

## Cardano Solutions to Property Industry Problems – 1100070 – Closeout Report – Bernard Sibanda

**A: Name of project:** Cardano Solutions to Property Industry Problems  
**B: Project URL on IdeaScale/Fund:** <https://cardano.ideascale.com/c/cardano/idea/112087>  
**C: Your Project Number :** 1100070  
**D: Name of project manager :** Bernard Sibanda  
**E: Date project started :** March 2024  
**F: Date project completed :** December 2024

### G: List of challenge KPIs and how the project addressed them

- KPIs were found 10 reporting and performance measurement standards. This project does not have in its application have listing of KPIs.

### H: Technical Implementation Challenges:

1. **User Requirement Specifications – Available on GitHub.**  
<https://github.com/wimsio/cardanopropertysolutions/blob/main/User%20Requirement%20Specifications%20Document.md>
2. **dApp Front-End Design** – Stored on GitHub.  
<https://github.com/wimsio/cardanopropertysolutions/blob/main/dApp%20Front%20End%20design%2028-04-2024.pdf>
3. **dApp Back-End Design** – Stored on GitHub.  
<https://github.com/wimsio/cardanopropertysolutions/blob/main/dApp%20Back%20End%20design%2028-04-2024.pdf>
4. **Front-End Hosting** – Hosted on Cardano Property Solutions.  
<https://cardanopropertysolutions.co/>
5. **Back-End Hosting** – Hosted on Cardano Property Solutions.  
<https://cardanopropertysolutions.co/>
6. **Smart Contract Design Document** – Available on GitHub.  
<https://github.com/wimsio/cardanopropertysolutions/tree/main/src-29-12-2024>
7. **Smart Contract Source Code** – Stored on GitHub.  
<https://github.com/wimsio/cardanopropertysolutions/tree/main/src-29-12-2024>
8. **User Help Manual** – Available on Project Website.  
<https://cardanopropertysolutions.co/help/>
9. **Prototype or Demo Video** – Available on YouTube.  
<https://www.youtube.com/watch?v=vvZ-j3oYiGA>

### I: Key achievements (in particular around collaboration and engagement)

John Hindi in Ghana is one property business person ([https://www.youtube.com/watch?v=uRkzv\\_CJnQs&t=5288s](https://www.youtube.com/watch?v=uRkzv_CJnQs&t=5288s)), who not only helped test and evaluate the app but also wants it for his Cassava real estate business.

In North West, one municipality dealing with stands, water and electricity meter reading and using this app this app I developed need such app for solving related problems property. Although currently there is written down deal to present as proof I am already part of their service givers via the Mosekate tender of which I am the System Administrator and developer. That is why am putting a lot of effort to improve usability by hiding ADA and yet be able to use the dApp because they do not know about blockchain.  
(<https://mosekate.co.za/-/%20-%20-%20/oerkilZQOc55H2nHcGZDvQdCNHWD3O0pYlBrp2soqPrk4j-level-e/login/>)

#### 1. Blockchain-Driven Secure Sales Transactions

- Will enabled secure, transparent property deals, reducing fraud and costs while increasing trust.
- Will increase collaboration with real estate and legal professionals to prevent fraud.

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### **2. Real Estate Tokenization**

- Used smart contracts to enable fractional ownership, making property investment more accessible.
- Attracted a diverse investor base, from individuals to institutions.

### **3. Open Opportunities for Smart Contract-Driven Property Driven Investments**

- The success of this MVP is an advantage to property industry in that automated property sales are possible. Businesses and individuals are now able to conduct decentralized investments using ADA. John Hindi from this video [https://www.youtube.com/watch?v=uRkzv\\_CJnQs&t=5288s](https://www.youtube.com/watch?v=uRkzv_CJnQs&t=5288s) alluded to this. He is a successful property business person in Ghana, also a member so WIMS-Cardano who helped assess the Real World need for this application.
- This opens opportunities for Cardano to partnered with regulators and institutional investors to ensure property compliance and this will lead to successful projects.

### **J: Cardano Property Industry Solutions: Key Takeaways**

1. **Enhanced Trust & Transparency** – Blockchain ensures immutable records for transactions, reducing fraud and disputes while building trust among stakeholders.
2. **Tokenization Lowers Barriers** – Fractional ownership enables small investors to access real estate markets, promoting financial inclusion.
3. **Smart Contracts Reduce Costs** – Automation streamlines transactions, eliminates intermediaries, and lowers administrative overhead.
4. **Regulatory Collaboration is Crucial** – Compliance with legal frameworks is essential for blockchain adoption in real estate.
5. **User Experience & Education** – Intuitive interfaces and awareness efforts are key for wider adoption among property stakeholders.
6. **Scalability is Essential** – Cardano's high throughput ensures efficiency as real estate transactions and data demands grow.
7. **Increased Market Liquidity** – Tokenization allows fractional trading of properties, making real estate a more liquid investment.

### **K: Property Due Diligence and Smart Contracts for Legal Compliance**

#### **Achievement:**

Developed an automated property due diligence solution using Cardano smart contracts to ensure legal and regulatory compliance before transactions.

#### **Key Learnings:**

Cardano's blockchain enhances transparency, efficiency, and accessibility in real estate. Regulatory collaboration, education, and compliance are key to long-term success. Smart contracts, tokenization, and decentralization are driving transformation, with further innovation ahead.

### **L: Next Steps for Cardano Property Solutions**

#### **1. Enhance User Experience & Education**

- a) **Goal:** Simplify UI/UX and educate stakeholders for wider adoption.
- b) **Action:** Develop tutorials, manuals, and online courses in collaboration with real estate institutions.

#### **2. Integrate Additional Property Services**

- a) **Goal:** Create a comprehensive real estate ecosystem with services like insurance, mortgages, and tax reporting.

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- b) **Action:** Develop APIs and smart contracts for seamless integration with third-party providers.

### 3. Expand Tokenization & Liquidity Features

- a) **Goal:** Enable broader participation in real estate investments.  
b) **Action:** Tokenize more asset types and build a secondary market for trading property-backed tokens.

### 4. Implement Enhanced Security Measures

- a) **Goal:** Ensure safe and reliable transactions.  
b) **Action:** Incorporate multi-signature wallets, encryption, and identity verification.

### 5. Optimize Platform Scalability & Performance

- a) **Goal:** Maintain efficiency as transaction volumes grow.  
b) **Action:** Continuously upgrade blockchain infrastructure for low-cost, high-speed transactions.

## M: Final Thoughts on Cardano's Role in Real Estate

### a) Key Strengths:

1. **Transparency & Trust:** Immutable records reduce fraud and improve ownership tracking.
2. **Decentralization & Efficiency:** Eliminates intermediaries, cutting costs and delays.
3. **Financial Inclusion:** Tokenization allows smaller investors to access real estate markets.
4. **Regulatory Innovation:** Collaboration with authorities ensures legal adoption.
5. **Sustainability:** Blockchain integration supports green property certifications.

### b) Opportunities Moving Forward:

- **Global Expansion:** Disrupt traditional markets with blockchain-based solutions.
- **Improved User Experience:** Simplifying adoption for non-technical users.
- **Comprehensive Real Estate Platform:** Integrate investment, management, legal, and financial services.

## N: Challenges to Address:

- **Scalability:** Ensure network efficiency as adoption grows.
- **Legal Hurdles:** Navigate evolving regulations in different jurisdictions.
- **Education:** Increase awareness among traditional industry players.

## O: Links to other relevant project sources or documents.

<https://github.com/wimsio/cardanopropertysolutions>  
<https://cardanopropertysolutions.co/>

## Link to Close-out video - must be either YouTube or Vimeo link only

<https://www.youtube.com/watch?v=vvZ-j3oYiGA>

22 minute long application demo is here : [https://www.youtube.com/watch?v=52K8Ja\\_BxRI](https://www.youtube.com/watch?v=52K8Ja_BxRI)