

Al Chatbot – Functional Specification

1. Background

In 2024, the Human Sciences Research Council (HSRC), through the RDSI division, launched the MyBIP mobile application to support informal business owners. The MyBIP app provides a set of research-based tools and resources to guide informal business owners to develop proactive strategies to use innovation, for problem-solving and to take up business opportunities. The app was created as part of a research project that aims to understand how informal business owners in South Africa use their skills and the knowledge available to them to create value for their customers, contributing to their local economies. And how they use creative solutions to make do with the limited resources they have. More information on the MyBIP app and the larger research project is available from this webpage: https://informalbizinnovationhub.hsrc.ac.za/.

2. Purpose

The AI chatbot will be integrated into the existing MyBIP mobile application to support informal business owners. It will act as a virtual assistant, helping users navigate the app, understand innovation strategies, and access relevant tools and resources. The chatbot will **only** use approved content sources as outlined in the requirements below.

3. Deliverables and timelines

Deliverables	Expected timeline
1. Estimated start date of the contract	1 st November 2025
2. Al chatbot build and launch with the MyBIP app according to requirements,	
including:	Within 8 weeks of project
1.1 Joint design of main conversation flows, questions, and guardrails	kick-off
1.2 Development, customisation, training, integration with relevant models	
and interfaces as needed	
1.3 In-depth testing according to agreed test plan	
1.4 Soft and hard launches with users	
3. Al chatbot operation, adjustments and maintenance based on user and	For 12 months from launch
performance feedback	

4. Requirements

4.1 Scope

Cape Town Office:

Pietermaritzburg Office:

Durban Office:

- The chatbot will be available to all users who have access to the app.
- The chatbot will operate entirely within the app environment.
- All responses will be based exclusively on the approved sources.

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www.hsrc.ac.za

134 Pretorius Street, Pretoria, 0002, South Africa. Private Bag X41, Pretoria, 0001, South Africa. **Pretoria Office:**

Tel: +27 12 302 2000 Fax: +27 12 302 2299/2149
The Yacht Club, 2 Dockrail Road, Foreshore, Cape Town 8001, South Africa. Private Bag X9182, Cape Town, 8000, South Africa

Tel: +27 21 466 8000 Fax: +27 21 461 2099

Connect Space, 102 Stephan Dlamini Road, Musgrave, Durban, 4001. PO Box 37429, Durban, South Africa.
Tel: +27 31 242 5400 Fax: +27 31 242 5401

Old Bus Depot, Mbubu Road, Sweetwaters. PO Box 90, Msunduzi, 3200, South Africa. Tel: +27 33 324 5000 Fax: +27 33 324 1131

4.2 Approved Information Sources

The chatbot will draw information only from the following:

Internal Resources

- Informal Business Innovation Toolkit (HSRC)
- HSRC Policy Briefs provided
- HSRC Informal Business Innovation Hub
- My Business Innovation Planner (MyBIP) App content and tools

Public Resources

- https://informalbizinnovationhub.hsrc.ac.za
- https://smmesa.gov.za
- https://www.sars.gov.za
- https://www.seda.org.za
- https://iedfglobal.org
- https://www.cipc.co.za

4.3. Key Features

Content Awareness

- The chatbot will "know" and understand all text, FAQs, help sections, and other data already stored in the app.
- It will use this information to answer user queries in natural, conversational language.

Guided Assistance

- The chatbot can provide step-by-step guidance for using features within the app.
- It can point users directly to relevant screens, sections, or documents within the app.

Question & Answer Function

- Users can type or speak their questions.
- The chatbot will respond clearly and concisely, based only on the app's content.

Search and Navigation Support

• The chatbot can help users quickly locate information, settings, or resources inside the app.

Context Retention

- The chatbot will remember the current conversation while the user is in the session, to avoid asking for repeated information.
- Once the session ends, no personal conversation history will be stored.

Transparency and safety

- The chatbot will not respond to certain types of questions as defined during the design process.
- Responses will be evaluated and modified to take into account potential bias in pre-trained models.
- Sources of information for answers will be provided to users and if possible an indication of confidence in the answer will be indicated

4.4 User Experience

- Access Point: The chatbot will be accessible via a chat icon or button on all main screens of the app.
- Interaction Style: Friendly, clear, and easy to understand.
- Languages Supported: English, Zulu, Xhosa and Afrikaans.
- Accessibility: The chatbot interface will be usable by people with disabilities, following accessibility guidelines

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4.5 Data Privacy & Security

- All chatbot responses will be generated locally or from the app's internal content or list of approved sources.
- Conversations will not be stored permanently.
- The AI operates in a sandboxed environment to ensure privacy and control

4.6 Maintenance

- Content updates for the chatbot will be tied to updates of the app's own database or help content.
- Admins will be able to add or update the information the chatbot uses.
- New HSRC publications or toolkit revisions will be added to the chatbot's knowledge base.

5. Proposal mandatory requirements

Your proposal submission must include:

1. Technical proposal including:

- a. A brief order of work describing the approach, and when and how each component and deliverable will be completed.
- b. Examples of past client work related to similar tool design and customisation or development (at least 3 examples in the form of screenshots or website links. If website links are provided, please ensure these are publicly accessible and working).
- c. Contact information for at least 3 references related to past client work noted above.
- 2. Financial proposal to complete above specifications and requirements, including VAT.

6. Evaluation

80/20 Preferencial Procurement System

Criteria	Points	Score*	
 Approach and feasibility including the use of preferred and novel methods to address the specific and general requirements noted in the Requirements section above. Clear approach with feasible timelines and technologies, using preferred and novel methods (21 - 45 points) 	45		
 Partially clear approach with uncertain timelines and technologies (1 - 20 points) No description of approach, timelines or technologies (0 points) 			
Quality of past client work on similar tool design and customisation or development. Provide at least three (3) examples of past client work in the form of screenshots or website links. • High quality (26 - 45 points) • Medium quality (11 - 25 points) • Low quality (1-10) • No relevance or less than three examples (0 points)	45		
Contact information for references (name, telephone number and email address) related to past client work noted above. • 4+ references (10 points) • 3 references (7 points) • Less than 3 references (0 points)	10		
r Reginald Cassius Lubisi (Chairperson), Dr Deenadayalen Konar, Prof. Ibbo Day Joseph Mandaza, Ms Shamem dv Faith Dikeledi Pansy Tlakula, Prof. Fiona Tregenna, Prof. Sarah Mosoetsa (CEO) Total	e Manjoo, Dr Ale 100	x Mohubetswa	ne Mashilo, Prof. Zei

Minimum threshold 75 points

HSRC Board: D

Zethu Nkosi.

7. Briefing Session
An optional briefing session will take place online on the 13 TH of October 2025