# 1. Introduction

¶ - 1. Overview of transaction and assets

¶ - 2. Auction example, smart contract intro and dApps.

¶ - 3. Smart contract limitations: usability, vulnerability, cost/efficiency (very large half of the page)

¶ - 4. Usability aspect that wasn’t still addressed: visibility of transactional activity? Notion of first

## 1.1 Contribution

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# 2. Background and Related work

¶ - 1. Explanation of validity semantics of transfer transaction (and other native asset transfers)

¶ - 2. Example of **non-native** assets

¶ - 3. Reverse auction and motivation.

¶ - 4. Smart contracts are used to implement marketplace on a blockchain

¶ - 5. Smart contract example and methods description from figure

¶ - 6. Transferring asset in the smart contract and incentive to have decentralized marketplace?

¶ - 7 (highlighted). How smart contracts are invoked and executed

¶ - 8 (highlighted). Storage of smart contract

Smart contract issues

¶ - 9-10. Contrast of native and non-native assets. Creation, visibility and traceability.

¶ - 11. Implementation burden for developers

Questions:

The interest [?] in using blockchains to automate some of these processes is to en-

**able improved efficiency**.

Implementation from databases

It made usability better but it also