Abstract

Credit scoring has provided a number of financial institutions like banks, Microfinance institutions the means of determining if a given client will default or repay their debt obligation. Credit defaulting has become a stubborn enemy to the financial sector globally. With numerous Saccos in Kenya today it is challenging to predict accurately the trust of its members hence there arise a need of models, which will determine Sacco members credit worthiness. Qualitative output variable (i.e. member credit worth) measured using factors (i.e. Credit Duration, Concurrent Credits, Repayment Amount, Most Valuable Asset and Account Balance with Sacco) are scaled using appropriate linguistic terms and fused using hierarchical sensory fusion to evaluate credit worth of Sacco members in Kenya. Similarly, the output variable member credit worthiness was assigned linguistic terms of Excellent, Good, Fair/ Average, Bad and Poor.
25.

**Index Terms**

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**Keywords**

credit worthiness, qualitative measures and fuzzy relations.