

Goal : To introduce an online platform that provides opportunities for research, collaboration and scholarship during the current COVID-19 pandemic and beyond.

Why a separate e-learning-teaching-research platform to Sri Lanka? We have country / regional specific national challenges that demand solutions through scientific research.

Main tools : Open source software, Open data, Open Courseware

Project workflow : This project, “**Estagram**”, focuses on four Es (Educate, Explore, Engage, Explain) to develop a strong, supportive, collaborative and sustainable research community in Sri Lanka.

Educate → Explore → Engage → Explain

Estagram Courses: Provide online courses on Statistics, research methodology, research tools, open source software, reproducible research, research ethics, data visualization, data modeling techniques, software development etc.) to support good research practices

Estagram datathon: Conduct online data hackathons and data competitions for Sri Lanka specific national challenges. This also encourages cross-disciplinary research collaboration. These data competitions encourage general public to work together to find quick and novel solutions to diverse national challenges.

First datathon - Battling SL COVID-19 with Data

Estagram peer-review: Introduce a transparent, constructive, non adversarial and open “peer” review and ranking process for data competitions. This allows to maintain the quality of the project proposals of datathon. This will also create a vibrant and supportive research community in Sri Lanka.

Estagram stack overflow: introduce a Q&A site for research questions and data challenges in Sri Lanka

Estagram blogger: Introduce a content aggregating site that circulates and indexes blog posts about research related to national challenges in Sri Lanka. This common online platform is to empower Sri Lankan research bloggers to empower other researchers in Sri Lanka.

Strengths

- COVID-19 SL IDEATHON
- Open source tools for developers
- Diverse learning tools and techniques
- This project can be introduced through R ladies Colombo, a local chapter of R Ladies Global, an organization that promotes diversity in the R community worldwide.
(<https://rladiescolombo.netlify.com/>)
- International reputation of R ladies Community
- Supportive national international research community
- Active academic/ research community on social media (Twitter)
- Passionate general public with innovative solutions

Weaknesses

- Lack of access to technology at home
- Limited access to the internet
- Limited access to high quality journal and publications
- Lack of flexibility when accessing materials (Limited access to free online data sources)

Opportunities

- Advanced and high quality research products to support the sustainable development goals
- Reliable visualization of the decision related opportunities
- Predictive analytics: better decision and actionable insights through scientific research
- Increased national and international visibility of the Sri Lankan research community
- New research collaborations opportunities with other countries facing similar challenges
- Growing interest of the general public for data challenges

Threats

- Loss of reputation in case of scientific misconduct and ethical violations in the above workflow