

An E-business Model for Small and Medium Scale Enterprises in Sub-sahara Africa



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Research Motivation

The existing e-business models is not suitable for African SMEs to participate in the global market due to non availability of Internet infrastructure within communities, non-affordability of bandwidth and computing resources. The proposed Tetrahedron model consist of four actors: the producer, the Consumer, the Bank and the Courier.

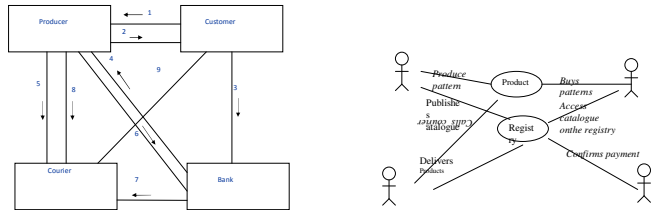


Figure 1. Communication Model.

Methodology

The solution based on an Application Service provider (ASP) grid framework is proposed. The ApplicationService Grid -Based (ASGB) framework is specified using Universal Modeling Language (UML) .

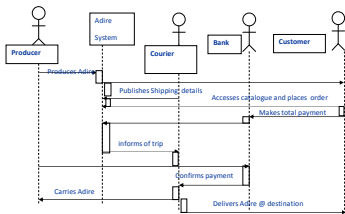


Figure 2. Sequence Diagram of the ASGB-System

Proposed Architecture

The Tetrahedral architecture is loosely coupled and event driven. It is a low cost scalable system. The System guarantees reliable and affordable technology for SME operators.

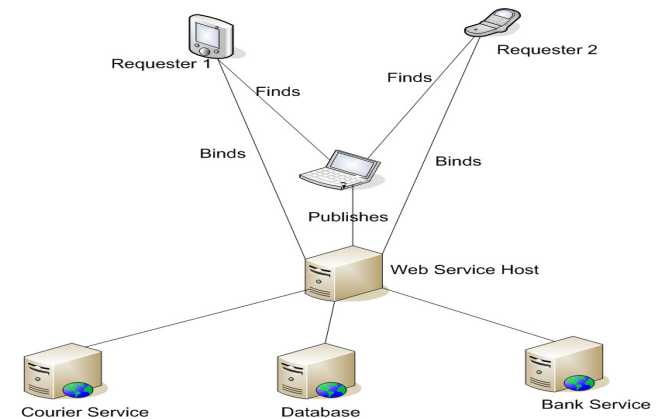


Figure 3: The Tetrahedron ASGB-System Architecture

Future Work

- Implementation of the proposed system using Java technology
- Addressing of Security issues associated with the Short Message Service within the System like authentication.
- Evaluation of the performance of the proposed system