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**The Global Warranty Management System**

Key Words – Electronic Warranty, Warranty Card, Warranty API Systems, Online retailer

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## ABSTRACT

The Electronic Warranty Management System is an innovative solution that leverages NLP, ML, QR scanning, blockchain, and encryption to modernize the warranty management process. Customers need help with warranty claim documentation in today's digital age. Most available warranty management systems need to be updated and improved in their service range, making it difficult for small customers to use them. Therefore, the author aims to design, implement, and evaluate a plan that covers a globally accessible system for the warranty sector. This project significantly contributes to the problem domain by streamlining the warranty management process and offering a secure and efficient solution for managing electronic warranties. Implementing NLP and ML allows for intelligent and automated warranty claims processing, reducing manual effort and increasing efficiency. QR scanning technology provides quick and easy access to product information and warranty status. Blockchain integration enhances the security and tamper-proof nature of warranty records, while encryption ensures the confidentiality of sensitive information.

The system will be managed through a QR input and output system that simplifies the user's access to the design and is protected from behind. This project's contributions to technology are significant, with the building of a Global Warranty System that uses a QR scanning method, end-to-end encryption, and secure data storage systems. This simple contribution will maximize the system until it builds a Sharpe cut system. Several challenges must be addressed in researching the Electronic Warranty Management System, including ensuring the accuracy and reliability of NLP and ML algorithms, seamless QR scanning and access to product information, and robust security implementations.

*Keywords: Blockchain, QR code, Warranty tracking, e-Commerce, Product warranty.*