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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.

- 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.

<table>
<thead>
<tr>
<th>Services offered</th>
<th>Customer engagement lifecycle for financial services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Informational:</strong> Self paced educational lessons and quick and accurate responses to answers to FAQ’s</td>
<td>The lifecycle captures the different roles CIs can play along the customer’s financial service journey [See appendix for more information]</td>
</tr>
<tr>
<td><strong>Transnational:</strong> Access to basic mobile money services and financial products</td>
<td></td>
</tr>
<tr>
<td><strong>Advisory:</strong> Tailored financial guidance and investment support [note: currently, CIs in SSA do not have the data necessary to provide automated advisory support]</td>
<td></td>
</tr>
</tbody>
</table>

**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

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1. Deloitte Digital. *Adopting the power of conversational UX.*
The criteria below can then be used to assess the user experience of a conversational interface:

**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?

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

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Responsiveness</th>
<th>Accuracy</th>
<th>Integration</th>
<th>Flow</th>
<th>Value proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Does the CI interact when prompted?</td>
<td>How relevant is the CIIs response to my prompt?</td>
<td>How well does the CI connect with other applications (if relevant)?</td>
<td>How intuitive is using the CI to access different features?</td>
<td>Is it clear the CI adds more value to the user than the alternative?</td>
</tr>
<tr>
<td>Evaluative criteria</td>
<td>Speed of the CIs response</td>
<td>Sentiment; syntax; context of the CI response</td>
<td>Bugginess; security</td>
<td>Search; modify search; NLP/Button hand-off</td>
<td>Cost effectiveness; Time savings; Access to new and relevant services</td>
</tr>
<tr>
<td>Scoring</td>
<td>0</td>
<td>CI does not provide a response when prompted; freezes or shuts down</td>
<td>CI does not understand the sentiment, the syntax and the context of the prompt and does not correctly respond</td>
<td>Integration does not work and is not secure</td>
<td>Unable to figure out how to maneuver past the home screen on the CI</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>CI responds slowly to the prompt, likely due to a lag in the software</td>
<td>CI does not understand either the sentiment, the syntax and/or the context of the prompt and sometimes responds correctly</td>
<td>Integration is either buggy, and/or does not secure the users information</td>
<td>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</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>CI responds almost instantaneously to the prompt</td>
<td>CI understands the sentiment, syntax and/or the context of the prompt and always responds correctly</td>
<td>Integration is seamless, and secures the customers information</td>
<td>Clear and intuitive with how to navigate in and around the CI</td>
</tr>
</tbody>
</table>
Outline below is a list of lessons learned after our review of different conversational interfaces used in sub-Saharan Africa

<table>
<thead>
<tr>
<th>UX Category</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsiveness</td>
<td>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.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>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.</td>
</tr>
<tr>
<td>Integration</td>
<td>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.</td>
</tr>
<tr>
<td>Flow</td>
<td>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.</td>
</tr>
<tr>
<td>Value Proposition</td>
<td>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.</td>
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Appendix
Explanation of the customer engagement lifecycle for financial services

**Awareness:** Customer identifies companies / brands and options of interest

**Choose:** Customer reads reviews, uses comparison tools or makes own comparison, talks with sales agents about offerings, etc...

**Apply:** Customer fills out application

**Process:** Financial services institution processes customer’s application

**Purchase/Close:** Customer purchases the financial product / service, including collecting payments if applicable, approving terms, closing of sale, etc.

**Utilization:** Customer utilizes the product – if insurance this could mean filing claims, if loan product, could mean making payments, etc.

**Cross-sell/Upsell:** Financial services institution proposes additional products based on current usage or customer demographics

**Advocacy:** Customer advocates for others to use financial service – via social media, word of mouth, etc.

**Customer care:** Customer launches an enquiry about product / service which gets handled / managed until resolved.