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## **Promoting Collaborative Research among State Universities in Zimbabwe through Identity Federation and Researcher Information Management**

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Normally, the process of applying to universities in Zimbabwe is a generally redundant activity which involves filling in application forms to the multiple local universities using the exact same information on all forms. This paper proposes a platform that not only does away with this redundancy but also reaps great benefits as by-products of its implementation.

The solution will streamline the university-application procedure and also help further collaborative and nationally-relevant research for the benefit of Zimbabwe as a nation. Effectively, it will help in bridging the gap between the raw ideas and concepts undergraduates may have and the well-honed and experienced research skills older researchers are equipped with. This will be by creating a platform where the research potential of each and every person interested in academia in Zimbabwe can potentially be harnessed.

The goal of this paper is to propose a design of a Federated Identity and Access Management (FIAM) platform integrated with a National Researchers Database Management System (NRDMS) to be used by potential university students during their application process to universities in Zimbabwe. This will involve the use of a single set of login credentials to be used by the students when applying to any local university and will also allow them to apply to any of those universities without having to re-enter the same application data for each university. It will also enable them access all their biodata and academic history data which will then be added to the NRDMS. This data management system will also comprise of all university-based researchers in Zimbabwe including all the current and past students and academic staff at state universities. In the process, the students will then automatically be registered to a national database of researchers (upon enrolling with any particular university) which would also then give them access to selected resources availed by that university from anywhere in the world due to the use of Identity Federation.

In the case of academicians working in the same research area but from different universities, this platform will also help them greatly as well. They will gain access to resources availed through the various funded research areas and programmes relevant to the Zimbabwe National Agenda as well as data from other local researchers working in the same area. As an added benefit, this platform will also be able to help postgraduate applicants select supervisors for their PhD or Masters' Degree basing on the set of current researches being undertaken across the country within their own particular area of interest.

Ultimately, the adoption of this model and platform will not only reduce redundancies and the other related costs currently being faced with the current system and thereby simplify the whole university-application process, but it will also help streamline, coordinate, synchronize and better organize researches being undertaken across the nation. In the event that this model is successful, it could have more services added to it and possibly even be applied at a regional or global scale.

### **Summary**

We are proposing the design of a platform that registers all current and potential university students in Zimbabwe as researchers and aims to harness their knowledge by availing various research tools to them which they can access securely through the federated identity management platform. This can ultimately help streamline and better coordinate researches being undertaken across the country in universities and also

rope in the raw young undergraduate minds into these research areas as well for the betterment of Zimbabwe as a whole.

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