

LIBSENSE Strategic Framework for Open Science

A comprehensive guide to the strategic matrix, ECR Champions, workplans, and tools that drive an African-centred approach to open science across research institutions.

LIBSENSE OPEN SCIENCE



The LIBSENSE Strategic Matrix

The strategic matrix organises LIBSENSE's work across three core pillars, applied to every major initiative area.

Policy Work

Developing guidelines, strategies, and roadmaps that enable changes to the research environment — oriented around an African-centred vision of open science.

Capacity Building

Improving knowledge, changing behaviour, and instilling skills through targeted meetings, workshops, and training sessions across the community.

Infrastructure Support

Providing hardware, software, tools, protocols, and standards to deploy suitable technologies and platforms for research and education institutions.



On-Campus Open Science Communities of Practice

Key Partners

- University of Sheffield
- CVCNU, TETfund
- NUC, NBTE, NCCE

Initiatives by Pillar

Policy: Institutionalising national open policies

Capacity: ECR networks, RDM & Research Ethics workshops, ECR Network Leads workshop, Bookhub authoring workshops

Infrastructure: National repository metadata schema, TERAS aggregation plans, open data repository development

Open Access Repositories & Open Data

Open Access Repositories

Partners: COAR, NII Japan, CERN/InvenioRDM

Policy: TETfund linkages, National OA council coordination

Capacity: OAR regional workshops, skills profiles development, webinar series

Infrastructure: BAOBAB (regional), RUMBU (national) | **MOUs:** NII Japan, La Referencia

Open Data

Partner: RUFORUM | **MOU:** RUFORUM

Policy: SAG on data sharing and data privacy policies

Capacity: Open data/open science workshops, RDM, research ethics and governance, data ethics

Infrastructure: Open data repository development

Sectors: Healthcare, Agriculture, Climate & Environmental Science, Education

Research Assessment, Open Infrastructure & Open Publishing

Research Assessment Reform

Partners: DORA, UNESCO, CoARA

Policy: Paper — "Shaping Quality Assessment and Open Science Practices in African Research"

Capacity: National Open Science Workshops, Regional Policy development workshops, National Open Access Summits

Open Research Infrastructure

Partners: ORCID, CrossRef, ARK Alliance

Policy: PID Strategy, PIDs working groups

Capacity: ARKs webinar series, PIDs Day with ORCID

Initiatives: PIDsLink, ORCID-WACA, eduID

| **Agreements:** CrossRef, ORCID, ARKs

Open Publishing

Partners: EIFL, Wellcome Trust, Kotahi, Coko Foundation, DOAJ

Policy: National Framework for OA Books (Nigeria), National OA council coordination

Capacity: COPPHA online training, Bookhub authoring workshops

Infrastructure: COPPHA platform, Bookhub platform



What Is a LIBSENSE ECR Champion?

A member of the wider LIBSENSE community who identifies as an early career researcher and leads interventions — at the policy, capacity-building, or infrastructure levels — that strengthen the institutional research environment.

ECR Champions also support the formation and growth of **on-campus Open Science Communities of Practice** aligned with LIBSENSE strategies and priorities. They are the frontline agents of change within their institutions.

The Workplan: A Tool for Change

The workplan enables an ECR Lead to identify a problem area and plan an intervention — alone or with LIBSENSE network experts. It uses a **Theory of Change (ToC)** approach and can be paired with the Measuring Outcome and Impact Template for detailed project proposals.



The ECR Lead must engage with networks within their institution or the broader LIBSENSE community to ensure appropriate guidance, mentorship, and knowledge-sharing across institutions.

Workplan Template in Practice

A theory-of-change (ToC) template for ECR Leads to identify a problem, plan an intervention, and engage networks to achieve change. Can be used with the Measuring Outcome and Impact template for detailed project proposals.

ECR Lead Name: _____

ECR Lead Institution: _____

Attachments: _____

Current problem/situation in research environment <i>I have found the following existing problems hindering good research practice... which then leads to....</i>	Networks to be mobilised to enable the desired change <i>I will need these resources, expertise from these networks...</i>	Actions needed to enable the desired change <i>I will need to take these actions to enable the change ...</i>	Desired Change to Research Environment <i>I would like my institution to start ...</i>
Researchers do not adhere to any ethical practice when collecting and analysing data. This leads to errors in reporting on that data and lack of trust in the results. This further leads to hesitation of research collaborators to work with colleagues at my institution. This further leads to lower quality research output.	People: Ethics review board, Research office Infrastructure: Platform for disseminating guidelines and training materials Other: Sample ethical guidelines from other institutions; National guidelines on ethical research, if existing	Work on a research ethics framework which can guide researchers on how to undertake ethical research practice in gathering and analysing their data. Work on training materials to help train researchers on proper ethical practice.	Producing and disseminating up-to-date ethical guidelines for research and training staff in applying them appropriately

Measuring Outcome & Impact

This template addresses the question: "how will I know what success looks like?" It outlines what will be achieved at the end of the intervention, what will change in the institution, and how the ECR Lead can gather evidence of change. Critically, learning must feed back into networks of action (peers and communities of practice) and networks of influence (e.g. deans or vice-deans of research) to seed change in other institutions.

Outputs produced or outcomes planned	Impact or potential impact to be realised	Evidence of the impact or potential impact	How the learning from this intervention can be extended to other networks of action and of influence
<i>The actions I will take will result in...</i>	<i>I expect to see changes in my institution related to...</i>	<i>To demonstrate how change has happened I can use these metrics/case studies/evaluations...</i>	<i>In order to let others in my networks know how change like this can be achieved, I will...</i>
A new ethics review template for all academics in my institution to follow when engaging in new research An ethics training workshop	Improved research practice where the ethical considerations have been properly documented and can be audited for compliance; more confidence in research results and participants' satisfaction and safeguarding in the research process	Number of new ethics applications using the new ethics template Feedback from academics on the changes they have made to their research process and how this has influenced their work	Post the training materials and ethics review template onto the BAOBAB (or other) platform for dissemination to the LIBSENSE community and wider networks Hold a meeting with my line manager and vice-dean of research to illustrate the impact of the intervention Communicate the outcomes/impact of the intervention to my on-campus open science community of practice and encourage further interventions



Project & Documentation Templates

LIBSENSE provides a suite of templates to support ECR Leads in planning, funding, and documenting their interventions.



Project Proposal

Covers title, duration, budget, aims, activities, outputs, dissemination, beneficiaries, and team roles. Includes a simple Gantt chart.



Concept Note

Outlines workshop rationale, SMART objectives, format, and a day-by-day agenda for planned capacity-building events.



Case Study

Documents interventions with sections on background, intervention details, outcomes/impact, and acknowledgements — for sharing across the LIBSENSE community.

Project Proposal Template

A simple project proposal template that can be used to source funds of up to ₦ X.XX to enable the completion of a planned intervention.

Project Title: _____

Project Duration (in months): _____

Project Start Date: _____

Project End Date: _____

Total Funds Requested: ₦ X.XX

Short Summary of the Project (100 words)	_____
Project aims and objectives (200 words)	_____
Project outline plan including all planned activities and a timeline (500 words)	_____
Project outputs (200 words)	_____
Planned dissemination activities (200 words)	_____
Project beneficiaries (200 words)	_____
Project team/partners/collaborators and their roles (500 words)	_____
Budget and justification	_____

Simple Gantt Chart

Task/subtask ID	Task/subtask description	Start date	End date	Assigned to	Dependencies	Duration bar (in weeks/months)

Concept Note Template

Title of planned workshop	_____
Venue, date(s) and timing of workshop	_____
Registration information	_____
Background/motivation Explains the rationale for the workshop	_____
Aims/objectives Explains the main goals of the workshop and how these will be achieved through SMART objectives	_____
Workshop format Outlines the key activities to be undertaken in the workshop per day and could be further decomposed into a detailed day by day agenda	_____

Case Study Template

The Case Study Template can be used to document interventions undertaken by ECR Leads in the on-campus initiatives to strengthen institutional research environments through open science policies and practices. The following are suggested section headings for the case studies, which can be adjusted according to the details of the actual intervention. The Workplan and Outcome/Impact Templates can be used to help develop the sections of the case study.

Background/Motivation • Overview of the institutional context • Overview of the problem situation motivating the change • Brief overview of planned action, noting beneficiaries and planned outcomes and proposed timeline for the intervention	
Details of the Intervention • Detailed description of the actual activity/ies undertaken including networks/partners/collaborators involved in the action (involvement of any LIBSENSE network members would be included here) • Provide explanations of any challenges that needed to be addressed and how these were resolved	
Outcomes/Impact • Provide evidence of change brought about by the intervention in the form of testimonials, surveys, data about the intervention, sample documentation produced by the intervention, etc. • Explain how the intervention will be sustained and any activities to secure buy-in from the senior management of the institution • Detail how the case study and materials related to the intervention will be shared for the benefit of the LIBSENSE open science communities of practice	
Acknowledgements • Provide details about the team that helped to implement the intervention and contact details for follow-up or for further information about the intervention	