

CONCLUSION

This research establishes models and designs the change of government payments system to electronic payment system.

The implementation of current manual payment system using Form15 which is mainly based on the states and national organizations which represent Federal Ministry of Finance (MOF) clients. The MOF form a unique design for each client; it obtains it's uniqueness from its color, number and client logo and controls issuing and distribution of those documents to its client besides receiving summary reports in format other than this document.

This Research Makes Changes by Offering These Solutions:

- In the center database each client has a unique identifier through the Sudan; this identifier concatenated with six-digit length random number along with a batch number in this year to form a number pattern which known as a payment number which is unique all through the Sudan and represent one Form15 document.
- Distribute those payments number to clients in a form of encrypted text based file format through File Server for online clients which they have access rights to download this file or through normal storage media for offline clients.
- The clients extract the records from encrypted file to its local database and use them according to regulations and restrictions such as no deletion and cancellation.
- The research offer data exchange method between clients database with managing security threats by using authentication server as a third party which provide single sign-on, data integrity and authorization and tolerate data loss by using messaging service with buffering support.
- Using messaging service each client could validate any payment and MOF can gather data for auditing purpose.
- By using lightweight database the teller can use offline handheld device to reach payers in their locations.

FUTURE WORK

To ease and simplify the implementation and the interaction between the Federal Ministry of Finance (MOF) and its Payers in the future; the integration with others electronic systems should take place for the smoothness tracing of the payments process such as civil registry which use the Social Security Number (SSN) as citizens identifier and the commercial registry which use the Unified Business Identifier (UBI).

To make use of the above mentioned integration, MOF should issue a payment card and the payments can be done through the internet or can possibly be connected to the banks system to withdraw directly from the customers account.