# Research4Life Infrastructure Review

Research4Life Infrastructure Review – Executive Summary

Prepared on behalf of Research4Life

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**"Research4Life Infrastructure Review"**

*Report commissioned by:*

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# Executive Summary

## Introduction

**Background and context**

Research4Life is a public-private partnership which provides low and middle-income countries (LMICs) with access to academic literature, with the aim of reducing the scientific knowledge gap between high-income countries and LMICs. As part of the partnership's five yearly evaluation process, Research Consulting was commissioned to undertake an Infrastructure Review and a separate Landscape Analysis. This report provides our analysis of the partnership's infrastructure based on a consultation with Research4Life partners and relevant experts on their experiences. It concludes by advancing some recommendations for the partners as they move forward to the next five year period.

**Methodology**

This project was made up of two parts, comprising a comprehensive literature review to assess the current landscape, summarised in a separate landscape analysis report and this infrastructure review report. For the current report, we conducted interviews with 26 Research4Life partners and external experts and designed two surveys which were sent out to partners to evaluate the effectiveness of the partnership. Findings from our interviews were qualitatively coded for the purposes of thematic analysis and quotes in anonymised form are presented throughout the report.

## Key findings

**Research4Life has improved its offering but usage has declined**

The scale of the partnership has grown since 2015, with the introduction of a new programme, GOALI, and increases in the numbers of participating institutions, as well as the volume of books and journals offered. New authentication and improved search tools have improved usability, and the partnership held its first ever massive open online course (MOOC). However, despite these improvements, overall levels of usage have declined significantly since 2015.

**Research4Life aligns with partners' missions…**

Almost all partners that engaged in the consultation highlighted that their main reason for participation was that the partnership fits with their own strategic mission and organisational priorities.

**…but lacks external visibility**

Publisher and infrastructure partners highlight that there is a lack of visibility of the partnership and feel that Research4Life could do more

to illustrate the work it does. Some attribute this to a lack of senior endorsement in participating organisations.

**Limited awareness of the SDGs**

We found that there is a limited awareness of the linkage between Research4Life and the United Nations sustainable development goals (SDGs) across the partnership. There is scope to align Research4Life's focus and activities more explicitly with them for marketing and communication purposes.

**Many partners are unaware of the decline in usage**

Partners seem largely unaware of the decline in usage, which has fallen by more than 50% since 2015, though many flagged that they wish to receive more granular statistics from the partnership. In addition, partners expressed a strong desire for better data to illustrate the overall impact of Research4Life. The continued involvement of some UN agencies is at risk if there is a failure to provide statistics to illustrate the impact of the partnership.

**Governance is seen as effective, but with room for improvement**

Research4Life's organisational management is considered effective but partners noted that its ad-hoc and informal governance structures can be a barrier to effective progress. There is a high degree of reliance on a small core group of individuals, and recognition of the need to ensure a diversity of viewpoints are represented.

**Partners disagree on the importance of systems development**

Most partners we interviewed agreed that systems development is a pressing improvement the partnership needs to address, but survey respondents don't see this as being a significant priority. Greater adoption of IP-based logins and improved mobile access to the partnership's content are seen by infrastructure partners as key to stemming the decline in usage.

**Publisher exclusions create large volumes of work**

With the sheer number of publishers involved in the partnership, allowing publishers to set their own exclusions rather than using a single template creates large volumes of work at the backend. Publisher exclusions also run the risk of deterring Research4Life users from the platform.

**The current training arrangements are deemed effective by partners who are aware of them**

For the most part, partners have limited visibility of the current training arrangements. However, those who are more familiar with them comment that they are effective and are keen for the partnership to build on the success of the first MOOC, run in November 2019.

**Views on OA are mixed, and partners are frequently**

There are mixed views amongst the partnership on the issue of open access, but broad agreement on the risk illicit content represents to the Research4Life partnership. Most partners are also involved in other access initiatives, particularly INASP's recently-closed Access to

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| **involved with other access initiatives** | Information programme, but feel Research4Life compares favourably to these. |
| **Total costs have increased slightly - but cost per login has more than doubled** | Estimated costs have increased slightly to $3.1m, but the cost per login has more than doubled, from $2 to $5. Many partners expressed concerns over the current lack of funding but there is little consensus on which alternate funding streams the partnership could adopt. |
| **Partners wish to consolidate rather than expand** | Partners wish to consolidate what is already in place and see little benefit in including new bodies in the partnership. They do note that the five separate programmes confuse the overall brand of the partnership. In addition, it is noted by UN Field Officers that greater language coverage would be beneficial. |
| **COVID-19 and SWOT Analysis** | An addendum updating our work in light of coronavirus (COVID-19) is included on page 7 of this document, while an overview of the strengths, weaknesses, opportunities and threats identified from our work is provided on page 9. |

## Conclusions

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| **Changes in the wider landscape pose an existential threat to Research4Life** | Our view, drawing on both the consultation findings and our own knowledge of the landscape, is that Research4Life now sits at a crucial juncture in its history. There are challenging developments in the wider landscape, such as the move to OA and the growth of illicit content, whose adverse impact on Research4Life's value proposition do not appear to be fully recognised. The partnership must make difficult decisions on its strategic direction if it is to remain relevant beyond the next five years. |
| **Improvements in the user experience may slow the decline in usage, but appear unlikely to reverse it** | The likelihood of improvements to the platform reversing the overall downward trend in usage appears low. Changes in researchers' reading and discovery habits and the rapidly increasing availability of content from other sources mean Research4Life is likely to remain a niche service for LMIC researchers seeking access to peer-reviewed content. |
| **Remaining relevant beyond 2025 will entail new strategic priorities and funding arrangements** | For Research4Life to play an active role in the future scholarly communications landscape it will need to redefine its value proposition, and significantly strengthen its fundraising capability. There is scope for the partnership to play a role in tackling the issue of article publication charge (APC) waivers, inform the development of equitable approaches to transformative agreements and build on the success of the MOOC |

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| **Developing KPIs and a theory of change** | A revitalised Research4Life will also need to define new strategic goals, set key performance indicators to monitor performance against these, and situate them within a robust theory of change that clearly articulates the impact it seeks to deliver. |

## Recommendations

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| **Identification and prioritisation of recommendation** | Our work has identified 15 opportunities to improve the work of the Research4Life partnership, across the four areas of strategy, technology, communications and marketing, and funding. We recognise that resource constraints mean it may not be feasible for all of these recommendations to be implemented, and their prioritisation will depend on the partnership's chosen strategic direction |

**Strategy**

1. Review and redefine Research4Life's strategic priorities.
2. Strengthen and formalise the alignment of Research4Life's activities with the UN sustainable development goals
3. Assess the potential for standardisation or improved signposting of publisher APC waiver policies.
4. Develop a Theory of Change and a set of summary key performance indicators.
5. Develop a harmonised approach to exclusions.
6. Monitor outcomes of EIFL/Wellcome Trust pilot study on transformative agreements.

**Technology**

7. Redevelop content portal, with a focus on responsive design.
8. Accelerate implementation of IP-based logins.
9. Prepare an updated technology roadmap.

**Communications and marketing**

10. Increase use of marketing and social media to promote the partnership in LMICs.
11. Explore the potential to improve language coverage/guidance.

**Capacity Development**

12. Strengthen online training offer, leveraging the success of the MOOC.
13. Undertake an audit of existing capacity development initiatives and resources for authors.

**Funding**

14. Review scope to improve recovery of funds from Group B countries.
15. Revisit proposals for a Friends of Research4Life fundraising vehicle.

## Addendum: Coronavirus (COVID-19)

Following completion of our fieldwork and the drafting of this report, the full impact of the coronavirus (COVID-19) has become apparent. The outbreak was declared a Public Health Emergency of International Concern on 30 January 2020, and a global pandemic on March 11 2020. At the timing of writing this addendum both the likely duration of the pandemic and its long-term implications remain unclear, but it will inevitably have a far-reaching and longstanding impact across virtually all aspects of society and the global economy. We have provided some preliminary observations below to update our work, where appropriate, and aid the Research4Life partnership in assessing its response to these developments.

**Global impact**

It is already apparent that the pandemic will have fundamental implications for the role of governments and state actors, and their willingness to intervene in both citizens' lives and commercial markets. The more draconian, rapid and (seemingly) effective response to the virus adopted by Asian countries such as China, Japan and South Korea has raised fresh challenges for Western liberal democratic models of government. Meanwhile, the increased attention now being paid to the views of scientific and medical advisors is to be welcomed, and may see the tide of populism finally recede. However, the longer-term ramifications for geopolitics, academic and media freedom, and civil liberties, are impossible to call.

The fiscal and monetary stimulus announced by the world's major economies over the past month is 'a global policy event without precedent in peacetime'. There are growing fears that developing countries in South Asia and sub-Saharan Africa will bear the brunt of a coronavirus-induced recession, with a significant knock-on effect on international student flows to Western universities. In turn this will place many Western educational institutions under unprecedented financial pressure, with adverse implications for library budgets and expenditure on scholarly resources. Going forward, both companies and individuals are likely to face an increased taxation burden with costs, and therefore prices, liable to rise in many industries.

The critical importance of internet and mobile connectivity for almost all parts of the world has been amply illustrated in recent weeks, and the use of AI and big data technologies to map the virus's spread and impact will increase their rate of adoption in both the public sector and many sectors of the economy. Some have speculated that the coronavirus may lead to a rehabilitation of the big technology companies in the public eye, following growing scrutiny and privacy concerns, while the rapid shift towards remote working and distance/online seems unlikely to reverse in its entirety, even when the pandemic recedes.

**Impact on research**

Governments and research funders around the world have rapidly issued funding calls for research into the pandemic. Looking beyond these emergency measures, it appears all but inevitable that COVID-19 will lead to:

- strengthened demands from policymakers, funders and the general public for open access to scientific publications and data;
- increased investment by governments in scientific research, information and advice; and

- reinforcement of the links between science and policy, in response to societal needs.

These developments are consistent with the broad direction of travel outlined in our landscape report, but are now being urgently prioritised in the context of COVID-19 by international actors such as UNESCO.

**Impact on scholarly communication**

The WHO has compiled a database of global research publications on coronavirus diseases (COVID-19), while many publishers and vendors have already moved rapidly to provide immediate access to peer reviewed articles relevant to the pandemic, with lists of publisher resource hubs being quickly made available by trade associations and funding bodies, and guidance produced by Research4Life.  In the medium term, an acceleration of the shift to electronic, rather than print, resources appears an almost certain byproduct of the pandemic, while the future withdrawal of free access to electronic resources risks promoting a backlash against the subscription model. Popular newspapers like the LA Times and the Guardian have been quick to highlight the deficiencies of existing publishing and access models in light of coronavirus disease, while there is fierce debate over the value of preprints in such a crisis.

The pandemic has also had a significant operational impact on many publishers and service providers.  In addition to the shift to remote working, publishers have implemented changes to editorial policies and cancelled print runs. Trade associations report a reduction in editorial activity and the number of titles published in the countries most affected by the virus, and new product development has stalled in many cases. Mailing lists in the scholarly communications community are already raising concerns of an existential threat to mission-driven and not-for-profit publishers, amidst fears of ever greater market consolidation and loss of bibliodiversity.

In the longer term, the threats to higher education institutions and the corresponding implications for library budgets, in both high-income and low-income countries, will see publishers come under increased financial pressure, even as governments and funders strengthen their demands for open access. We may see increased moves to 'offshore' production and editorial activities to lower-cost regions, and, more positively, increased innovation as old ways of working are disrupted. More concerningly for Research4Life, philanthropic donations and activity by both publishers and libraries may provide difficult to sustain in a period of increased budgetary constraints.

**Summary**

The world has changed beyond all recognition in the weeks since our reports were written. We have outlined above some possible effects of COVID-19, but there can be no guarantees, and little certainty, as to its ultimate consequences. We believe the trends, findings and recommendations outlined in our reports remain largely valid. However, trends that were emerging slowly are now proceeding at breakneck pace, while others have shifted course or stalled. The immediate response of the Research4Life partnership to the current pandemic must be to service the resulting demand for access to high-quality, peer-reviewed academic and professional content. In time, however, attention must turn again to reviewing Research4Life's strategy and value proposition in light of what is now an even more rapidly changing external environment.

*Rob Johnson, Director, Research Consulting, 31 March 2020*

# Research4Life SWOT (strengths, weaknesses, opportunities, threats) analysis

## S

### STRENGTHS

1. Unique collaboration of public and private actors – UN agencies, publishers, libraries and technology partners
2. High degree of strategic fit with partners' organisational aims and priorities
3. Continued growth in the breadth of content and number of partners
4. Significant improvements to authentication and discovery processes in recent years
5. Training provision is well-regarded, and the MOOC has been a significant success
6. The partnership has successfully expanded to include the GOALI programme

## W

### WEAKNESSES

1. Lack of key performance indicators means levels of usage is not well-understood by partners
2. Limited funding constrains effectiveness and investment in technical infrastructure
3. User portal has poor responsive design, and is not user friendly on mobile devices
4. Lack of strategic direction on systems has enabled only limited progress against an outdated technology roadmap
5. Low levels of awareness amongst users limits uptake of the R4L platform
6. Piecemeal approach to country exclusions creates inefficiencies and compromises user experience

## O

### OPPORTUNITIES

1. Redevelop content portal and offer a mobile-friendly interface
2. Develop a set of summary key performance indicators
3. Increase use of marketing and social media to promote the programme in LMICs
4. Increase focus on training and capacity building in LMICs, leveraging the success of the MOOC
5. Develop a Theory of Change focussed on demonstrating R4L's impact
6. Improve visibility of research from LMICs
7. Pivot to tackle barriers to (OA) publication
8. Pursue new funding streams and Improve recovery of Group B fees

## T

### THREATS

1. Increased availability of open access content
2. Growth of illegal content sharing
3. Failure to demonstrate R4L's impact risks eroding support amongst UN Agencies and external stakeholders
4. Inability to offer a comparable user experience to emerging commercial access providers like Zendy.io
5. User authentication mechanisms fail to evolve to take advantage of new technology
6. External perceptions of R4L as neo-colonial and/or anti-open access limit its effectiveness and causes reputational damage