

NaijaCare - Research Plan

I. Introduction

NaijaCare is an innovative digital health platform aimed at democratizing maternal and child healthcare in rural northern Nigeria.

While the concept is grounded in personal experience and informed by robust course frameworks, several key assumptions remain unvalidated. These uncertainties include user acceptance of mobile health technology among rural mothers, the actual digital literacy levels in target communities, and the practical challenges in cost savings and service delivery. This research plan outlines the data gaps that need to be addressed and specifies how both primary and secondary research will be conducted to firmly ground the NaijaCare opportunity in empirical evidence. By integrating frameworks from entrepreneurial finance, accelerators, and systematic innovation (Drucker, 2013), this plan will guide the subsequent data collection phase (Assignment 4).

II. Identifying Data Gaps

Several aspects of NaijaCare currently rely on intuition and preliminary findings:

- **User Acceptance & Digital Literacy:**

It is assumed that the high mobile penetration rate (82%; Nigerian Communications Commission, 2023) translates into effective use of digital health tools. However, the actual level of digital literacy and smartphone ownership among rural mothers is uncertain.

- **Adoption Risks:**

The platform's success hinges on user trust in AI diagnostics and telehealth consultations. Current assumptions about acceptance are based on intuition and limited pilot data. We

need to determine if users are willing to rely on digital diagnoses over traditional methods, particularly in communities with historically low exposure to modern technology.

- **Perceived Barriers to Telehealth:**

While preliminary field interviews suggest distrust in centralized lab systems, we lack direct, systematic feedback from end-users regarding their willingness to use a telehealth service.

- **Economic Feasibility:**

While preliminary estimates suggest that NaijaCare could reduce healthcare costs by up to 60% (World Bank, 2017), further data is required to understand:

- How subscription fees, pay-per-use models, and freemium tiers will evolve over time.
- The potential long-term reliance on grants or partnerships, and whether alternative revenue streams can be sustainably scaled.

- **Partnership Viability:**

Although partnerships with telecom providers, NGOs, and government health agencies are anticipated, more detailed insights are needed regarding their potential challenges, readiness, and interest in supporting the platform.

III. Primary Research Strategy

To gather firsthand data, we will employ a mixed-methods approach—combining qualitative interviews and quantitative surveys.

A. Interviews

- **Participants:**

1. A rural healthcare provider (e.g., a midwife or community health worker).
2. A representative from a local NGO involved in maternal health.

3. A potential end-user (a pregnant woman or new mother).

- **Method:**

- **Platform:** Interviews will be conducted via telephone or WhatsApp calls.
- **Consent:** Each interviewee will complete an Ethics and Information Form (see Appendix C) to ensure informed consent and confidentiality.

- **Questions:**

▪ <i>What are the primary challenges you face in accessing or providing maternal healthcare?</i>
▪ <i>How do you perceive the idea of telehealth services (via SMS/USSD) as an alternative to traditional clinics?</i>
▪ <i>What features (e.g., voice control, real-time alerts) would increase your trust and willingness to use such a service?</i>
▪ <i>For NGOs: How do you assess the potential of digital health platforms in improving service delivery, and what are the key factors that would drive your adoption?</i>

- **Data Analysis:** Interviews will be recorded, transcribed, and analyzed thematically to identify common challenges, expectations, and suggestions.

B. Surveys

- **Target Group:**

Rural mothers and pregnant women in northern Nigeria.

- **Distribution Channels:**

- **WhatsApp Groups & Family Chats:** Collaborate with local NGOs and community leaders to distribute a Google Form link via WhatsApp groups and family chats.

- **SMS/USSD Surveys:** For users without smartphones, a text-based survey will be deployed via SMS or USSD in partnership with telecom providers.
- **Survey Content:**
 - **Demographics:** Age, education level, language, and location.
 - **Healthcare Access:** Questions on current methods for prenatal and postnatal care.
 - **Digital Literacy:** Likert-scale items assessing comfort and frequency of mobile phone use for non-traditional services.
 - **Telehealth Perception:** Items to gauge interest in using a telehealth service, preferred channels, and perceived benefits.
 - **Willingness-to-Pay:** Multiple-choice questions to determine acceptable price points for consultations (e.g., \$1, \$2, or \$3 per session).
 - **Open-Ended Questions:** To capture qualitative feedback on healthcare challenges and suggestions for platform improvements.
- **Sample Size:** Aim for 15–20 respondents to ensure a representative mix of voices.
- **Incentives:** Offer mobile airtime credits (e.g., ₦500) to boost participation rates.

C. Focus Groups *(If interviews lack depth and/or lived experience)*

- **Participants:** Same as above.
- **Group Size:** Each session will include 8–10 participants to ensure manageable group dynamics and comprehensive discussion.
- **Sampling:** To capture diverse perspectives, two focus groups will be organized in distinct rural locations, ensuring representation from different socioeconomic backgrounds and ethnic groups.

Methodology:

- **Facilitation:** A trained moderator, fluent in local languages (Hausa, Yoruba, or Igbo), will lead the sessions. The moderator will use a semi-structured guide to encourage open discussion while ensuring that key topics are covered.
 - **Duration and Format:** Each focus group session will last approximately 90–120 minutes. The discussion will be recorded (with participants’ consent) to facilitate detailed transcription and thematic analysis.
 - **Discussion Topics:**
 - **Healthcare Access:** Participants will discuss their current experiences with maternal healthcare services, highlighting challenges such as distance, cost, and quality of care.
 - **Digital Health Adoption:** The discussion will explore attitudes toward telehealth services, including the use of SMS/USSD, voice-controlled interfaces, and AI-driven symptom checkers.
 - **Trust and Cultural Relevance:** Participants will share opinions on the importance of culturally tailored content and the role of local health workers in building trust in digital platforms.
 - **Willingness-to-Pay and Service Expectations:** The focus groups will probe what pricing models (subscription, pay-per-use, or freemium) might be acceptable, along with any concerns about data privacy and service reliability.
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IV. Secondary Research Strategy

Secondary research will compile data from existing reputable sources to validate our market assumptions:

- **Healthcare Statistics:**

Gather maternal mortality rates, skilled birth attendance, and healthcare expenditure data from WHO, UNICEF, and the Nigeria Progress Report. These statistics will provide a macro-level context for our opportunity.

- **Digital Adoption & Connectivity:**

Use reports from the Nigerian Communications Commission, GSMA, and World Bank to analyze mobile penetration, smartphone ownership, and digital literacy in northern Nigeria.

- **Economic & Policy Reports:**

Review data from the Abuja Declaration and recent government budget reports to assess public health spending, funding gaps, and policy directions impacting digital health.

- **Case Studies & Academic Literature:**

Examine studies such as Kenya’s M-TIBA program and other mHealth interventions to benchmark user adoption, pricing strategies, and long-term sustainability. This literature will also help address adoption risks and the evolution of funding models.

V. Justification and Expected Outcomes

Validating Assumptions:

Primary research will directly test assumptions regarding digital literacy, trust in AI diagnostics, and price sensitivity. This empirical evidence will refine our product features and business model.

Informing Design and Financial Strategy:

User feedback will guide feature enhancements—such as integrating voice control and refining USSD interfaces—while secondary data will inform pricing tiers and long-term financial projections. This dual approach is critical to minimize risks related to user adoption and grant dependency.

Mitigating Adoption Risks:

Identifying potential barriers—such as low digital literacy or cultural distrust—will allow us to develop targeted interventions (e.g., community workshops, partnerships with local leaders) to improve scalability and user trust.

Integrating Course Concepts:

This research plan applies effectuation by leveraging existing digital channels and local

networks, and abduction through in-depth interviews that uncover hidden user needs. It also incorporates insights from entrepreneurial finance (structured funding and pricing strategies) and accelerators (ensuring long-term viability without excessive equity dilution).

VI. Conclusion

This research plan outlines a comprehensive strategy for gathering primary and secondary data to refine the *NaijaCare* opportunity. Through targeted interviews and surveys—distributed via WhatsApp groups, family chats, and SMS/USSD—and by synthesizing existing data from reputable sources, we will obtain actionable insights. These insights will not only validate our assumptions but also inform the product design, pricing strategy, and long-term financial feasibility of *NaijaCare*. (and also attempt to address scalability issues: digital literacy barriers, trust in AI diagnostics) Ultimately, this data-driven approach will strengthen our business model and reduce adoption risks, ensuring that *NaijaCare* can successfully address Nigeria’s maternal and child healthcare challenges.

References

Appendices:

- **Appendix C:** Ethics and Information Form for Interviewees
- **Appendix D:** Survey Instrument and Questionnaire Template

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