

ABSTRACT

In accordance with Law No. 8 of 1999 on Consumer Protection , every company is required to provide a warranty as a guarantee of the products that produced. To optimize the use of warranty costs it needs to make a design to determine the duration of the warranty policy and warranty policies that will be used a company. In addition, the inventory of spare parts also need to be taken into account so that companies can immediately handle claims that comes from the consumer. Damage modeling in the design of the product warranty policy here using one -dimensional damage model approach.

Warranty policy design begins with determining the critical components that will be the focus in this study using the Pareto principle, where critical components are determined by the components that contributed to 80 % of the total cost of replacement components. Furthermore, to determination of the distribution that represents the critical component by using the Kolmogorov-Smirnov test. Further calculation warranty policy and also spare parts supplies.

After the comparison between policies FRW, PRW and Combination warranty, we will known that the combination warranty policies that have the most cost-optimal (minimum), with a duration of 1.75 years warranty or 20 months with 10 months of free replacement warranty. The number of spare parts to be procured per year is 2 motherboard component units and 2 units of hard disk components. The selling price of the product once applied the proposed warranty policy is Rp. 8,047,037.35.

Keywords : Policy Warranty , Parts , Product Sales Price