A BLUEPRINT FOR RESEARCH INNOVATION SOCIALISATION, COMMUNICATION, ADVOCACY AND MAINSTREAMING (RISCAM)



RISA
Research and Innovation Systems for Africa

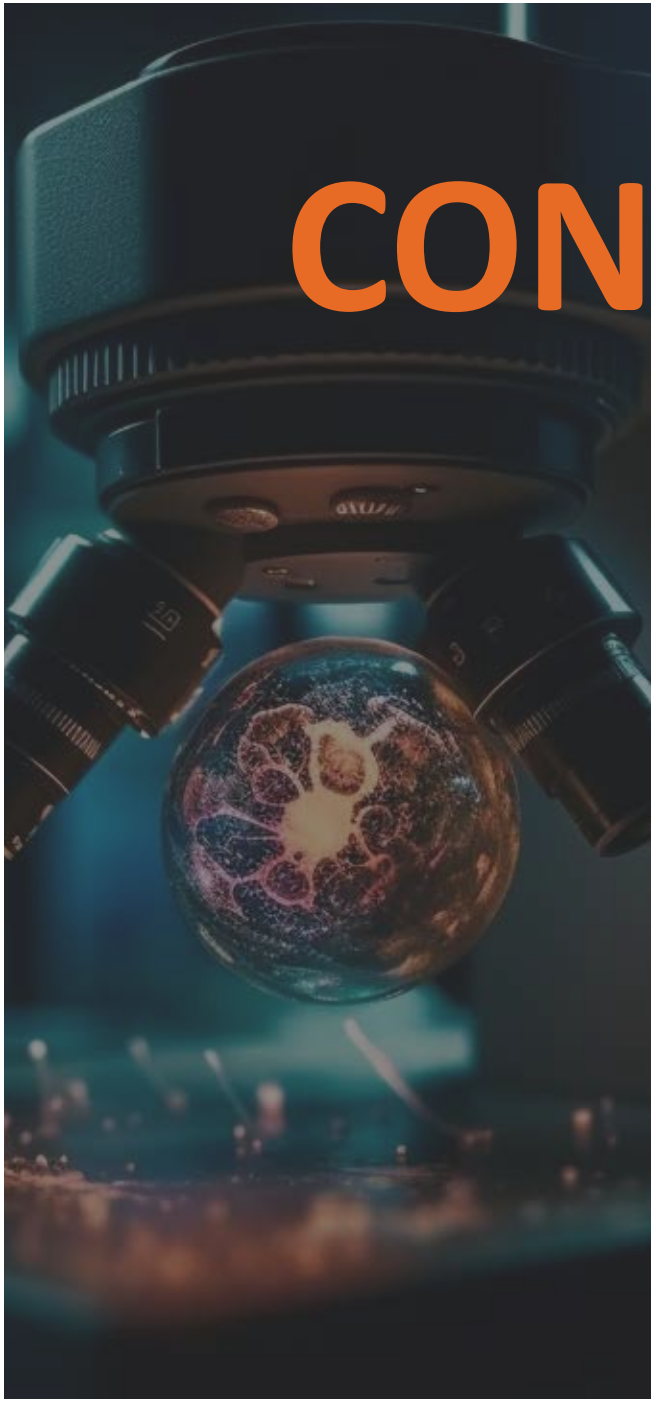
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Heritors Labs

A Blueprint
For Research Innovation Socialisation, Communication, Advocacy and Mainstreaming (RISCAM)

Presented to Heritors Labs
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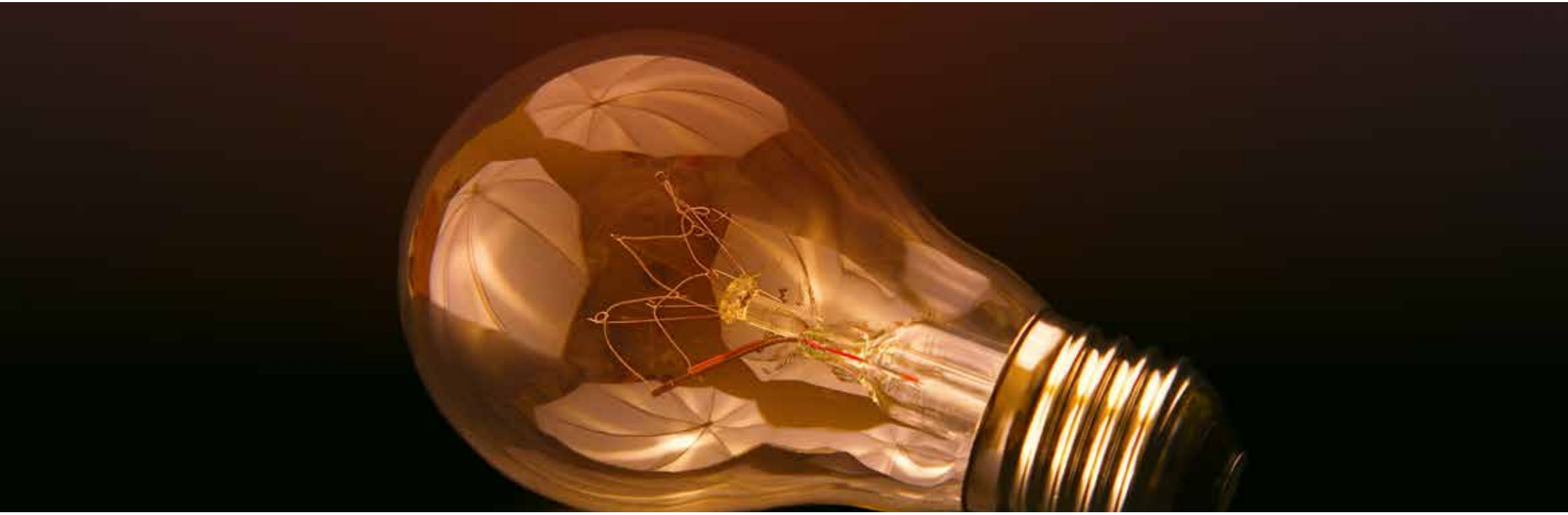
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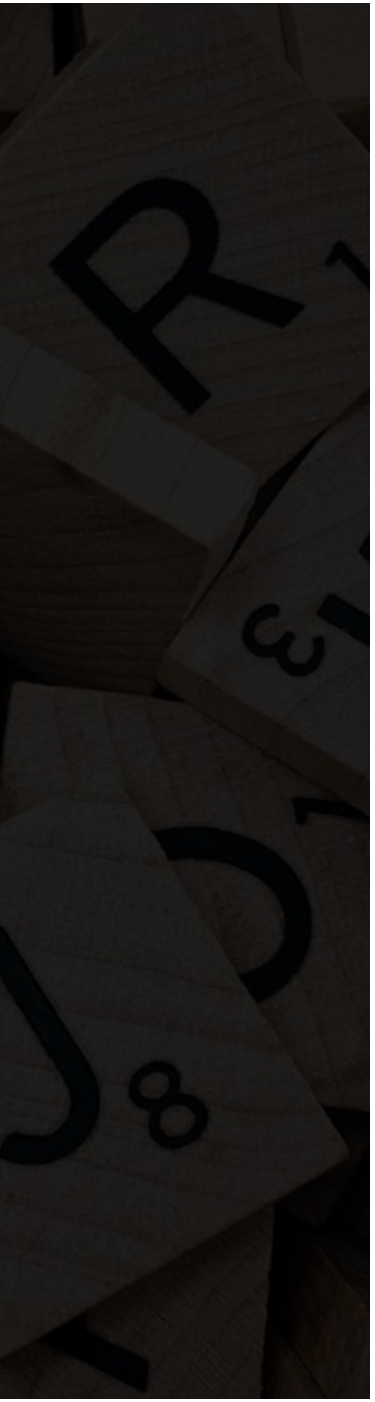
Executive Summary

The benefits of Research and Innovation (R&I) to the development of Ghana and other African countries are without a doubt. R&I is very useful in advancing our knowledge about several phenomena in society such as health, economics, culture, technology, and many others. R&I also helps boost economic growth, solve many society challenges, create new technologies and improve overall societal functioning.

Despite these benefits of R&I, scientists and academics face several hurdles in pushing their R&I outputs for the benefit of society. The baseline report leading to the development of this Blueprint on RISCAM in Ghana shows that there is no consistent deliberate effort to communicate, socialise, advocate and mainstream R&I outputs in Ghana. Two of the major challenges of RISCAM include the inaccessibility of R&I output sources (journals) to industry audiences as well as the episodic nature of many stakeholder fora, workshops and meetings that bring industry and academia together.

To address these and several other issues identified as plaguing the academia-industry linkages around R&I, there is a need for a RISCAM Blueprint This Blueprint will serve as a source for common language for all stakeholders involved in RISCAM in Ghana. Other benefits include ensuring clarity and consistency of the communication, socialisation, advocacy, and mainstreaming efforts. The Blueprint integrates issues critical to communication, socialisation as well as advocacy and mainstreaming R&I in Ghana.





Definition of Key Terms

Research

Research is defined within the context of this Blueprint as any process that involves the collection of detailed information about a given phenomenon in order to understand it with the view of making society better. The primary goals of research, therefore, are to generate new knowledge, expand existing knowledge, or solve practical problems by providing evidence-based recommendations.

Innovation

Innovation is the process through which new ideas, products, processes, and/or methods are introduced into society with the view to bring about positive change and improvement. These innovations may improve areas of society such as technology, business, science, education, healthcare, and more. These innovations can be incremental in nature or disruptive and can come from individual researchers or institutions/organisations.

Communication

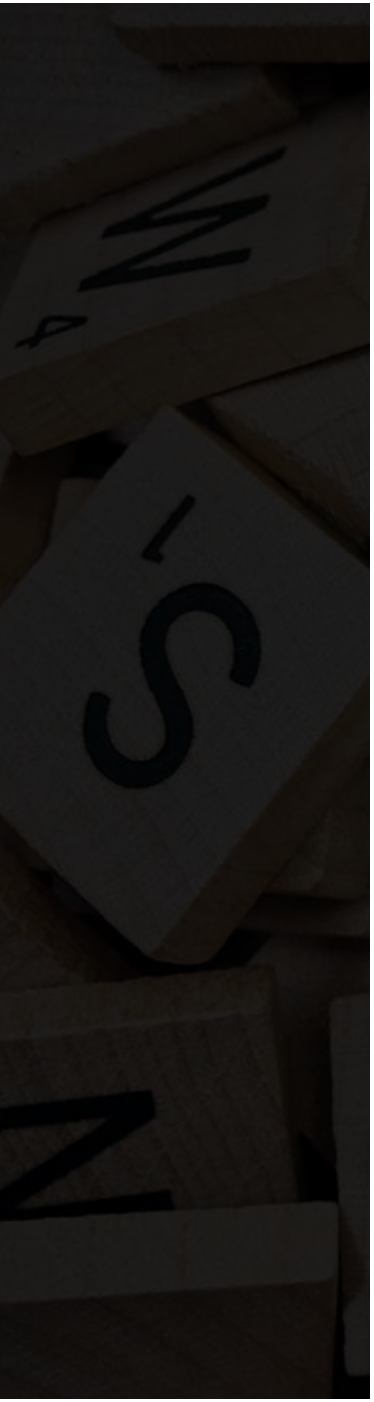
Communication generally refers to the exchange of information between two audiences. In this blueprint, communication is defined as the flow of information between researchers and their industry audiences. This communication may occur at the research level or innovation categories.

Research communication

Research communication is the process of sharing information and knowledge about research findings, methods, and concepts to different audiences, including the scientific community, policymakers, media, and the general public. The process involves conveying research findings in a clear, concise, and understandable way, using appropriate language and visuals to ensure that the information is accessible to different audiences.

Innovation communication

Innovation communication, on the other hand, refers to the mechanism through which information and knowledge about innovative products, services, or processes are shared with different audiences. This includes communicating the benefits, potential impacts, and value of an innovation in a clear and compelling way. Innovation communication helps to promote the adoption and utilisation of new and improved products, services, or processes, foster collaboration and partnership, and stimulate economic growth and development.



Definition of Key Terms

Mainstreaming

Research and innovation mainstreaming refers to the process of integrating research and innovation into the core activities of an organisation or society. This involves making research and innovation a central aspect of the organisational structure and strategy and creating the necessary conditions to foster research and innovation, such as providing resources, incentives, and a supportive environment. Research and innovation mainstreaming aims to ensure that research outputs, innovative ideas, processes, and products are not only created but also effectively implemented and scaled up to achieve broader impact.

Socialisation

Innovation socialisation is defined in this blueprint as the process of introducing and integrating new ideas, products, or technologies into society. It involves promoting and facilitating the adoption of innovative practices, products or technologies by individuals, groups, organisations, or society as a whole. Innovation socialisation process includes awareness creation about benefits and challenges presented by new innovations and how to address them. The goal is to promote the diffusion of innovations throughout society, and to maximise their impact and benefits.

Advocacy

Research advocacy is the practice of promoting, defending, or supporting research activities, findings, and their dissemination. It involves advocating for the value and importance of research, encouraging funding for research, educating the public about research, and ensuring that research is conducted in an ethical and responsible manner. Research advocacy can take forms, such as lobbying for increased government funding for research, promoting the use of evidence-based research in policymaking, advocating for increased access to research publications and data, and raising awareness about the societal benefits of research. Research advocates can include scientists, researchers, industry advocates, policymakers, and members of the public.



01

RESEARCH AND INNOVATION IN GHANA

Ghana has made significant strides in promoting research and innovation in recent years. The government has recognised the importance of science, technology, and innovation (STI) in driving economic growth and development and has taken steps to support research and innovation in the country. This is evident in the creation of the Ministry of Environment, Science, Technology, and Innovation (MESTI). The Ministry has six agencies working to promote and oversee different aspects of science, technology, and innovation in the country. These are:

COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH

GHANA ATOMIC ENERGY COMMISSION

ENVIRONMENTAL PROTECTION AGENCY

LAND USE AND SPATIAL PLANNING AUTHORITY

NATIONAL BIOSAFETY AUTHORITY

NUCLEAR REGULATORY AUTHORITY, GHANA

Together, these agencies and the differing mandates are to facilitate the creation, promotion, and uptake of scientific innovations in a safe and sustainable manner. For instance, the Council for Scientific and Industrial Research (CSIR) is responsible for research and development in areas such as agriculture, food, natural resources, and health. The Institute has 13 research institutes that span food and agriculture, manufacturing, and engineering as well as industry and information technology.

The Government of Ghana has also taken steps to support research and innovation through policy initiatives such as the Science, Technology, and Innovation Policy (STIP), which was launched in 2010 and finalised in 2017. The STIP aims to promote the development of STI in Ghana by providing funding and other forms of support to researchers and innovators. To ensure that science and innovation becomes a key driver of Ghana's development and economy of the future, the government is also actively promoting science, technology and innovation and mathematics education through the creation of well-resourced STEM centres in second cycle institutions. This, coupled with expansions in science and innovation-based programmes in public tertiary institutions are to ensure the development of critical human resource to service the sector.

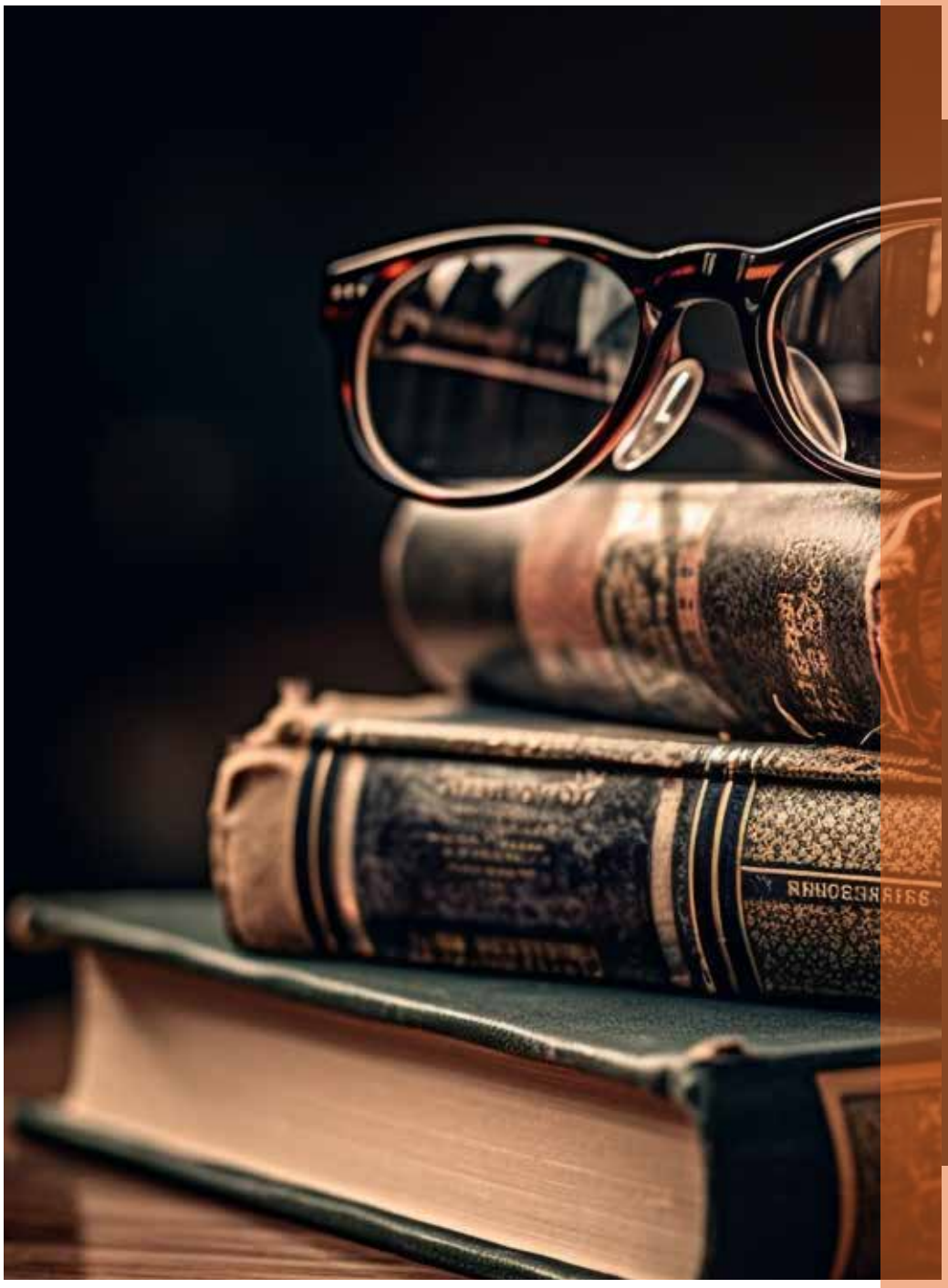
Besides state-sponsored interventions towards expanding scientific knowledge and innovations and their uptake, organisations such as the Ghana Academy of Arts and Sciences and the Ghana Science Association (GSA)also promote the development of science and technology in Ghana through education, research, and public engagement.

In addition to these organisations, there are several universities and research institutions in Ghana that are actively engaged in research and innovation. Some of the most prominent include the University of Ghana, Kwame Nkrumah University of Science and Technology, University of Cape Coast, University for Development Studies and the University of Energy and Natural Resources. The country also has several technical universities and polytechnics.

Despite these efforts, Ghana still faces significant challenges in promoting research and innovation. Funding for research and development remains limited, and many researchers and innovators struggle to find support for their work. In addition, there is a shortage of skilled scientists and engineers, and the infrastructure for research and innovation is still underdeveloped in many parts of the country. Also, there is a significant gap between the needs of industry audiences and the work of researchers and innovators. This is due to the episodic nature of the engagement events between these two audiences.

Nevertheless, Ghana is making progress in promoting research and innovation, and the government's commitment to this area is likely to drive further growth in the years ahead.



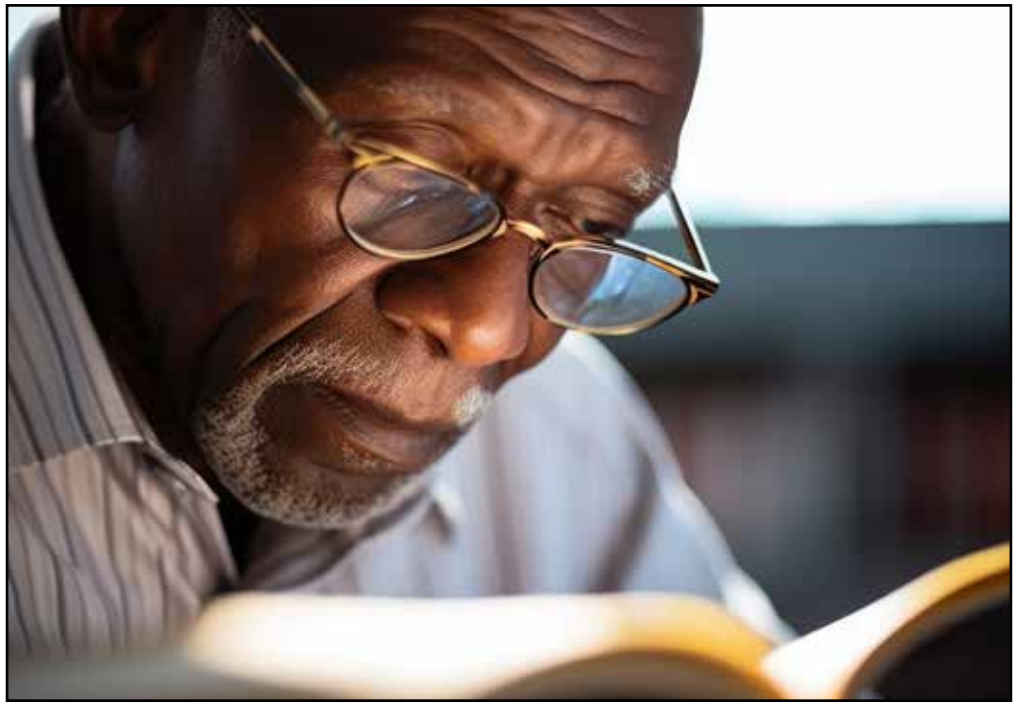


02

THE STATE OF RISCAM IN GHANA

In Ghana, research outcomes and the innovations therein are limited in their reach to industry audiences. This situation is anteceded by individual, institutional and industry level factors.

This is based on the "Baseline study and paradigm assessment for the development of Research Innovation Socialisation, Communication, Advocacy and Mainstreaming" by Banin-Yeboah, Acheampong and Appah (2022)



At the individual level, there is a preoccupation with successfully publishing research and innovations in scholarly publications such as journals and edited books. This is because such publications are the main pathway for promotion and career progression. There are also resource and skills gaps that impede the capacity of researchers to undertake RISCAM. Together, these factors de-emphasise the attention that should go to research uptake and impact efforts including communication, advocacy, and marketing.

Regarding institutional constraints, significant gaps in resources (financial, time and human) serve to undercut the readiness of academic and research institutions to engage in RISCAM. Institutions are further constrained by bureaucracy which renders intellectual property (IP) acquisition tedious for researchers and innovators. Finally, promotional practices that prioritise scholarly publications in pursuit of high rankings by international ranking indexes pose a challenge. Such practices move attention from research impact (which prioritises RISCAM) to a, sometimes, mundane but critical tool for career progression. This derails the outreach that should facilitate research uptake and commercialisation.



At the macro level, limited industry markets, interest, and funding readiness; distrust in authenticity of home-bred knowledge and a short term minded industry posture compound the problems identified.

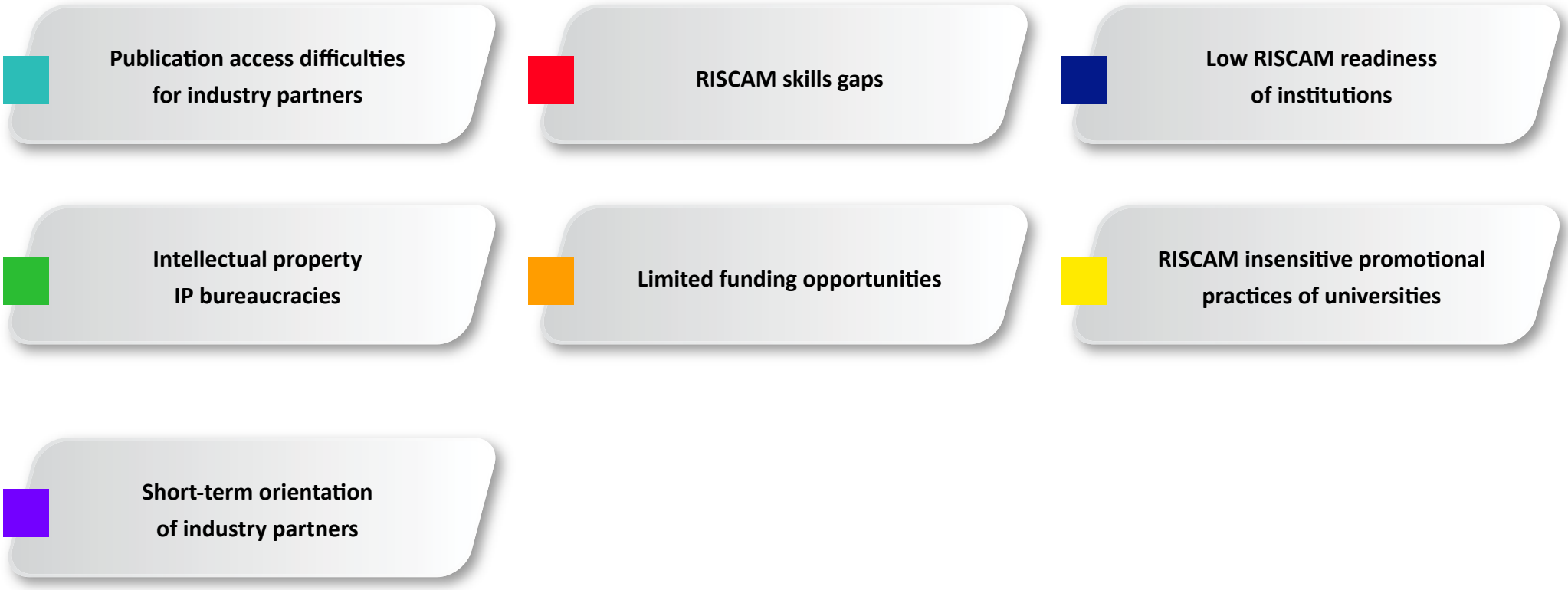
The effect of the foregoing is that there is little deliberate effort to promote R&I beyond academic circles and, particularly, to industry audiences. While researchers and innovators are aware of the need to promote their R&I and know about different options for doing so, their actual actions on this are generally low. At the institutional level, R&I communication, advocacy, and marketing efforts are, somewhat, better enabled by the existence, in some cases, of communication officers, institutional or project websites as well as various stakeholder engagement fora.

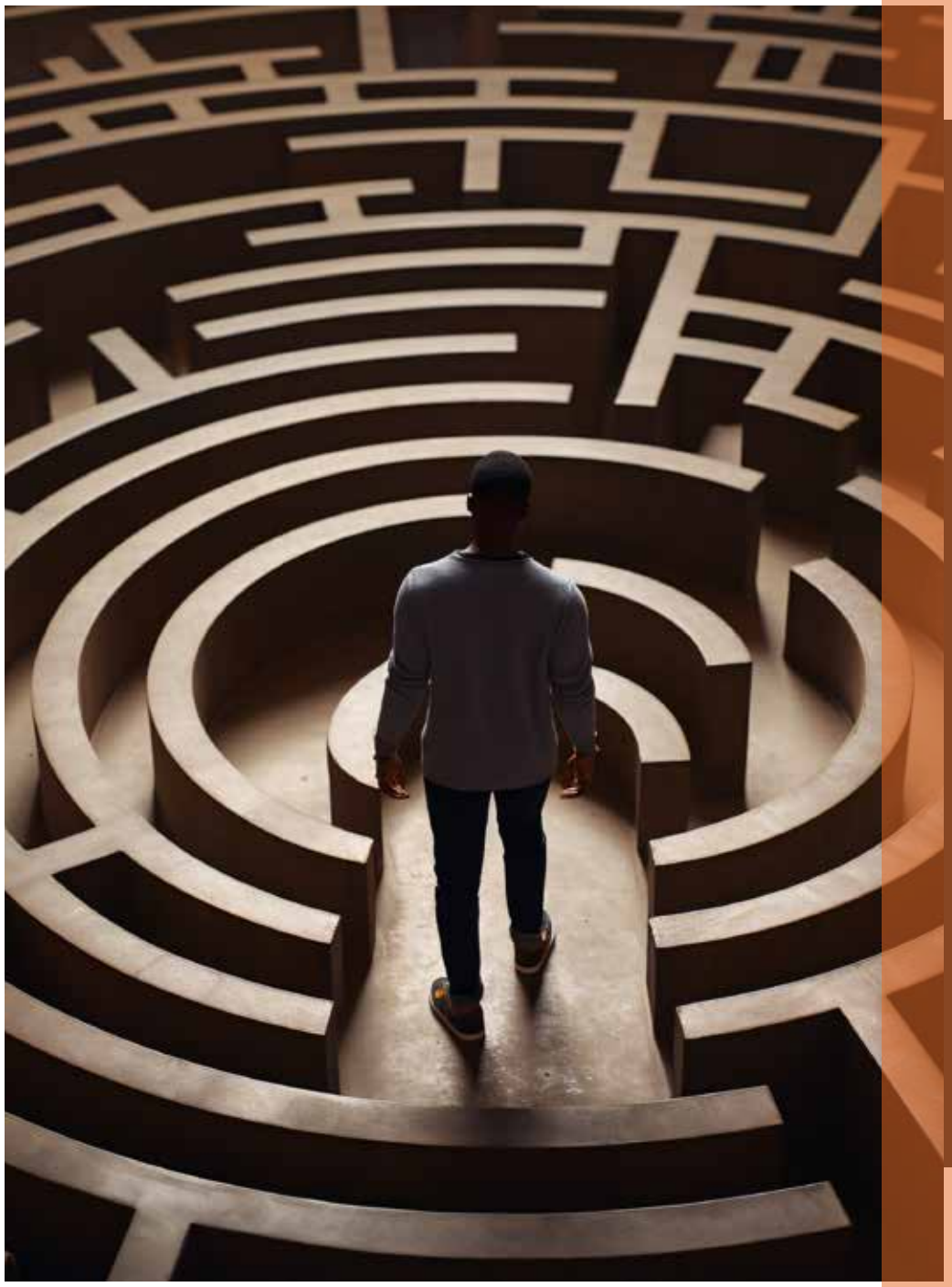


As regards R&I communication, advocacy and marketing assets in the country, four main types exist in an ecosystem that equally emphasises information dissemination and engagements. Publications such as journals, newsletters and policy briefs as well as websites and social media pages are used to push information about R&I. These serve informational and awareness creation purposes rather than engendering active engagement. However, a substantial part of the journals in particular target scholarly audiences and remain inaccessible to industry audiences.

Beyond this, the study notes that real engagement and collaborative opportunities lie in the many stakeholder fora, workshops and meetings that bring industry and academia together. However, these tend to be episodic rather than in any sustained manner as will be the case of say associations or databases that bring the two sides together. The closest to this are maker spaces/innovation hubs which tend to provide young innovators space to create rather than engendering commercialisation, necessarily. There is also very deliberate, sustained effort to use the media to build visibility for R&I and to increase uptake.

Figure 1: Challenges of RISCAM in Ghana





03

WHY IS A RISCAM BLUEPRINT NEEDED

A blueprint is critical to addressing the several gaps that are observed in the state of research and innovation socialisation, communication, advocacy and mainstreaming in Ghana. The four (4) critical reasons why R&I ecosystem actors need a blueprint include:

01. A PLANNING TOOL

The blueprint will serve as a planning tool to enable the critical stakeholders and ecosystem actors led by the Ministry of Environment, Science, Technology, and Innovation (MESTI) to coordinate resources and efforts towards addressing the gaps in RISCAM in Ghana.



02. A COMMUNICATION FRAMEWORK

This blueprint will provide a common language and framework for communication between different stakeholders involved in the R&I ecosystem in Ghana. This helps to ensure that all stakeholders have a clear understanding of the RISCAM goals, timelines, and requirements.



03. A QUALITY CONTROL INSTRUMENT

This blueprint will also serve as a reference point for quality control checks for all stakeholders in the R&I ecosystem to measure and guide their RISCAM efforts against.



Figure 2: Benefits of the RICSAM Blueprint



Overall, the blueprint will be an essential tool for MESTI, the governmental agencies and other ecosystem actors in R&I to plan, coordinate, and execute a complex activity such as RISCAM across multiple stakeholders. This will be achieved by aligning all stakeholders towards the same goals.



04

AN INTEGRATED BLUEPRINT FOR RISCAM IN GHANA

A blueprint for RICSAM must capture communication, socialisation and advocacy and mainstreaming issues in the R&I ecosystem. A communication blueprint focuses on effectively disseminating information about scientific breakthroughs, technological advances, and innovative solutions to societal challenges. A socialisation blueprint will also focus on engaging and involving various stakeholders, such as researchers, industry leaders, policymakers, and the public, in the creation and dissemination of knowledge and innovative solutions. Finally, the advocacy and mainstreaming blueprint will also emphasise integrating R&I into all facets of Ghanaian society. This blueprint integrates all these different blueprints into a single blueprint that ecosystem actors can implement with minimal effort.



ACTION 1. Advocate for the Benefit of R&I to the Ghana's

It is very important for the public to understand the benefits that research and innovation can bring to society, such as economic growth, job creation, and social welfare improvements. This will help in crafting compelling arguments for the importance of investing in research and innovation. Currently, not many Ghanaians and industry believe in the power of R&I to transform the Ghanaian economy. Most industry actors question the quality of research outputs from the Universities. This makes it difficult to access funding for R&I.



ACTION 2. Identify and engage stakeholders.

It is crucial to identify the key stakeholders who can contribute to the research and innovation process. These include:

1. Researchers **2.** Industry leaders **3.** Policymakers
4. Journalists **5.** Funding agencies, and **6.** The public.

Effective communication and engagement strategies should be developed to ensure that these stakeholders are informed and involved in the research and innovation process.



Figure 4: Key Stakeholders in Achieving RISCAM Success



ACTION 3. Craft a Communication Strategy

This action involves several sub-actions that are needed to reach the right audiences. The key sub-actions include:





SET COMMUNICATION GOALS:

Each ecosystem actor needs to establish why it seeks to communicate with other actors and stake-holders in the space. For instance, MESTI can have a goal that emphasises it's policy efforts; CSIR can set communication goals around its attempts to drive socio-economic development in Ghana through the creation of science and technology catalysts while Noguchi Memorial Institute for Medical Research can also focus its goals on its strive to be a leading medical research centre. These goals need to be clear, realistic and timebound.

IDENTIFY THE TARGET AUDIENCE:

It is important that R&I actors determine those they intend to reach with their communication efforts. These may include policymakers, scientists, industry leaders, journalists, or the public as listed in the engagement efforts above. A good audience mapping enables clarity about communication solutions that fit unique audience needs.



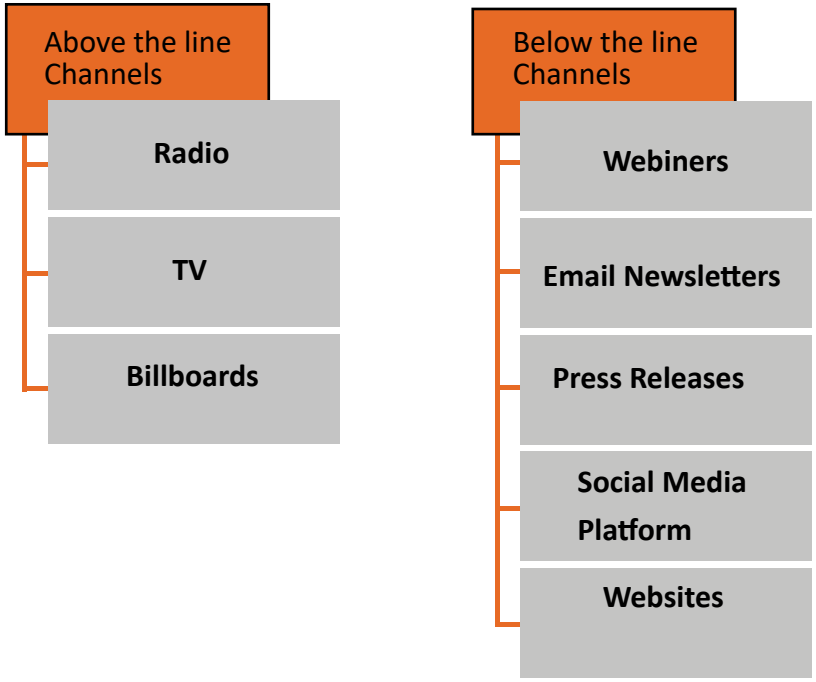


CHOOSE APPROPRIATE CHANNELS:

The next sub-action is to select communication channels that are appropriate for your target audience and key messages. These could include:

1. Press releases
2. Social media platforms
3. Websites
4. Email newsletters
5. Billboards
6. Radio and TV interviews
7. Webinars

Figure 5: Channels for Reaching Ecosystem Partners



DEVELOP CONTENT:

The content that has the message needs to be compelling and engaging that communicates your key messages effectively. This could include:



1. Visual aids



2. Infographics



3. Audios and videos



4. Other multimedia assets

There are professional agencies that provide these services while there are freelancers that can offer almost similar services for a fraction of the cost.





CREATE A TIMELINE:

After developing the content, the next action is to establish a timeline for your communication efforts that aligns with your research or innovation milestones. This will ensure that you reach your target audience at the right time with the most relevant information.

ENGAGE:

Using your audience mapping as a guide, identify relevant groups who may be interested in, or need to know about the research/innovation and engage with them to create a network of supporters. These stakeholders could include industry partners, policymakers, and advocacy groups.





EVALUATE RESULTS:

Finally, you need to measure the impact of your communication efforts by tracking metrics. Metrics that need to be tracked include:



1. Website traffic



2. Media coverage



3. Social media engagement

This will help you refine your communication strategy over time and ensure that you are reaching your target audience effectively.

Action 4: Collaborate

Collaboration is essential for successful research and innovation. Efforts should be made to foster collaborations between researchers, industry leaders, and policymakers (Triple Helix) to create a conducive environment for knowledge exchange and innovation. Collaboration is critical to ensuring that research and innovation is effectively integrated into policy decisions. This can be achieved through various mechanisms such as:

1. Advisory committees,
2. Consultations/Consultative Committees and
3. Knowledge-sharing platforms.



Action 5: Provide support and resources.

Adequate resources and support should be provided to researchers and innovators to facilitate their work. This can include:

1. Funding,
2. Access to facilities and equipment, and
3. Training



Funding mechanisms that support research and innovation in various sectors, such as:

1. Public-private partnerships,
2. Venture capital, and
3. Research grants

These will help to promote the development of new products and services and encourage innovation in various sectors.

Action 6: Encourage knowledge

Knowledge dissemination is essential to ensure that research and innovation outcomes reach their intended audience. Efforts should be made to disseminate research findings and innovative solutions through various channels, including:

1. Academic publications,
2. Conferences,
3. Workshops, and
4. Social media



Figure 6: Knowledge sharing platforms.



Action 7: Forster an innovation culture

An innovation culture should be fostered that encourages risk-taking, creativity, and collaboration. This can be achieved by:

1. Promoting open communication,
2. Recognising and rewarding innovative ideas, and
3. Creating an environment that encourages experimentation and learning.



Action 8: Evaluate impact

Evaluate impact: The impact of research and innovation should be evaluated regularly to ensure that they are meeting their intended goals. This can be done by measuring the impact on the economy, society, and the environment.





05

HOW TO USE THIS BLUEPRINT

The different R&I ecosystem actors are likely to have different organisational configurations that will affect their interaction and use of this blueprint. This section provides pointers on how ecosystem actors can deploy this blueprint in the face of their existing organisational system and past imprints. Some steps that can be useful when implementing this blueprint include:

1. Obtain your copy of the blueprint:

Obtain a copy of the RISCAM blueprint. This can be in the form of a physical document, a digital file, or an online resource. MESTI and Heritors Labs should make the document readily available to all ecosystem partners and actors.

2. Analyse the blueprint:

Analyse the blueprint carefully to understand its purpose and scope. Take note of important details, such as key action and sub-action points.

3. Plan your approach:

Based on your analysis of the blueprint, plan your approach to your RISCAM efforts. This may involve making modifications to the blueprint based on the original to fit your current organisational configurations and structures as well as strategy.

4. Organise resources:

Gather all the necessary resources required for implementing your RISCAM efforts. Ensure that you have everything you need before you set out with implementation.

5. Follow the blueprint:

Use the blueprint as a guide and refer to it frequently to avoid mistakes.

6. Make adjustments as needed:

If you encounter any issues while implementing the blueprint, make the necessary adjustments to ensure that the result meets your organisational objectives without jeopardising the broader ecosystem needs.

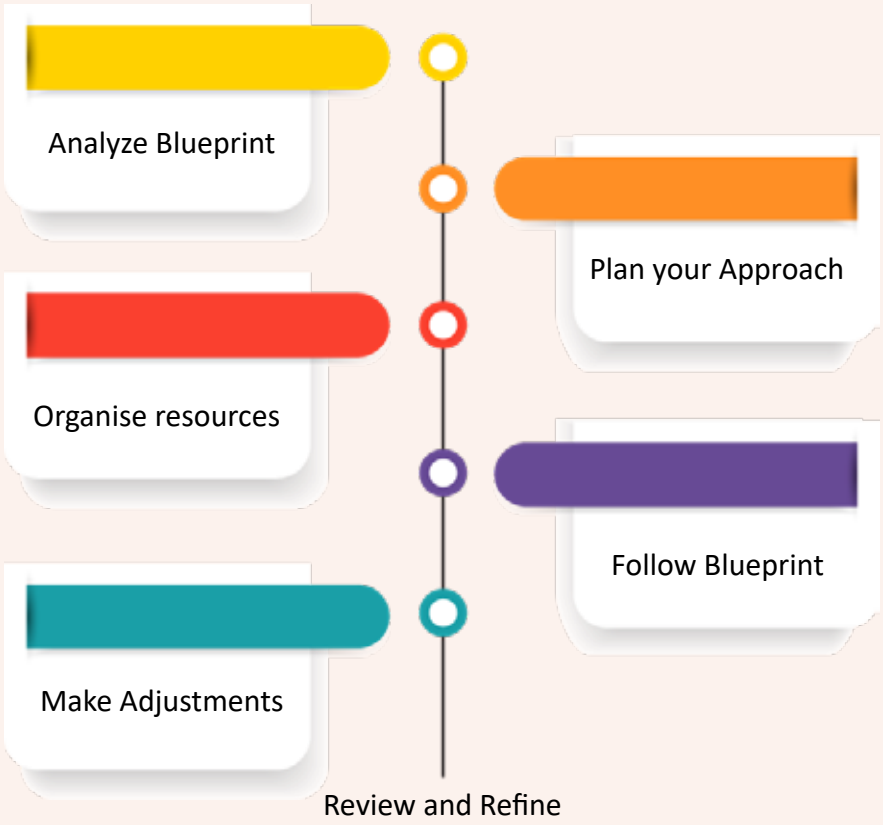
7. Review and refine:

Once you have completed implementing a phase of your RISCAM efforts, review the results to ensure that they match the original blueprint goals. Refine your adapted blueprint if necessary to ensure that it meets your organisational expectations.

By following these steps, you can effectively use the blueprint to address the current RISCAM gaps and challenges that your organisation and individuals face.



Figure 7: How to Use the Blueprint



CONCLUSION AND SUMMARY

In this section, the Blueprint presents some critical issues that need to be addressed to close the RISCAM gaps in the country. These follow critical pillars such as resources, challenges that need to be addressed, drivers, assets and steps to achieving an effective RICSAM regime in Ghana. In summary, a blueprint for RISCAM focuses on identifying and engaging stakeholders, developing a clear communication strategy, fostering collaboration, providing support and resources, encouraging knowledge dissemination, fostering an innovation culture, and evaluating impact.

APPENDIX: TIPS TO ACHIEVING AN EFFICIENT RICSAM

A) 5 Key Resources Required for RISCAM



Expertise:

People who understand, can conduct and communicate their research findings effectively.



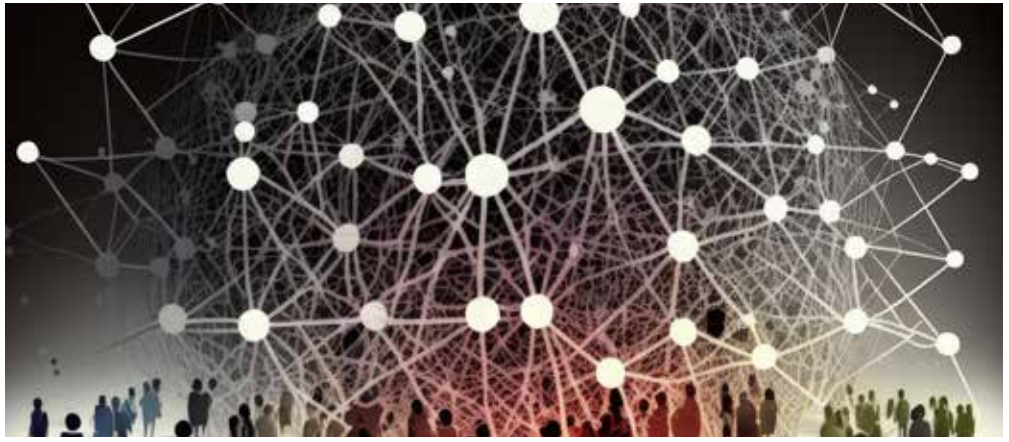
Technology:

This includes access to high-speed internet, websites and social media handles, and digital marketing tools.



Funding:

This includes funding for research, product testing, development, production, moving innovations to the markets and for intellectual property (IP) protection.



Network:

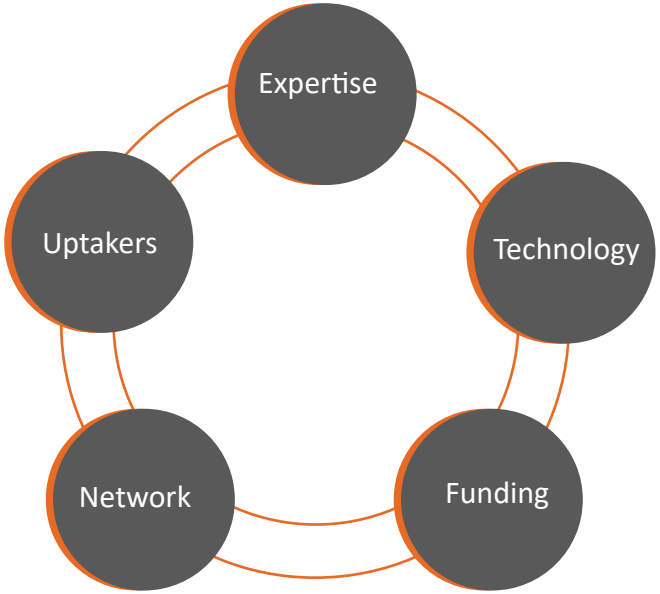
Building a network with researchers, policymakers, industry partners, and the public, that will collaborate in the transformation of research findings into innovations that can be commercialised.



Uptakers:

A local industry that can innovate research findings and commercialise them.

Figure 8: Key resources required for RICSAM



B) 3 Top Challenges to Overcome in RISCAM

- Lack of local industry to take research findings and develop them further into possible innovation.
- Resource constraints such as funds for product testing, development, production, moving innovations to the markets and for intellectual property (IP) protection.
- The current promotions systems within academic institutions.

C) 7 Key Institutional Factors Driving RISCAM

- Dedicated officers in charge of research communication.
- The establishment of internal Research and development (R&D) units in Business organisations.
- Dedicated websites and social media pages to share research results andinnovations.
- Money to fund research, innovation and commercialisation.
- Administrative institutions that assist with IP processes in securing innovations.
- Partnership with industry.
- Marketing strategy to promote your innovation to a wider audience and attract potential customers, investors, or partners.

D) 4 Critical RISCAM Assets

These can be divided into above the line and below the line assets.

Above the Line (ATL) Assets

- TV engagements
- Radio engagements
- Billboards

Below the Line Assets

- Publications
- Websites
- Social media pages
- Maker spaces/innovation hubs
- Forums

