

## **ABSTRACT**

Premiums are payable to an insurance company for a cover against a certain risk. Credibility models are actuarial tools to distribute premiums fairly among a heterogeneous group of policyholders. The problem is usually to devise a way of combining the experience of the group with the experience of the individual risk the better to calculate the premium. Credibility theory gives the solution to this problem. Most papers and researches on this subject are difficult to follow through, especially without the basic knowledge of Credibility theory. They also involve fairly recondite mathematics. This study describes the basic concept of Credibility theory and the standard methods of finding the Credibility factor, which are the Limited Fluctuation, Greatest Accuracy, and Bayesian. This is basically giving the areas of study there are in credibility theory. Once we have the insurance claim experience with us, we need to fit mathematical regression models to it. Usually, the data is assumed to be normal, and so we are restricted. The solution to this problem is the use of Generalized Linear Models which is looked at herein in this study. The topics at hand are generally broad and therefore for deeper comprehensive study the reader is advised to look at the numerous original papers on the subject.