



SAMSUNG SDS

Tech  
Mahindra

**How Pegasystems, Samsung SDS  
and Tech Mahindra are using DPA  
and Blockchain Technology to Improve  
Warranty Management**

To prove the viability of the DPA (Digital Process Automation) + Blockchain for Warranty value chain Pegasystems, Samsung SDS and Tech Mahindra partnered together for a robust reference implementation and Proof of Concept.

### Challenge to Address

Often regarded as an unavoidable “cost of doing business”, warranty management is one of the most significant expenses for manufacturing companies. Every year, an estimated \$50 billion is spent on warranty claims globally. Despite a reduction in the number of claims issued, there has been a noted increase in warranty costs across the supply chain. Organizations must manage both hard and soft warranty expenses to stay competitive.

- \* Counterfeiting leads to brand dilution, tarnished reputation and financial losses to manufacturers, resulting in an estimated \$1B additional spend per year per OEM due to counterfeit parts.
- \* Onus on the customer / dealer to prove ownership and coverage to OEM via physical invoices, which have to be manually assessed along with the claim.
- \* Lack of foolproof mechanisms to establish validity of product warranty.
- \* Opaqueness in the warranty cycle leading to more than 30% duplication of work.
- \* Identifying and associating the correct supplier of the part for faster cost recovery.

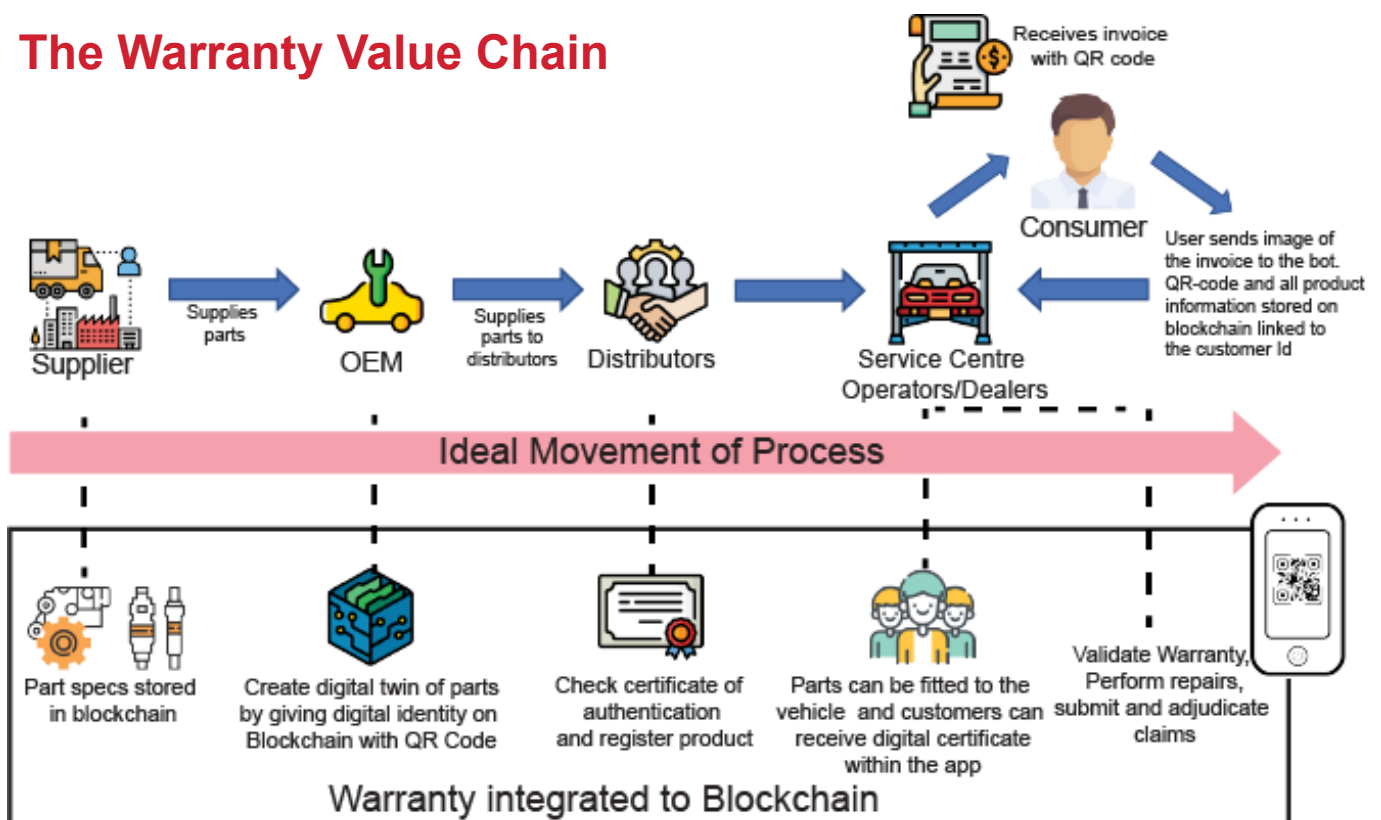
### Solution Overview

[Samsung’s Nexledger™](#) Universal blockchain along with [Pega’s Digital Process Automation](#) with out-of-the-box -warranty configurable workflows can help streamline and provide end-to-end visibility by securing supply chains and providing track-and-trace capabilities for parts and product warranty.

By integrating [Pega Warranty™](#) strategic application with Nexledger Universal Blockchain platform, we are able to

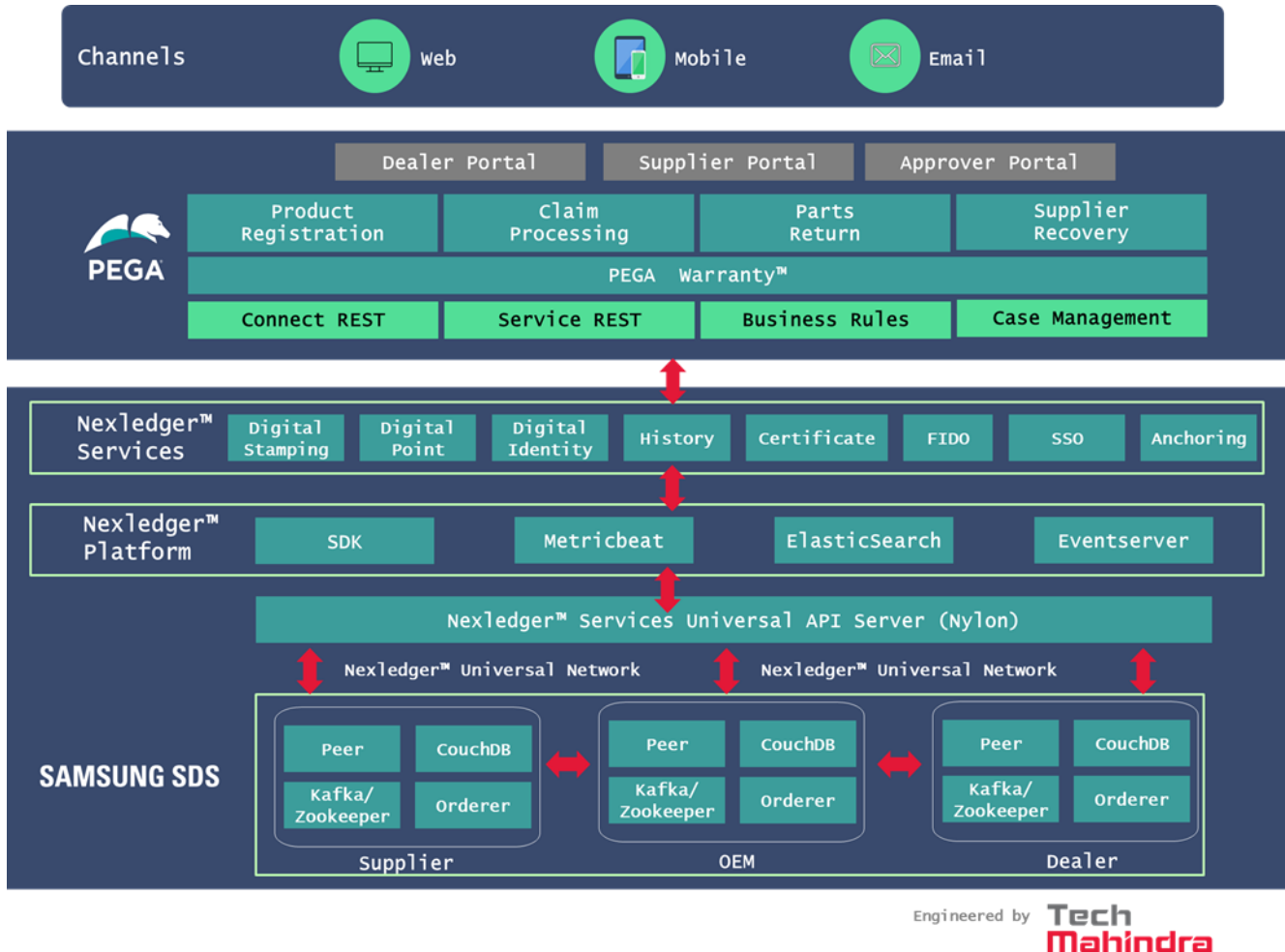
- \* Establish traceability / prove ownership / check warranty validity of an asset with blockchain’s immutability feature providing ability to link every transaction record to the part.
- \* Utilize the reusable out of the box portals, workflows and rules engine capability of PEGA for warranty claim processing and improve auto claim adjudication.

## The Warranty Value Chain



## Solution Overview

The following illustrates the reference architecture for the warranty value chain that uses the Pega DPA platform, the Pega Warranty™ strategic application that is built on top of Pega DPA and Samsung's robust Nexledger™ Universal blockchain technology. The implementation was spear headed by Tech Mahindra's Pega & Blockchain Practices with support from Pega and Samsung SDS



The proof of concept implemented, customizes out of the box features of Pega Warranty™ strategic application while leveraging the Samsung Nexledger Universal platform for tasks such as:

- \* Generation and recording of product or component IDs in Nexledger Universal
- \* Updating dealer / seller information for product in Nexledger Universal
- \* Registration of warranty and customer information of the product via Pega Warranty™ in Nexledger Universal
- \* Inquiry of warranty coverage in Pega Warranty™ with verification from the blockchain
- \* Automated claim adjudication in Pega Warranty™ with integration to the blockchain for validation
- \* Warranty Claim information and Supplier Smart Contract in Nexledger Universal

## Gain business efficiencies in your Warranty Value Chain

A Digital Process Automation (DPA) + Blockchain enabled warranty management system provides operational efficiencies and a quantified business benefit for OEM's and manufacturers.

*Reduced claims processing cycle time  
Extend the automated adjudication %*



**50% - 70%**  
Reduction in  
Document Verification Time

*Reducing counterfeiting risk  
Improving trust across the warranty chain*



**40% - 60%**  
Reduction in  
Fraudulent Claims

*Fewer appeals  
Associate the correct supplier*



**60% - 80%**  
Reduction in  
Warranty Information Mismatch

This POC is currently demonstrated at several Manufacturing and Warranty events – such as [The 2019 Pega Customer Engagement Summit in Detroit](#)

Contact us for a free demo today at  
[pegamarketing@techmahindra.com](mailto:pegamarketing@techmahindra.com)

## References

1. About Pega DPA : <https://www.pegacorp.com/products/pega-platform/digital-process-automation>
2. About Pega Warranty™ : <https://www.pegacorp.com/insights/resources/pega-warranty>
3. About Samsung's Nexledger™ : <https://www.samsungsds.com/us/en/solutions/off/nexledger/Nexledger.html>
4. About Tech Mahindra Warranty : <https://www.techmahindra.com/warranteeaze.html>
5. About Tech Mahindra Pega Practice : <http://max.techmahindra.com/pega-events>
6. IDC Technology Spotlight - Closing the Loop on Warranty for the Digital Age [https://forms.techmahindra.com/pages/download.aspx?type=Download\\_BR&category=white%20papers&section=IDC&file=Warranty-Management.pdf](https://forms.techmahindra.com/pages/download.aspx?type=Download_BR&category=white%20papers&section=IDC&file=Warranty-Management.pdf)
7. IDC Technology Spotlight - Enterprise Blockchain and Digital Transformation: Changing the Conversation