

**DETERMINATION OF INSURANCE PREMIUM IN A LIFE OFFICE OF AN
INSURANCE COMPANY**

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**BEING A RESEARCH SUBMITTED TO THE DEPARTMENT OF ACTUARIAL
SCIENCE AND INSURANCE, FACULTY OF MANAGEMENT SCIENCES, UNIVERSITY
OF LAGOS IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE
OF BACHELOR OF SCIENCE (B.Sc) IN ACTUARIAL SCIENCE**

AUGUST, 2019.

CERTIFICATION

This project was written by **Nkwocha Augustine Chukwuemeka**. Under the supervision and approval of **Professor Dallah Hammadu** has been submitted and accepted by the Department of Actuarial Science and Insurance of the University of Lagos in partial fulfillment of the requirements for the award of **Bachelor of science degree (B.Sc) in Actuarial Science**.

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DEDICATION

This project is dedicated to God Almighty for the gift of life. And to my parents Mr. Nkwocha Augustine Chukwujike and Mrs. Nkwocha Josephine for their love and care.

ACKNOWLEDGMENT

Foremost, I would like to express my deep and sincere gratitude to my research supervisor, Prof. Dallah Hammadu for the opportunity to embark on this research and for providing invaluable guidance throughout this research in order to present the research work as clearly as possible.

I am extremely grateful to Dr. A. B. Shogunro who has taught me in class part of the methodology I used to carry out this research work. His dynamism, vision, sincerity and motivation have deeply inspired me. I am particularly indebted and very much thankful to my parents Mr. Nkwocha Augustine Chukwujike and Mrs. Nkwocha Josephine and siblings for their love, prayers, care and sacrifices.

Above all, I am grateful to God Almighty, for His showers of blessings throughout the duration of this research work.

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ABSTRACT

Determination of premium rate in a life office of an insurance company is a very important aspect of life insurance business. Setting adequate premium rate ensures that an insurer is able to pay claims and meet other obligations as they fall due. Insurance premium is usually determined by : The type of coverage, the amount of coverage, personal information of the insurance policy applicant and competition in the insurance industry and target area. Two sets of secondary dataset were analysed to show how to predict premium charges using the Actuarial Technique and the Predictive Analytics Technique. The results of this analysis reveal that, with the increase in the amount of data and advances in data analytics, the underwriting process can be automated for faster processing of applications. Hence it is recommended that Actuaries with data analytics skills should be involved in making decisions on premium rating and calculations in order to speed up the underwriting process.