

## **ICTD Work, Plus mFeel : IMPROVING COMMUNICATION IN RESOURCE POOR SETTINGS**

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We're currently involved in a project that aims to increase security in sensitive (medical or administrative) transactions in unfriendly environments. Such environments are typical in areas with major telecommunication infrastructure deficiencies. In particular, we hope to reduce intermittent communications, which cause breaks in the flow of communication, and identify organizational aspects that influence the design and use of deployed services. We're also researching usability issues that hinder user acceptance, as well as the loss of information in failed transactions, which reduces users' confidence in the services deployed.

We've defined a model of communications in which all entities involved in communication exchange and share the same piece of information. These pieces of information, called Contract Documents (CDs), whose scheme is based on previously defined transaction to be

performed, are filled and exchanged for all parties in the transaction. This way, all parties share almost the same information in every stage of the transaction. All entities can check the transaction's status and recover in case of failure, because they all have the same information. Furthermore, because the transaction's logic is defined in the schema of the CD and not in the communications protocol, the design of the transaction logic can be done by multidisciplinary teams to reflect the organizational status of the área in which the transaction is applied or the usability requirements.

Currently, we're working to verify the validity of our proposed communication model using an anthropometric monitoring system for children in rural areas with scarce resources.

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