# DLR 7.4: PASET Benchmarking

# Data system intervention plan

## For Africa Centres of Excellence for Development Impact (ACE Impact)

> ℹ️ *Management Information System (MIS) support has been identified by ASET institutions as an area where support is most needed. Informed by this and the experience with previous PASET benchmarking exercise, a data system maturity (DSM) survey was launched in December 2021 under DLR 7.4 Institutional Benchmarking. The survey results were distributed to participating ACE Impact institutions via DSM fact sheets.*
>
> *As per DLR 7.4, each ACE Impact institution is required to submit an institution-level intervention plan to develop the institution's capacity on data collection and governance and to be able to report on benchmarking indicators in the future.*
>
> *This template is designed to provide guidance on how best to develop the intervention plan, informed by the DSM survey results.*

## OVERVIEW

> ℹ️ *Use this section to provide a brief summary of your institution's current data maturity. Please refer to the **Overall Assessment Score** and **Data System Maturity** of your institution, as indicated on your institution's DSM fact sheet.*

- Overall Assessment Score: [3.22] out of 5

- Overall Data System Maturity: [Medium]

- Overall Comment: [As indicated by the survey results, the University seems to be doing well on most of the performance metrics. However, the University is strongly committed to improve on the weak areas by enhancing staff skills on data management. In addition, the University plans to enhance data collection including automated techniques of data collection, enhanced data storage (including the use of cloud) and better data analytic tools.]

## People

> ℹ️ *Use this section to provide a summary of your institution's main data system maturity issues in relation to people. Does your institution have the people with data skills, analytical mindset, and dedicated time and resources to maximise the use of data?*
>
> *Please refer to the **People Assessment Score** and the areas under **People**, highlighted in Amber, for areas that improvements are most needed.*

- People Issue #1: refer to areas scored <3
    - People Issue #1: (Use of data to influence institutional research and decision making)

    [The University has personnel with sufficient data skills, analytical mindset as well as dedicated time and resources to maximise the use of data. However, more training is needed to create a large pool of competent hands to enhance data use in institutional research and decision making]

- People Issue #2: refer to areas scored <3
    - People Issue #2: (Commitment to data roles in staffing)

    [The university plans to integrate its Human Resource Management System, Student Information Management System and Facility Management System to assist in generating statistics on staff requirements in terms of recruitments, training, etc.]

## Technology

- Technology Issue #1: refer to areas scored <3
    - Technology Issue #1 (Data collection tools)

    [The primary data collection tools used by the University are Data Capturing Portals, Google form and manual collection. However, there are difficulties in collecting data due to lack of deployment of appropriate data collection tools, absence of the data sometimes and reluctance by some stakeholders to supply data.]

- Technology Issue #1: refer to areas scored <3
    - Technology Issue #2: (Data storage)

    [The University uses an on-site data storage system, which may not be accessible outside the University during down-time. However, the University plans to enhance data storage including the use of the cloud.]

- Technology Issue #3: refer to areas scored <3
    - Technology Issue #3: (Data analysis and reporting)

    [There are limited data analysis and reporting tools being used at the operational levels of the University. The University intends to acquire more tools and provide training to relevant stakeholders.]

## Culture

The score is > 3 in all the areas.

# INTERVENTION PLAN

● Overall Goal of the Intervention Plan:

[To acquire and deploy state-of-the-art data collection and analytic tools, train more people on data analysis and reporting, integrate the existing information systems and build a comprehensive university-wide data repository.]

## Key Considerations

● Resource availability:

[The University has personnel with requisite knowledge in data collection, storage, analysis and reporting that can assist in training required staff members. The university shall commit funds to implement the plan on a sustainable basis.]

● Improvement opportunities

[The University has skilled manpower and is keen to improve on its current status by investing to enhance its ICT infrastructure including connectivity, data storage, back-up and recovery mechanisms. In addition, the University has several information systems on almost all aspects of its activities that are being integrated to provide a common repository for data analysis and reporting.]

● Timeline:

Timeline for the activities in the main intervention plan is as follows:

✓ Acquire data analytic tools and train personnel (Programme Coordinators, MIS Staff, etc.) on data collection – July, 2022;

✓ Integrate the existing systems to create a comprehensive data repository – July, 2022;

✓ Train personnel (Programme Coordinators, MIS Staff, etc.) on data analysis and reporting – October, 2022;

✓ Train concerned stakeholders (Heads of Department, Deans, Directors and Principal Officers) on use of data reports for decision making – November, 2022.

- Risks:

[The most prominent risk foreseeable is unstable academic calendar due to industrial actions by staff unions.]

## Project Governance

> ℹ️ *Please illustrate the governance structure of the intervention plan using a relationship diagram or a brief description addressing the points below.*

- Plan/Programme Sponsor:

[Prof. Kabiru Bala – Vice Chancellor]

- Plan/Programme Steering Committee:

    Prof. Y. M. Ibrahim - Director, Directorate of Academic Planning & Monitoring, (Chairman)

    Prof. S. A. Abdullahi - Dean, School of Postgraduate Studies

    Prof. U. A. Danbatta - Deputy Director (Planning & Statistics), Directorate of Academic Planning & Monitoring

    Prof. M. Mamman – Representative of the Africa Centres of Excellence

    Aminu Muhammad Bello Gurin – Bursar

    Dr. A. Yahaya - Head, Department of Statistics

    Mal. D. Salihu – Deputy Registrar, Representative of the Registrar

    Prof. B. Mukhtar - Deputy Director (Quality Assurance), Directorate of Academic Planning & Monitoring

    Dr. A. F. D. Kana - Acting Director, Iya Abubakar Institute of Information and Communication Technology

    S. M. Audu - Administrative Secretary, Directorate of Academic Planning & Monitoring, (Secretary)

- Plan/Programme Advisory Group:

Prof. D. A. Ameh – Deputy Vice Chancellor (Academic)

Prof. N. M. Maiturare – Department of Actuarial Science

Prof. S. B. Junaidu - Department of Computer Science

Prof. S. I. Doguwa – Department of Statistics

Dr. (Mrs) A. Umar – Department of Mathematics

- Plan/Programme Operating Working Group 1 – People:

    Dr. A. Yahaya - Head, Department of Statistics

    Dr. I. Ahmed – Head, Department of Insurance & Actuarial Science

    Dr. U. A. Danbaba – Department of Mathematics

    Mal. D. Salihu – Deputy Registrar, Representative of the Registrar

    Mal. A. S. Mohammed - Department of Statistics

    Mal. J. Falgore - Department of Statistics

- Plan/Programme Operating Working Group 2 – Technology:

    Prof. Y. M. Ibrahim - Director, Directorate of Academic Planning & Monitoring, (Chairman)

    Prof. M. Mamman – Representative of the Africa Centres of Excellence

    Prof. M. B. Mu'azu – Head, Department of Computer Engineering

    Dr. A. F. D. Kana - Acting Director, Iya Abubakar Institute of Information and Communication Technology

    Mal. M. Sani - Head, MIS

Mal. M. S. Umar – SPGS ICT Unit Coordinator

- Plan/Programme Operating Working Group 3 – Culture:

  Prof. S. A. Abdullahi - Dean, School of Postgraduate Studies

  Prof. U. A. Danbatta - Deputy Director (Planning & Statistics), Directorate of Academic Planning & Monitoring

  Prof. B. Mukhtar - Deputy Director (Quality Assurance), Directorate of Academic Planning & Monitoring

  Dr. A. Adedokun, Department of Computer Engineering

  Mal. A. A. Gene – Head, Web Management Unit

  Mal. R. G. Umar, MIS Unit

## Resources

> ℹ️ *Please indicate the budget approved for the intervention plan*

- Budget approved

  Acquiring data analytic tools – ₦2, 000,000

  Training (300 personnel @ a cost* of ₦16,000/ head) – ₦4, 800,000

  > 1st training: 100 staff for 5 days

  > 2nd training: 100 staff for 5 days

  > 3rd training: 100 Management staff for 3 days

  *cost – Feeding, Training Materials and Honorarium for trainers

  Data integration (6 staff for 1 week retreat – transportation, accommodation and feeding) and repository creation- ₦2, 000,000

  Cloud storage – ₦1, 000,000

  Network Enhancement, Security and Back-up– ₦ 7, 000,000

  **Total = ₦ 16,800,000**

## Project Deliverables

> ℹ️ *Please provide a full list of project deliverables and indicate the data system maturity issue(s) that the deliverables intend to address. Please make sure that the deliverable addresses the issue(s) that need support and improvement the most, as per the fact sheet.*

| Deliverable | Description | Targeted DSM Issue |
|---|---|---|
| Deliverable #1 | Brief description | Indicate the data system maturity issue(s) that the deliverable intends to address |
| Survey and acquisition of data analytic tools | Identification and acquisition of relevant analytic tools for various institutional data analysis | Data collection tools |

| | | |
|---|---|---|
| Train personnel on data collection and use of data analytic tools | The training is on techniques of collecting data as well as use of analytic tools on university activities such as Admission, Training, Research, Social environment & support, Administration, Quality Assurance and Management | Data collection tools.<br><br>Availability of data tools and technology.<br><br>Overall data literacy. |
| Create data repositories and enhancement of data storage as well as network infrastructure | Creating institutional data repository for storing various institutional data as well as integrating existing data source systems. Enhancing on-site data storage as well as acquiring cloud data storage | Plan for data improvement.<br><br>Good practice in using and integrating data. Data storage |
| Train personnel on data analysis and reporting | The training is aimed at equipping and empowering participants to be able to analyze data, make sense out of it and provide a proper report for an informed decision making | Data analysis and reporting.<br><br>Open data culture |
| Enhance data security | Put in place some mechanisms to ensure compliance to the Nigerian Data Protection Act | Data governance and cyber security |
| Train decision makers on use of data for decision making. Sensitize and promote data culture among all stakeholders | Training of decision makers on the use of reported data to make informed decisions.<br><br>Workshops, seminars and symposia to sensitize and promote data culture in the University | Use of data to influence institutional research and decision making.<br><br>Data-driven decision making.<br><br>Commitment to data roles in staffing.<br><br>Open data culture.<br><br>Data use at operational level |

## Timeline for Execution

| i | *Summarise the timeline of plan-related milestones and key phases from start to finish.* |
|---|---|

| Description | Start Date | End Date | Duration |
|---|---|---|---|
| Project Start | July 1st, 2022 | November 30th, 2022 | 5 months |
| Milestone 1: Selected data analytics tools acquired | July 1st, 2022 | July 31st, 2022 | 1 month |
| Milestone 2: 250 personnel trained on data collection and use of data analytic tools | August 1st, 2022 | August 31st, 2022 | 1 month |
| Phase 1 Complete | July 1st, 2022 | August 31st, 2022 | 2 months |
| Milestone 3: Institutional data repositories created, data storage as well as network infrastructure enhanced | July 1st, 2022 | November 30th, 2022 | 5 months |

| | | | |
|---|---|---|---|
| Milestone 4: 250 personnel trained on data analysis and reporting | October 1st, 2022 | October 31st, 2022 | 1 month |
| Phase 2 Complete | July 1st, 2022 | November 30th, 2022 | 5 months |
| Milestone 5: Data security enhanced | July 1st, 2022 | November 30th, 2022 | 5 months |
| Milestone 6: 200 decision makers trained and sensitization workshops conducted | November 1st, 2022 | November 30th, 2022 | 1 month |
| Project End | July 1st, 2022 | November 30th, 2022 | 5 months |

## EXPECTED RESULTS

> ℹ️ *Describe the results expected from the intervention plan and why the deliverables outlined above will achieve those results.*

### Technical Benefits

- Deliverable #1: Acquire data analytics tools

  [It will enable the University to have quality and reliable data collection and reporting system.]

- Deliverable #2: Train personnel on data collection and use of data analytic tools

  [To obtain competent manpower shouldered with the responsibility of collecting quality data using the analytic tools.]

- Deliverable #3: Create data repositories and enhancement of data storage as well as network infrastructure

  [This allows for easy access to various data fragments on various university activities within a single pool and easy storage & retrieval as well as data accessibility at all times. In addition, it guarantees data transmission among various units seamlessly.]

- Deliverable #4: Train personnel on data analysis and reporting

  [This enables the university to have competent personnel that can analyse data and produce reliable statistical reports for decision making.]

- Deliverable #5: Enhance data security

  [ It will promote data integrity and protection.]

- Deliverable #6: Train decision makers on use of data for decision making. Sensitize and promote data culture among all stakeholders

  [It enables decision makers to execute data-driven decisions for more efficient service delivery.]

## Other Benefits

- Other benefit #1:

  [It enhances availability of data on all aspects of the University operations.]

- Other benefit #2:

  [It will facilitate data access to all stakeholders.]

- Other benefit #3:

  [It will improve the University visibility and ranking.]

## CONCLUSION

[The intent of the University on this intervention plan is to have a reliable comprehensive data that is accessible, and secured. This will enhance effectiveness of the University operations at all levels. The University shall use the data at all operational levels of governance to be able to execute well informed data-driven decisions.]

Name:        Prof. D. A. Ameh
Title:        Deputy Vice Chancellor (Academic)
Institution:    Ahmadu Bello University, Zaria, Nigeria
Date:        30th May, 2022