception of Assurance | Interval | p19 – p22 |  |
| Section 2, Q1 | Importance of Tangibles | Ratio | tanimp | 0 – 100 points |
| Section 2, Q2 | Importance of Reliability | Ratio | relimp | 0 – 100 points |
| Section 2, Q3 | Importance of Responsiveness | Ratio | resimp | 0 – 100 points |
| Section 2, Q4 | Importance of Assurance | Ratio | asrimp | 0 – 100 points |
| Section 2, Q5 | Importance of Empathy | Ratio | empimp | 0 – 100 points |
| Section 3, Q1 | Overall quality of service | Interval | OQ | 1 = extremely poor; 10 = extremely good |
| Section 3, Q2 | Recommend service to others | Nominal; may be treated as ordinal as ‘1’ is better than ‘2’ | rec | 1 = yes; 2 = no |
| Section 3, Q3 | Length of service usage | Ordinal | use | 1 = less than 1 year; 2 = 1 to less than 2 years; 3 = 2 to less than 5 years; 4 = 5 years or more |
| Section 3, Q4 | Problem with service | Nominal; may be treated as ordinal as ‘1’ is better than ‘2’ | prob | 1 = yes; 2 = no |
| Section 3, Q5 | Problem resolved to satisfaction | Nominal; may be treated as ordinal as ‘1’ is better than ‘2’ | resolve | 1 = yes; 2 = no |
| Section 4, Q1 | Gender | Nominal | sex | 1 = male; 2 = female |
| Section 4, Q2 | Marital status | Nominal | mstat | 1 = single; 2 = married; 3 = widowed; 4 = divorced |
| Section 4, Q3 | Age | Ordinal | age | 1 = under 25; 2 = 25 – 44; 3 = 45 – 64; 4 = 65 or over |
| Section 4, Q4 | Income | Ordinal | inc | 1 = under £10000; 2 = £10,000 - £19,999; 3 = £20,000 - £29,999; 4  = £30,000 - £49,999; 5 = £50,000 - £64,999; 6 = £65,000 or over |
| Section 4, Q5 | Education | Ordinal | Ed | 1 = Secondary school or less; 2 = Some University; 3 = UG degree;  4 = Post graduate education |

**APPENDIX 2 Memo Format**

The memo should adhere to the following format.[2](#_bookmark1)

1. **Introduction / Situation Assessment / Recommendation:** This section should provide a statement of the purpose of your memo and your recommendation. Given that you have limited space, eliminate the text about "how you have been hired to do a study" and quickly get to the point of what you are recommending. The key to writing a good statement of purpose is making clear what the situation is that the reader is confronting (threat to profitability or from competitors, market share, harms to society, etc.), and how and/or why following your recommendation addresses this situation. Students usually make a mistake in this paragraph by providing too much descriptive information about the situation. Remember, the reader knows the situation, what is unknown is your insight about the most important factors of the situation.
2. **Rationale for Recommendation:** Here is where you link your recommendation to your analysis of the situation. The rationale should clarify how your recommendation evolved from your analysis and addresses the situation faced by management. In this section you should clearly articulate the findings from your analysis – but not the process of your analysis. The reader does not care what you did first, what software package you used, or how you manipulated the data, if at all. The pertinent results should be described, with supporting statistics, in your text. All relevant output and statistics should also be included in an appendix.

The key to writing a good rationale is to make sure your logic or line of reasoning addresses the reader’s concerns, explains how the recommendation serves the major situation identified in the introduction, and provides good coverage of your analysis.

# Key Points to Note:

* 1. Notice there is no conclusion. Unlike academic writing, writing for a business audience requires you to say your case as quickly and succinctly as possible. Essentially, your conclusion is in the introduction.
  2. Do not include all your SPSS output in an appendix. Be selective about what you include and be sure to note the inclusion of any output in the text memo, otherwise there is no reason for the reader to attend to it in the appendix.

3 Adapted from the *Case Study Instructions* available at [http://www.csed.umn.edu/EMSS/case.htm,](http://www.csed.umn.edu/EMSS/case.htm) accessed 29 January 2018.

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