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

Robert T. Rosenthal Shoniwa Harare Institute of Technology

Agenda

- Background
- Questions
- Solutions
- How?
- Benefits
- Challenges
- Conclusion

Background

- There is a total of 8 state universities in Zimbabwe out of a grand total of 21 universities
- These universities are regulated by the ZIMCHE (Zimbabwe Council for Higher Education) which falls under the Ministry of Higher and Tertiary Education
- Each state university has a corresponding Act of Parliament and a mandate that they are supposed to serve for the country
- Currently ZIMCHE is coordinating the harmonization of the National Credit System for all universities in the country (Notional Credit Hour system)



Background

- Zimbabwe has a national Agenda known as ZIMASSET (Zimbabwe Agenda for Sustainable Socio-Economic Transformation)
- Has a number of strands/key areas that are to be addressed for the benefit of the nation
- Research is a key component in fulfilling the needs within the mentioned key areas so as to come up with the more ideal way to resolve various socio-economic issues
- Research needs funding and funders (government or private) need efficient monitoring and reporting mechanisms to be in place which is typically lacking or less than ideal in a number of cases



Gap

- There are a lot of older researchers with experience and there are also a lot of youthful but inexperienced minds (in research)
- These two are a great asset when combined
- Inter-university and cross-discipline research is also a great asset considering each university has a mandate it abides by
- No platform to allow this idea exchange and foster collaboration across sectors
- Considering how the Ministry of Education now manages the selection of primary students into secondary school, can the same be done for high school to university?

м

Questions

- How do we bring the young minds and the experienced minds together?
- How do we ensure that we always have easily accessible updates on funded researches?
- How does the government benchmark the progress of funded/unfunded research on each strand of ZIMASSET and which ones are they making progress on?
- How do we harmonize research across universities as we are doing with Notional Credit-Hour System?
- Considering how the Ministry of Education now has a platform for the selection of primary students into secondary school, can the same be done for high school to university by the Ministry of Higher and Tertiary Education?



Solution

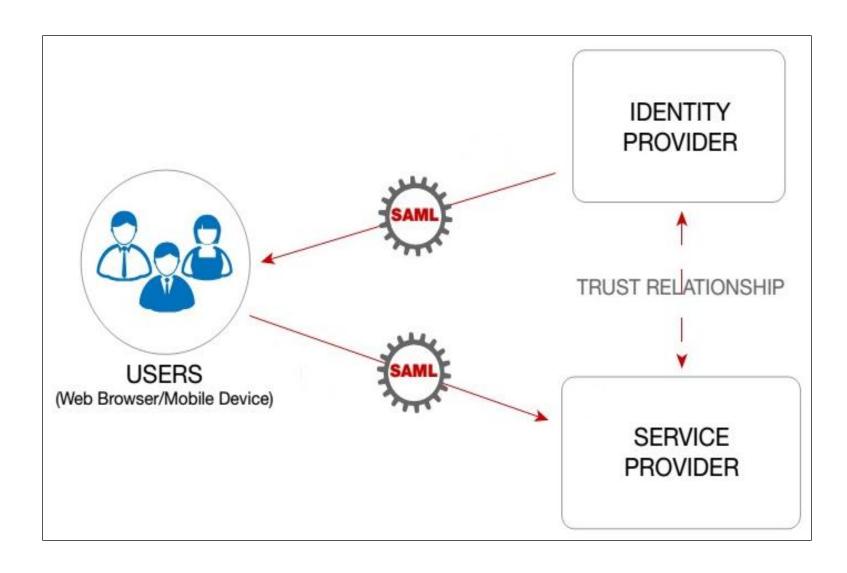
- Federated Identity Management Platform that incorporates a researcher database
- Implementation of identity management system at state universities to allow for single sign-on (but not a priority as yet)
- Lecturers and experienced researchers will use the same credentials they use internally to access the platform and offsite resources
- When university applicants submit application to a university, they fill in the form once online, data is uploaded to researchers database
- Students will no longer need to fill in and submit the same documents for each of the 8 state universities but the data will be submitted automatically.
- They would just need to select their degree program choices for different universities in order of priority
- New students will be able to sign onto the collaboration platform using the same credentials that they used to apply to universities



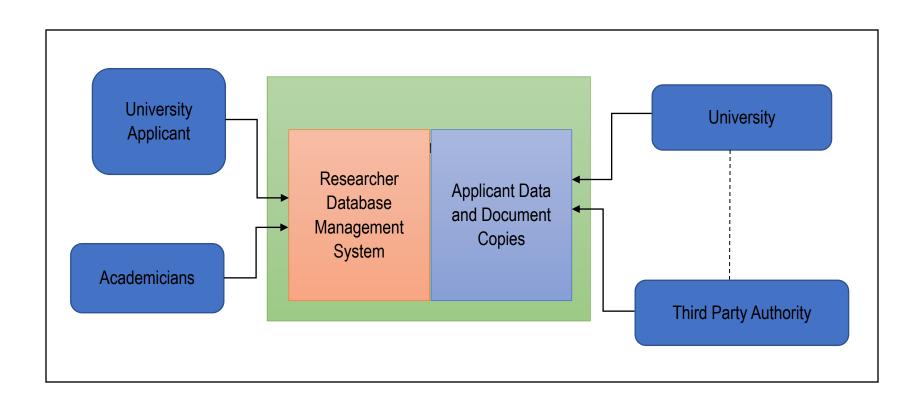
How?

- Create a database for the management of researchers in the country and their government funded researches and categorize them into ZIMASSET strands
- Add university undergraduates to the database as well
- avail to them the research areas being focused on with respect to ZIMASSET and allow them to pick an area to innovate under the guidance of experienced researchers
- Also allows potential Masters students and PhD candidates to select their ideal university and supervisor they want to work under basing on their area of research
- It offers a platform for inter-university and cross-domain researches to be done on government sponsored projects and accommodates the skills set from all universities

SAML OPERATION



HOW?



M

Benefits

- This means research is better managed and progress can be easily monitored through the platform
- Big data analytics on collected data can help assess the strengths and weaknesses of universities in the country and then highlight areas to be improved upon e.g. little output in ICT but a lot in Industrial Manufacturing
- Statistical analysis can also be used to decide on how best to improve the efficiency of each university
- Cultivates a culture of research in young students as well as universities as a whole since they will gain recognition for their achievements through this platform
- Students and families make more informed decisions on selection of degree programs to study in



Challenges

- Adoption by universities
- All state universities have websites but only a little more than half of them allow online submission of application forms
- Training of staff at each university to use the platform
- Downsizing of student registration and application departments



Conclusion

- the adoption of this model and platform will reduce redundancies and the other related costs currently being faced with the current system
- It will simplify the whole university application process,
- 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.

Thank you!

Questions?