ABSTRACT

PARAMETER ESTIMATION OF GENERALIZED LAMBDA DISTRIBUTION (GLD) USING THE MAXIMUM LIKELIHOOD METHOD IN SOFTWARE R

By

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Parameter estimation is one of inferential statistics. Parameter estimation to be used to estimate of unknown population. In this study discuss about parameters estimation of Generalized Lambda Distribution (GLD). Generalized Lambda Distribution is a distribution with four parameters which is developed from a single parameter of Lambda Tukey distribution. To estimate parameters of GLD, we use Maximum Likelihood Method shows that the estimation of GLD cannot be solved analytically. To solve this problem this study itteratively utilizes Newton Rapshon Method using software R. The estimate values of parameters value of GLD's obtained from simulation. Their biased is calculated as well of data. From the calculation proves that the large size of data then biased values tend to be smaller.

Keywords *: Generalized Lambda Distribution (GLD), Maximum Likelihood Method, Newton Raphson Method.*