

# Conversational Interfaces: Framework

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Digital

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# Context



# This deck is the second of three deliverables designed to explore the role of conversational interfaces in addressing financial inclusion in emerging markets

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- Companies in emerging markets are taking advantage of the lower barriers to entry in using conversational interfaces across a variety of different sectors, particularly around FinTech, for various support functions.
- To explore this further, Caribou Digital, through the FiDA Partnership, has partnered with Mastercard Foundation to explore their unique value proposition across three deliverables:
  - A **primer** that defines key terms and concepts and serves as a foundation for future conversational interface (CI) analyses.
  - **Developing a framework** to approach and evaluate conversational interfaces for investment or for use
  - **Business case analysis** that explores the use of CIs as a customer engagement tool and strategy for financial inclusion
- For this deliverable, we reviews different conversational interfaces and chatted with different researchers, practitioners and investors to develop a framework that can be used to assess the user experience of a conversational interfaces, as well as the business model

# This guide will help our implementation and portfolio partners better calibrate their expectations when either investing into or employing a CI

Many of the IP's and PP's we spoke with in our initial consultation [see appendix for list] shared the following questions about the role CIs can play in addressing financial inclusion:

- **Capacity:** Are there enough users in SSA who have access to smartphones and are technically capable of interacting with a CIs?
- **Functionality:** Are CIs designed in a way to help drive transactions or improve financial literacy? How accurate and localized is the CIs response to customer queries?
- **Ethics:** What are the consequences of not letting the user know they are interacting with a machine instead of a person? What makes a CI trustworthy?

This document will explore the role these two thematic areas play in shaping the value proposition and design of each of the four CIs reviewed.

# Framework: Structure of analysis



# The four categories can be used to organize the value, role and tactics conversational interfaces use to interact with customers

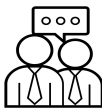
**Services offered:** CIs can provide three types of support to customers:



**Informational:** Self paced educational lessons and quick and accurate responses to answers to FAQ's



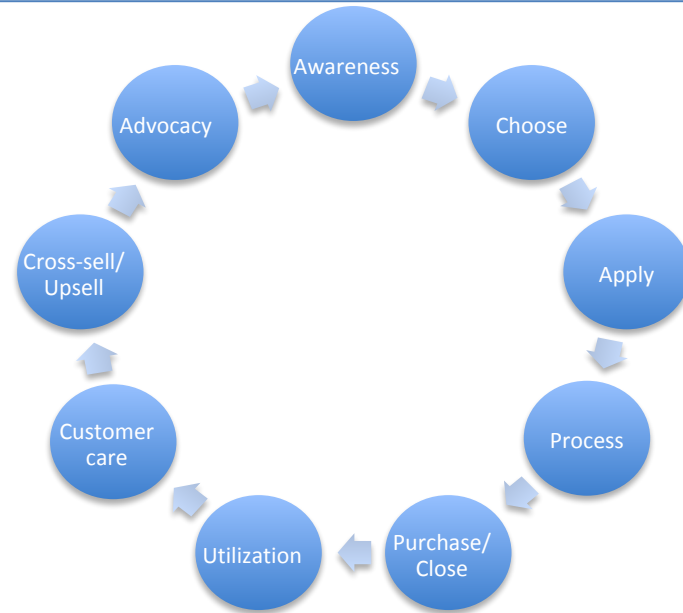
**Transactional:** Access to basic mobile money services and financial products



**Advisory support:** Tailored financial guidance and investment support [note: currently, CIs in SSA do not have the data necessary to provide automated advisory support]

## Customer engagement lifecycle for financial services:

The lifecycle captures the different roles CIs can play along the customer's financial service journey [See appendix for more information]



## Delivery channels: Users can interact with CIs over three different channels



**Messaging applications:** API enabled applications offer a more comprehensive chat experience but can only be accessed over Wi-Fi or through data plans



**SMS:** Interactive SMS can be accessed by all customers over airtime but with limited functionality and no access to integrated services



**Website:** Users can access the CI either through the products website or through a messaging application over the web

## Business Model: CI providers target a variety of different customers using different revenue models

**Revenue Model:** Because of how new FinTech CIs are, it is unclear what their revenue model and unit economics are; however, we outline some trends and observations:

- Revenue focused: CI generates revenue from either third party partnerships or through transaction fees
- Cost savings focused: CI saves the company money by automating customer service functions

**Customer audience:** Many of these early stage CIs have not defined their target audience yet, but, based on the CIs functionality, we offer our observations with who the audience could be

# The criteria below can then be used to assess the user experience of a conversational interface

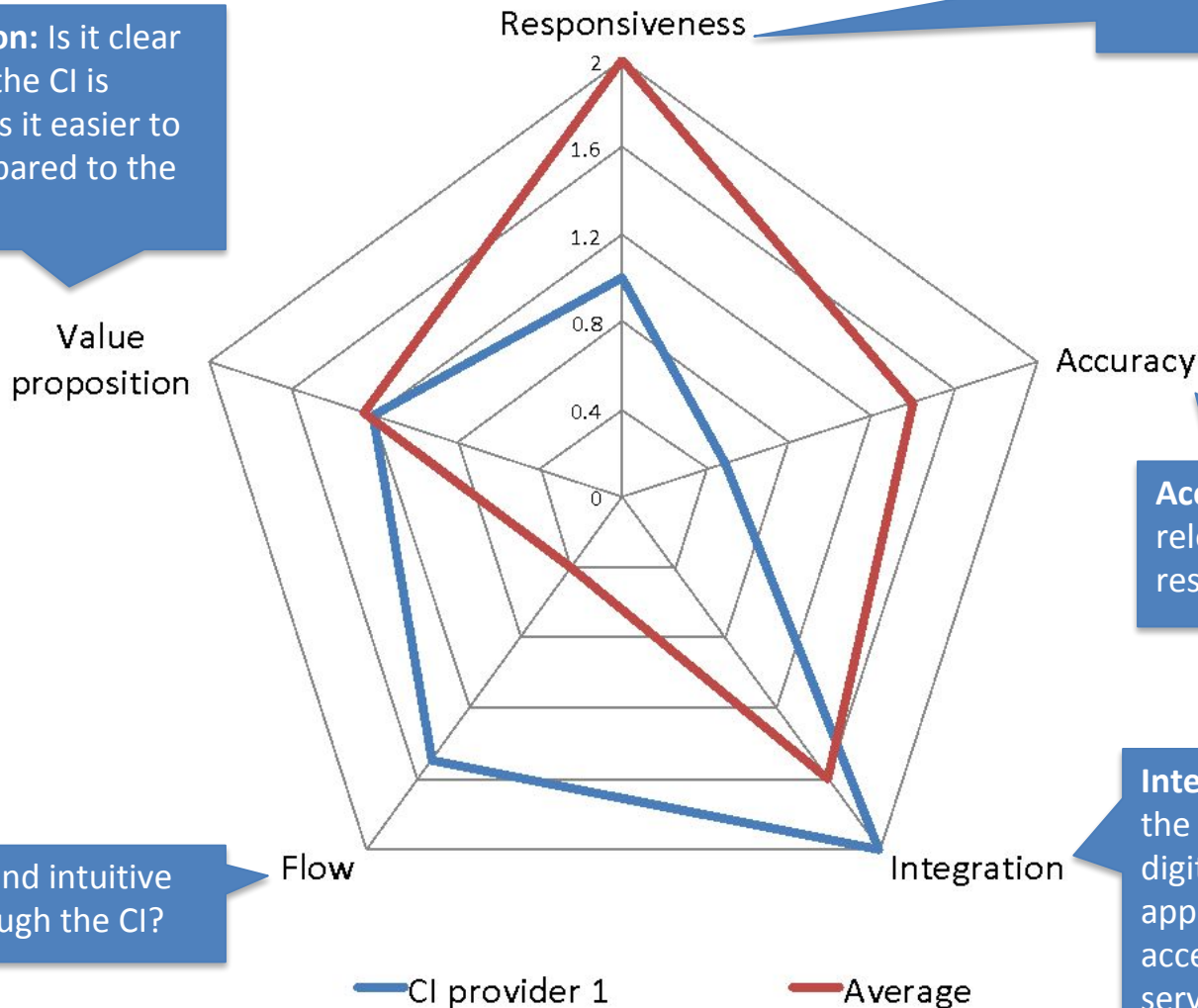
**Value proposition:** Is it clear what challenge the CI is addressing and is it easier to use/access compared to the alternative?

**Responsiveness:** How quickly did the CI respond to the inquiry?

**Accuracy:** How precise and relevant was the CI's response to the inquiry?

**Integration:** How well does the CI connect with other digitally enabled applications [critical for accessing third party services, like mobile money]

**Flow:** Is it easy and intuitive to navigate through the CI?



— CI provider 1      — Average

Note: See appendix for scoring criteria



Listed below are the different criteria used to measure and score the different aspects of the user experience against

Category	Responsiveness	Accuracy	Integration	Flow	Value proposition	
Description	Does the CI interact when prompted?	How relevant is the CIs response to my prompt?	How well does the CI connect with other applications (if relevant)?	How intuitive is using the CI to access different features?	Is it clear the CI adds more value to the user than the alternative?	
Evaluative criteria	Speed of the CIs response	Sentiment; syntax; context of the CI response	Bugginess; security	Search; modify search; NLP/Button hand-off	Cost effectiveness; Time savings; Access to new and relevant services	
Scoring	0	CI does not provide a response when prompted; freezes or shuts down	CI does not understand the sentiment, the syntax and the context of the prompt and does not correctly respond	Integration does not work and is not secure	Unable to figure out how to maneuver past the home screen on the CI	CI is as expensive, as time consuming and offers as much access to new services as the next best alternative
	1	CI responds slowly to the prompt, likely due to a lag in the software	CI does not understand either the sentiment, syntax and/or the context of the prompt and sometimes responds correctly	Integration is either buggy, and/or does not secure the users information	Unclear with how to search for services, modify search for services and whether to type into the messaging interface or use the menu or buttons on the CI	CI offers some advantages over the alternative, either around cost savings, efficiency or access to new services
	2	CI responds almost instantaneously to the prompt	CI understands the sentiment, syntax and/or the context of the prompt and always responds correctly	Integration is seamless, and secures the customers information	Clear and intuitive with how to navigate in and around the CI	CI offers clear cost and time savings while opening up access to new and relevant services

# Outline below is a list of lessons learned after our review of different conversational interfaces used in sub-Saharan Africa

## UX Category

## Observation

### Responsiveness

Delays in a CIs response to a customer query runs the potential risk of losing not only the customer's interest but their trust. It is therefore paramount that the CI respond quickly to the query, which each of the profiled CIs did

### Accuracy

In building trust with the user, the CI should respond to a customer query with a logical and accurate response. This can be difficult if the CI needs to understand the syntax of a written query; to work around this, Pia, Simply and Kudi supplemented text fields with drop down menus and icons

### Integration

If the CI chooses to integrate with other services, it should aim to do so within the application versus leaving the application and connecting to the website. We thought Pia integrated different services - news to restaurant information to mobile money – cleanly

### Flow

Offering many different services can be helpful to users but should do so in a way that it is easy and intuitive to access. Navigating through Pia, we appreciated how clean and simple it was to understand what the CI offered and how to access it

### Value Proposition

Unless the conversational interface is solving a challenge users continue to have, it is likely that it may not be used. We believe the challenge Arifu is solving – access to education at the last mile – to be one that solves an on-going pain point for many

# Appendix



# Explanation of the customer engagement lifecycle for financial services <sup>1</sup>

