LIGA INAN
PROGRESS REPORT

Wednesday, 11 March 2015

Technical support and software development for the Liga Inan service to help ensure the successful scale up of the mHealth initiative.

CONTENTS

1. BACKGROUND

In response to Timor-Leste's extremely high maternal and neonatal mortality rates, Catalpa International and Health Alliance International partnered with the Timor-Leste Ministry of Health in 2011 to design and develop the Liga Inan mobile phone program with support from USAID.

The goal of the Liga Inan program is to increase the utilisation of, and access to, skilled health care providers by women during and after pregnancy. It does this by strengthening the relationship between mothers and midwives by facilitating better communication through the use of a simple mobile phone.

A pilot of Liga Inan has been operating in Manufahi district since mid-2013 with funding from USAID. Based on the encouraging results from the pilot, HAI and Catalpa received a grant from the Australian Government Department of Foreign Affairs and Trade to implement the Liga Inan program in two additional districts — Liquicia in August 2014 and Aileu in March 2015. Pursuant to the DFAT grant, Catalpa entered into a sub-contract with HAI for the period June 2014 to 31 March 2015 for the scale-up of the Liga Inan program. That contract has recently been extended to June 2015, after which Catalpa and HAI will enter into separate grant agreements with DFAT for the national scale-up of the Liga Inan program. Catalpa's scope of work and deliverables under the existing contract with HAI are outlined below.

2. DESCRIPTION OF ASSIGNMENT

This report relates to the period 1 June 2014 until the date of this report, 15 March 2015.

PROJECT DELIVERABLES

To support the expansion of the Liga Inan service to an additional district, updates were required to the technical system that supports the Liga Inan service. Accordingly the deliverables were mainly focused around stability of the Liga Inan service and its sustainability over the next three years.

Specifically deliverables fell into the following four areas

- Updates to current system
- Integration of System with Mobile Network Operator
- Development of the LI Service to Support Scale-up
- Assistance with the development of a Liga Inan Road Map

The deliverables checklist in Annex 1 provides a detailed list of the deliverables and Catalpa's progress to date.

PROGRESS AGAINST DELIVERABLES

During the contract period, the following activities and progress was achieved against the deliverables.

a. Updates to Current System

Catalpa has completed all the relevant updates to the Connect system in the lead-up to the successful launch of the Liga Inan program in Liquicia District in August 2014. As outlined in the deliverables checklist in Annex 1, these included preparing phones for midwives to use, updating the code base to improve the stability of the existing service to handle the extra user volume and updates to the dashboard to accommodate Liquica and Aileu district health facilities. It also involved establishing test accounts, acquiring new hardware and and supporting HAI staff throughout the implementation process.

b. Integration of system with MNO

An MoU was entered into between Catalpa, HAI and Timor Telecom in October 2014. The agreement provides for the technical integration of the technical system underpinning the Liga Inan Service with Timor Telecom's SMS Center ands sets up a fee structure for cost of text messages. Since then Catalpa has been working with Timor Telecom's technical team to achieve technical integration with Timor Telecom's SMS Center.

Technical integration with Timor Telecom was completed in November 2014. Once Timor Telecom achieves interoperability[1] with other MNOs such as Telmor, Catalpa will transition the existing LI service and users to the new integrated services and provide monitoring and maintenance of this service. Further effort and support is being directed at Timor Telecom to ensure interoperability is achieved in the short-term.

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[1] Interoperability refers to the ability to Timor Telecoms SMS systems to receive and route messages from the other MNOs. This also includes recognition of the universal short-code (8080) for Liga Inan.

c. Development of LI Service to Support Scale Up:

Six deliverables fell under this objective, four of which have been achieved and two of which are outstanding. Those which have been completed include modifying the Liga Inan data model to improve the management of personal health data. This will help to ensure the confidentiality of information and appropriate use of the Liga Inan data and respect the privacy of users. The data model has also been modified to allow for the registration of multiple births.

The web application has been modified to enable national level and district level navigation and further development of the dashboard was undertaken to facilitate the analysis of national level program statistics and outcomes. These updates will enhance the monitoring and evaluation capabilities of the online dashboard, and ensure the information remains relevant and accurate as the service scales nationally.

The underlying technology of the Liga Inan service was extensively re-written and updated to ensure the service can handle the increased demands of a national program. Stress testing was preformed on the service, and other service monitoring tools and process were integrated into the application to ensure stability and reliable service provision over the long-term.

Catalpa has also provided additional graphic design services to HAI for the development of various Liga Inan communication materials. The provision of technical support is ongoing throughout the contract period.

d. Assistance with the Development of the Liga Inan Roadmap:

In December 2014, HAI and Catalpa began the process of developing a draft Liga Inan Roadmap for discussion with the Ministry of Health. The Roadmap was conceived to be a Ministry of Health document that outlines the high level strategic direction of the Liga Inan program over the next three years. After developing an initial draft, Catalpa and HAI intend for MoH to finalise and take ownership of the document. At the time of writing, a draft roadmap is close to completion for consultation with the Ministry of Health.

3. LESSONS LEARNED

Engage with other MNOs
As the Liga Inan program moves into additional districts in which Timor Telecom faces strong market competition from other MNOs such as Telemor, the costs of off-network messages are increasing and will continue to increase as more messages are being sent. To reduce these channel costs, more effort needs to be be made to engage with other MNOs and explore opportunities for sponsorship. While the exclusivity clause in the current agreement with Timor Telecom will continue until October 2016, it is important to note that this doesn't preclude other forms of engagement with other MNOs.

Explore IVR Technology
Disability inclusion is becoming an increasingly important aspect of the Liga Inan program. Around the world, IVR technology is being promoted as a tool to increase participation in health messaging programs amongst people with low literacy or disabilities. An evaluation of the costs associated with using this technology in the context of Liga Inan should be undertaken.

Promote use of Liga Inan dashboard at national level
The new Liga Inan dashboard enables users to see national level program results in real time. Not only is this useful for national level staff, it may also help in engaging them more in the program. More effort

should be put into increasing participation from the MoH through the use of the Liga Inan dashboard at the national level.

Develop user support processes

As the number of Liga Inan users increases, so to do the demands for user support. To ensure that the on-the-ground maintenance and support requirements for the Liga Inan program are reduced over time, more effort needs to be given to establishing clear user-support processes and resources.

Develop strategy for engagement with MoH

It is clear that the MoH at a national level still lacks a clear understanding of the technical, human resource, and maintenance costs and responsibilities of the Liga Inan service. To ensure that this information is communicated effectively, a strategy for engagement with MoH that is framed around their knowledge and concerns should be developed.

Extend messages to 6 months post-partum

Increasingly there are calls for messages to be extended beyond the initial 6 week postpartum period until 6 months post-partum. This option merits further exploration as it is low cost and likely to have a high impact on the behaviour of mothers.

ANNEXES

1. DELIVERABLES CHECKLIST
2. SCREEN SHOTS OF LIGA INAN DASHBOARD
3. ABOUT CATALPA

DELIVERABLES
CHECKLIST

1	**Milestone: Updates to Current System**	
1.1	Mobile phones for Liquica health facilities and midwifes are installed with monitoring software for remote management and troubleshooting.	X
1.2	Update the location and health facility information specific for the Liquica district.	X
1.3	The Liga Inan dashboard is modified to allow to accommodate the new district.	X
1.4	Improved stability and redundancy of current systems, through the purchase of an additional back-up GSM modem, an improved UPS and a back-up generator.	X
1.5	Test accounts are established for the Liquica training program.	X
1.6	Midwifes are trained in the use of the Liga Inan services & receive required instructional materials.	X
1.7	Technical support is provided to HAI staff throughout the project implementation and planning phases.	X
2	**Milestone: Integration of System with MNO**	
2.1	Catalpa and HAI enter into an MoU with an MNO that matches the technical and operational requirements of the Liga Inan service.	X
2.2	The Liga Inan service is technically integrated with the MNO SMS-C, and tests have been performed to ensure the services, accessibility, stability and performance match the requirements of project expansion.	X
2.3	Managed the transition from the existing LI service to the new integrated service.	X
2.4	An MoU has been developed and negotiated collectively by HAI, Catalpa and the contracted lawyer.	X
3	**Milestone: Development of the LI Service to Support Scale Up**	
3.1	The Liga Inan data model is modified to allow for improved management of personal health data, and the ability mothers to switch locations, among other updates.	X
3.2	The Liga Inan web-applications is modified to allow for national level and district level navigation.	X
3.3	The Liga Inan data model is modified to allow for the registration of multiple births.	X
3.4	The Liga Inan dashboard is developed to facilitate the analysis of national level project statistics.	X
3.5	Additional graphic design for Liga Inan branding and support materials for promotion/communication.	X
3.6	Ongoing technical support software development are undertaken over the life of the project.	X
4	**Milestone: Assistance with the Development of the Liga Inan Roadmap**	
4.1	Assist in the facilitation and planning of 3 workshops for the development of the road map documentation.	☐
4.2	Development of adequate design documentation for the introduction of potential innovative functions.	☐
4.3	Assist in the writing and development of the road map document.	☐

ANNEX 2: SCREENSHOTS

Liga Inan Dashboard
The dashboard was redesigned to incorporate lessons learned from the original application, and accommodate both nation level and district level data.
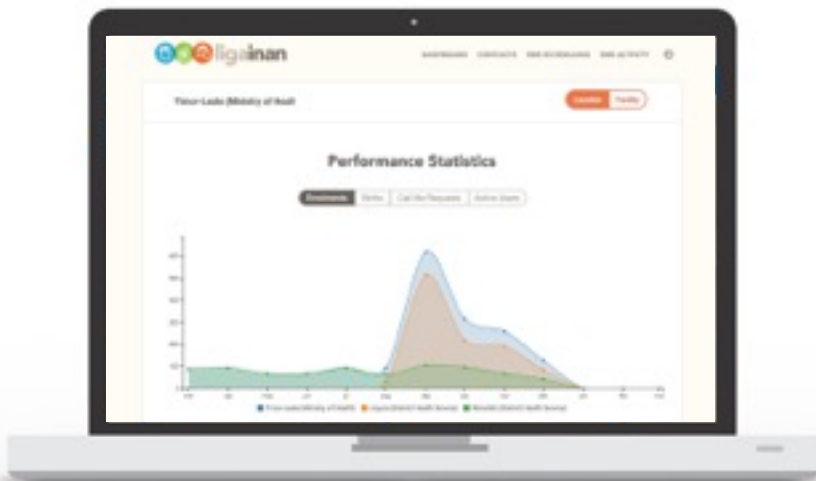
Interaction Statistics
A number of new program performance indicators where added to the application to better track and monitor user interaction.

Liga Inan Activity List
The Liga Inan 'Activity List' was updated to allow for better monitoring of in-coming and out-going interaction through Liga Inan.

Previous statistics presented on this page have been incorporated into the new Liga Inan dashboard.

ANNEX 3: ABOUT CATALPA

Catalpa International is a not-for-profit design and technology agency which provides innovative, simple and effective solutions in a development context. Catalpa's work is governed by the values of human-centered design, appropriateness and simplicity. The overall success of our work is measured by its impact on the individual.

Launched in 2010, Catalpa builds tools to assist governments, NGOs, communities and donors to make decisions to improve the delivery of aid and services.

Catalpa focuses on how technology can be used to improve the management of information in various sectors, including health, agriculture, finance, enterprise, governance, telecommunications services and advocacy. We combine innovative technologies with projects that improve the lives of individuals. We believe that technology can be an agent for change.

"We believe that technology can be an agent for change."

Catalpa brings together a team of technical providers with a wide range of skills and experience. Our proposed project staff are fluent in Tetum, have experience working in the health sector in Timor-Leste, and are international development, as well as IT professionals.

Our previous work has included partnerships with the Government of Timor-Leste, the Government of Myanmar, and donors such as ILO, FAO, UNICEF, WHO, USAID, European Commission, World Bank and the Asian Development Bank.

LIGA INAN
PROGRESS REPORT

Monday, 27 July 2015

Technical support and software
development for the Liga Inan service
to help ensure the successful scale up
of the mHealth initiative.

CONTENTS

1. EXECUTIVE SUMMARY

This report relates to the bridging period between 1 April 2015 and 30 June 2015 during which Catalpa has focused on planning, mobilising resources and engaging with key partners in preparation for implementation of the Liga Inan program over the coming three year period. Much of the work commenced during this period has been foundational and as such will continue into the start of the new grant.

During this period Catalpa has taken the opportunity to refine and test its program theory and with input from Dr Sue Dawson, is firmly on the path to developing a robust M&E framework that is consistent with best practice. Other key achievements during this period have included substantial progress with developing Memoranda of Understanding with key partners Marie Stopes International (signed) and the Ministry of Health (draft prepared for discussion).

Under the service delivery component of Liga Inan, Catalpa has completed revisions to the mHealth training package that is delivered to health providers, resulting in a reproducible stand-alone package of tools that can be delivered to health providers by trainers with minimal pre-existing knowledge of Liga Inan. This period has also seen the completion of the Liga Inan performance monitoring dashboard and substantial progress has been made towards technical integration with Timor Telecom. The Liga Inan service has also been updated to enable it to provide delivery confirmation reports for SMS sent by the service, and work is underway on the development of a user support package and tools which will be aligned with those used by the Ministry of Health's Health Management Information System (HMIS) team.

During this three month period there has also been progress under Catalpa's second component of work, health information management, with support from the Director of the Maternal and Child Health Department at the Ministry of Health, Dr Triana. Key district level Ministry of Health staff have been identified to engage in the design process and a plan for engaging them is currently being finalised. Catalpa has also already held preliminary meetings with the Ministry of Health's Information, Communication and Technology (ICT) team under component 3 of Catalpa's work which relates to sustainability, and an assessment of their capacity and activities is currently underway.

In preparation for the first meeting of the Connect Consultative Committee following the end of this reporting period, Catalpa has begun the process of finalising the stakeholders who will sit on the committee that will oversee activities undertaken as part of the Pilot Fund.

Several key lessons emerging from this period relating to Catalpa's engagement with key partners are outlined on page 9.

2. DESCRIPTION OF ASSIGNMENT

This report relates to the period 1 April 2015 to 30 June 2015.

The three months from 1 April 2015 to 30 June 2015 have been a bridging period for Catalpa as we transition to a separate grant agreement with the Australian Government Department of Foreign Affairs and Trade. Accordingly, this has been a period of planning and preparation which has laid the foundations for working with key partners to implement the Liga Inan program over the coming three year period, such as the development of Memoranda of Understanding and early engagement with the Ministry of Health's ICT and HMIS teams.

As part of this, in anticipation of the new grant, we have also refined our program theory for our components of work relating to the Liga Inan program to ensure it is as robust as possible. Our program Theory was reviewed by Dr Sue Dawson, who is the Director of Same Page Performance and is a monitoring and evaluation practitioner who has worked in an advisory capacity with the Australian government's aid program for more than ten years. We will continue to engage Sue for periodic inputs into our M&E activities to ensure that that are consistent with best practice.

We have also committed to developing a joint strategic M&E framework for Liga Inan with Health Alliance International (HAI) in the coming months to better align our strategic goals and simplify project planning and implementation.

A detailed checklist of progress against milestones for this period is attached in Annex 1 while more a more detailed description of progress under each component is provided below. Given the bridging nature of the three past three months, many of the activities implemented in this period are still underway and will continue into the new grant.

PROGRESS AGAINST DELIVERABLES

2.1 PREPARATION FOR SCALE UP

During the past three months we have achieved two key deliverables in preparation for scaling up the Liga Inan program. The first is that we have entered into a Memorandum of Understanding (MoU) with Marie Stopes International which identifies areas for cooperation and potential future collaboration. Secondly, we have also made progress towards entering into an MoU with the Ministry of Health to frame our ongoing cooperation. We have held preliminary discussions with members of the partnership team at MoH and we have drafted an MoU for discussion. We expect to meet with MoH before the end of August 2015 to discuss the draft with them further.

2.2 COMPONENT 1: SERVICE DELIVERY

Three milestones fell under this component of work, which concerns the technical delivery of the Liga Inan service. Milestone 2.1, the revision of the mHealth training component delivered to health providers has been completed during the three month period, while work on milestone 2.2 (Implementation plan for national scale-up developed with partners) and 2.3 (M&E framework developed) has been delayed until after the development of the overarching joint strategic M&E framework with HAI, which is currently planned for late August 2015.

A summary of the work undertaken relating to component 1 is provided below.

Revision of mHealth component — Milestone 2.1

Milestone 2.1 was the revision of the mHealth component of Liga Inan training for health providers. The original Liga Inan training package for health providers was developed in the lead-up to the launch of Liga Inan in Manufahi district in 2013 and was in need of updates. The training package comprising of the training manual and presentation has now been extensively revised to incorporate experience from implementation and updated technical information.

The training manual is now an easily reproducible stand-alone training package tool that can be delivered to health providers by trainers with minimal pre-existing knowledge of Liga Inan. Over the coming months, in collaboration with CBM, who will provide technical advice on disability inclusion, the training package will be revised further to include a small module on disability inclusion. (See Annex 3 for a copy of the revised training program)

Implementation Plan — Milestone 2.2

At the Liga Inan partners meeting with DFAT facilitated by Dr Sue Dawson on 22 June 2015, the decision was made to delay the development of an implementation plan for national scale-up until after a joint strategic management and evaluation framework has been developed. It is anticipated that the process of developing an implementation plan will commence with partners shortly thereafter.

M&E Framework — Milestone 2.3

Similarly, as agreed with the Australian Aid program during the partners meeting on 22 June 2015, Catalpa will finalise its monitoring and evaluation framework after the overarching strategic monitoring and evaluation plan has been developed as planned in August. Catalpa has engaged a consultant and is in the process of finalising revisions to its program theory so it will be in a position to finalise the M&E framework at the end of August.

Liga Inan performance monitoring dashboard

The development of the new Liga Inan online performance monitoring dashboard, which provides a more detailed overview of relevant program statistics at the local, district and national levels was completed during this three month period. The new dashboard has been designed for use at the national level by implementing partners. It is anticipated that all users will be transitioned to the new dashboard by the end of August 2015. Screenshots of the new dashboard are attached in Annex 2.

Technical integration with Timor Telecom

During the past three months there has been significant progress in integrating the Liga Inan service with Timor Telecom however delays on the part of Timor Telecom's technical team to complete the final stages of preparation have prevented Catalpa from being able to transition to the new service as scheduled.

This has meant that SMS messages are still being routed through Catalpa's server. This has not impacted service delivery but has meant that Timor Telecom has not subsidised SMS costs as it undertook to do so under the MoU and as such, there has been a small financial implication for the implementing partners. As the project is still relatively small in size, this has had minimal impact on program costs. Timor Telecom will start fulfilling its commitments under the MoU as soon as integration is achieved. At the time of writing, discussions are underway for Timor Telecom to reimburse the costs incurred due to their delays.

Operationally, the impact of not yet having achieved technical integration has been that we are unable to transition to the new integrated cloud based Liga Inan service as scheduled. Catalpa has been in constant communication with Timor Telecom's technical team during this period in an effort to resolve the outstanding technical issues at their end. These include the ability of the Liga Inan service to send and receive SMS between the other mobile network operators (MNOs), as well as support a short-code across MNOs. These functions were agreed to by all parties in the MoU.

Currently, it is anticipated that it will be possible for us to transition to the new service in the near future. In the interim period, Catalpa is working with Timor Telecom on a hybrid approach that provides a temporary solution until Timor Telecom can resolve its internal routing issues. This temporary approach will employ a combination of physical hardware and cloud based hardware and would allow Liga Inan to use Timor Telecom to send SMS while our hardware would only be responsible for receiving SMS. This approach is satisfactory until a more permanent solution can be found and will resolve the cost issue as under this arrangement, Timor Telecom will be covering SMS costs.

Meanwhile, Catalpa has started to explore relationships with other MNOs and is in the early stages of discussion with the MNO Telemor.

SMS Delivery Reports

In the last three months, the Liga Inan service has been updated so that it is now technically capable of providing delivery reports for SMS. This enables the Liga Inan service to know whether an SMS has been received by the intended phone and how long it took to send the SMS from the nearest tower to the intended phone. By providing more information about the status of SMS, it is anticipated that this will be useful for monitoring and evaluation purposes. Implementation of this feature is subject to technical integration with Timor Telecom and will be activated when Liga Inan is transitioned to the new system.

Development of user support package

Work on the development of the Liga Inan user support package for users of the Liga Inan service commenced during this three month period and will continue into the new grant. The first step in this process, an assessment of the existing user support activities provided by HAI and Catalpa is currently underway. Early discussions have already taken place between Catalpa and the ICT team at the Ministry of Health who have expressed their support for contributing to this process in anticipation of the support package eventually being transitioned to the Ministry of Health. We have recently hired a new local staff member in the position of Technical Support and Training Officer who will take this process forward over the next three month period.

User support processes and tools aligned with those of HMIS

Catalpa has started to engage with the Director of HMIS at the Ministry of Health to start this process which will continue into the new grant. This will see the Catalpa team work closely with the Ministry of Health's HMIS team to align the Liga Inan user support processes and tools with those used by the HMIS team in relation to its network of laptops and tablets. Taking this process forward and engaging directly with the HMIS team will be a key aspect of the new Technical Support and Training Officer position.

Technical Design Services

During the past three months, Catalpa has also continued to provide technical design services in relation to the development of various Liga Inan promotional materials including stickers, banners and updating logos. During this period we have also undertaken a photoshoot and post-production on a series of new photographs depicting a pregnant woman, her family and related health staff participating

in the Liga Inan program. These high quality images will significantly expand, both in number and variety, the existing collection of photographs available to the Liga Inan program for promotional purposes.

2.3 COMPONENT 2: HEALTH INFORMATION MANAGEMENT

There were two milestones under this component, which focuses on ensuring that data collected by the Liga Inan system is being used by the MoH at a district level to deploy resources and personnel more effectively and efficiently to address the needs of pregnant women.

Recent meetings with the Director of the Maternal and Child Health department at the Ministry of Health, Dr Triana, have been positive and productive and have indicated a demand for this component of work. Catalpa will be undertaking further design session with the MCH department to better customise the Liga Inan dashboard to their information priorities.

The first milestone under this component, milestone 3.1, a baseline assessment to identify key MoH staff at district level to participate in design process completed) has been completed. The second, milestone 3.2, a plan for engaging with key MOH staff developed is in the process of being finalised. Below is an outline of activities undertaken in relation to this component during the previous three month period.

Baseline assessment — Milestone 3.1

This milestone has been completed and work has commenced on engaging key Ministry of Health staff in the design process. Catalpa held the first design workshop with key MoH beneficiaries during this three month period, with the second planned for completion by end of August 2015. Building on the first workshop, which focused on the information needs of DHS chiefs, the second workshop will focus on the needs and experiences of CHC managers and health providers. The information collected during these design sessions will inform the design of additional tools for use by other levels of Liga Inan users, such as CHC and DHS chiefs.

Plan for engagement with key Ministry of Health Staff — Milestone 3.2

Catalpa is currently in the process of finalising the second milestone, the plan for engaging key Ministry of Health Staff in the HMIS team in the design process and expects to finalise it by the end of July 2015 after our new Technical Support and Training Officer comes on board.

2.4 COMPONENT 3: SUSTAINABILITY & INTEGRATION

This component is concerned with putting in place systems to ensure the Liga Inan service is sustainable beyond the end of the grant and involves extensive engagement with the Ministry of Health's ICT team who will in the future be responsible for delivery of the Liga Inan service.

Assessment of MoH ICT Team capacity and activities – Milestone 4.1

There was one milestone under component 3, which was 4.1, an assessment of MoH's ICT team's capacity and activities. This process is underway and our initial meetings with the ICT team at MoH have been productive with the team responding enthusiastically to our proposed plans for working together.

The undertaking of the assessment has been delayed slightly while we recruited the Technical Support and Training Officer. Now that she is on board, we expect to have this milestone completed by early August 2015.

2.5 COMPONENT 4: PREPARING FOR PILOTS

Following internal discussions, it was decided that the original milestone 5.1 was no longer required and instead the development of pilot activities will be driven by the monitoring and evaluation reporting for the Liga Inan program, as well as sectoral reporting. Consideration and approval of pilot activities will be explicitly linked to Liga Inan's performance reporting cycle.

Following completion of annual M&E and performance reports for the July-June period, Catalpa will convene a Connect Consultative Committee meeting to socialise results with key stakeholders, including the Ministry of Health, the Australian Embassy in Dili. We are in the process of finalising the other stakeholders who will be members of the committee with Marie Stopes International and Jon Moores, who implements the health transport program, already confirming their interest.

3. LESSONS LEARNED

- The delay in technical integration with Timor Telecom has come about as a result of Timor Telecom entering into the agreement with us for technical integration without first having realistically assessed their technical capabilities. As a result of this, in future, Catalpa will ensure that a technical capacity assessment is undertaken as part of any commercial negotiations with other MNOs.

- The experience of refining our program design and undertaking implementation planning for the Liga Inan program over the past three month period has emphasised to us the importance of having in place a robust strategic framework in place with HAI to assist us in coordinating our respective components of work. We anticipate that the joint strategic framework that will be jointly developed in August 2015 will be extremely useful in further articulating our separate but complementary units of work.

- Recent engagement with the Ministry of Health has demonstrated to us their primary focus on costs and results when considering programs such as Liga Inan. In light of this, we will are in the process of developing a communication strategy that is tailored to the Ministry of Health as an audience and identifies key positions to engage with going forward.

ANNEXES

1. DELIVERABLES CHECKLIST
2. SCREEN SHOTS OF LIGA INAN DASHBOARD
3. REVISED MHEALTH TRAINING COMPONENT
4. ABOUT CATALPA

ANNEX 1: DELIVERABLES CHECKLIST

|		
1	**Milestone: Preparing for scale-up**	
1.1	MOU drafted with Ministry of Health.	✔
1.2	MOU signed with Marie Stopes International.	✔
2	**Milestone: Improving Service Delivery**	
2.1	mHealth component of Liga Inan training materials for health providers revised.	✔
2.2	Implementation plan for national scale-up developed with partners.	Ongoing
2.3	M&E Framework developed.	Ongoing
3	**Milestone: Strengthening Liga Inan Service**	
3.1	Baseline assessment to identify key MOH staff at district level to participate in design process completed.	✔
3.2	Plan for engaging with key MOH staff developed.	✔
4	**Milestone: Sustainability and Integration**	
4.1	Assessment of MOH ICT's department's capacity and activities completed.	✔
5	**Milestone: Preparing for pilots**	
5.1	Health sector scoping study completed.	N/A

ANNEX 2: SCREENSHOTS
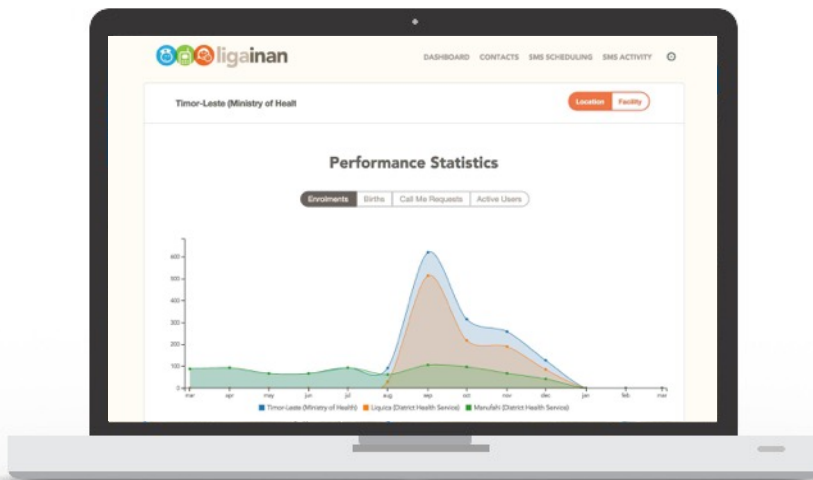
Liga Inan Dashboard
The dashboard provides an overview of the performance of the mHealth program in realtime.

Interaction Statistics
The dashboard allows project administrators to monitor and mange the activity in relative. Indicators include, number of subscribers, time of subscriptions, SMS performance statistics, and receipt messages.
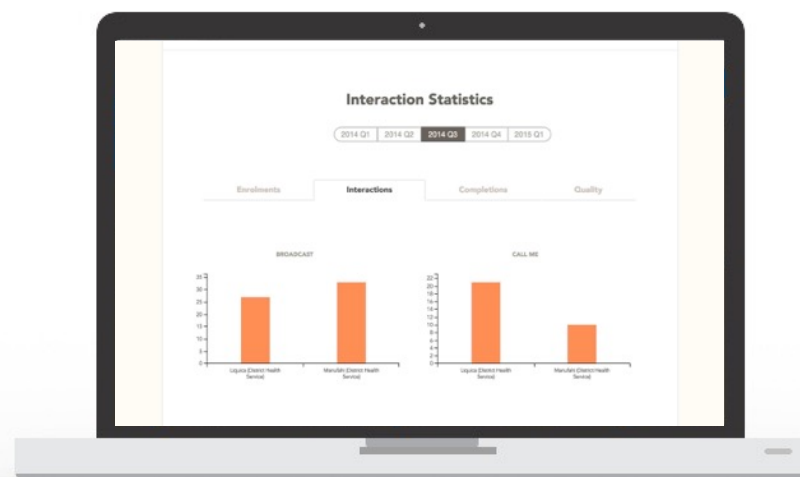
Liga Inan Activity List
The Liga Inan 'Activity List' allows for better monitoring of in-coming and out-going interaction through The platform.
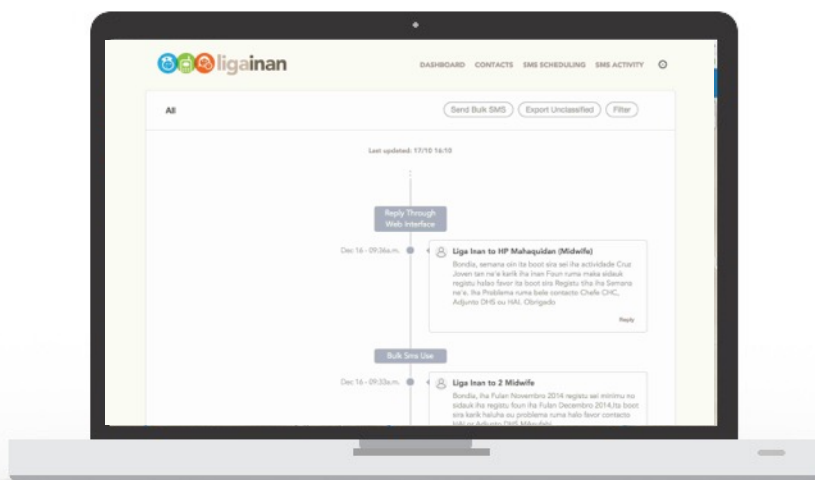
ANNEX 3: REVISED MHEALTH TRAINING PACKAGE

ligainan

Manual Orientasaun

Manual Orientasaun

Kontéudu

1 Saida mak Liga Inan?

Liga Inan ne'e dezenvolve atu tulun hamenus númeru mortalidade inan no bebé sira durante isin-rua. Inan barak iha Timor-Leste mak hela iha area remota no area rural. Ida ne'e difikulta sira atu asesu ba fasilidade saúde no parteira sira. Nudar rezultadu, feto barak mak hasoru difikuldade atu hetan konsellu no apoiu ne'ebé diak atu hadiak oportunidade ba isin-rua ne'ebé seguru no bebé ne'ebé saudavel.

Iha Timor, feto barak atende sira nia konsulta antenatal (ANC) primeiru, maibé feto oituan deit mak tuir konsulta ANC kontinuasaun sira. Feto barak mak prefere liu atu halo partus iha uma duké halo partus iha fasilidade saúde ida. Wainhira sira halo partus iha uma, dala barak la ho suporta parteira ida. Ami hatene katak dalan ida ne'ebé diak liu atu promove saúde inan isin-rua nian mak liu husi hametin inan nia ligasaun (kontaktu) ho ninia parteira.

Liga Inan hafasil inan sira no parteira sira atu komunika ba malu uza telemovel. Liga Inan uza telemovel tanba peskiza hatudu katak feto barak liu ne'ebé ho idade reprodutiva mak iha asesu ba telemovel ida. Rezultadu husi distritu sira ne'ebé implementa ona Liga Inan hatudu katak dalan ida ne'e efektivu hodi hasa'e númeru inan sira ba tuir sira nia konsulta ANC no aumenta mós númeru inan sira ne'ebé hili atu halo partus iha fasilidade saúde ka iha uma ho prezensa parteiru/a ida.

2 Halo introdusaun ba telemovel

Iha sesaun ida ne'e imi sei aprende oinsá atu:

- loke no taka telemovel
- karga imi nia telemovel
- halo no simu telefone
- hakerek, haruka no simu SMS
- asesu ba aplikasaun sira iha telemovel

"Kualidade tratamentu nian hadiak ona tanba Liga Inan kria koneksaun entre ami no pasiente sira. Liga Inan ajuda ami atu hetan informasaun detalla husi pasiente, no halo ami fó atensaun liutan ba pasiente. Wainhira Liga Inan seidauk iha, pasiente sira mai halo konsulta maibé depois ida ne'e, sira la mai ona. Ho Liga Inan ami bele kontaktu sira no sistema mós ajuda haruka mensajen ba inan sira atu fó hanoin sira atu mai konsulta."

Telemovel (hp) nia funsaun prinsipal sira

oin   kotuk

1 butaun atu loke/taka
2 butaun ba volume
3 kamera
4 lampra
5 fatin ba ligasaun atu halo kargamentu batria

Atu karga telemovel

USB kargador

1 Liga USB kargador ba fiu kargador

Fiu kargador
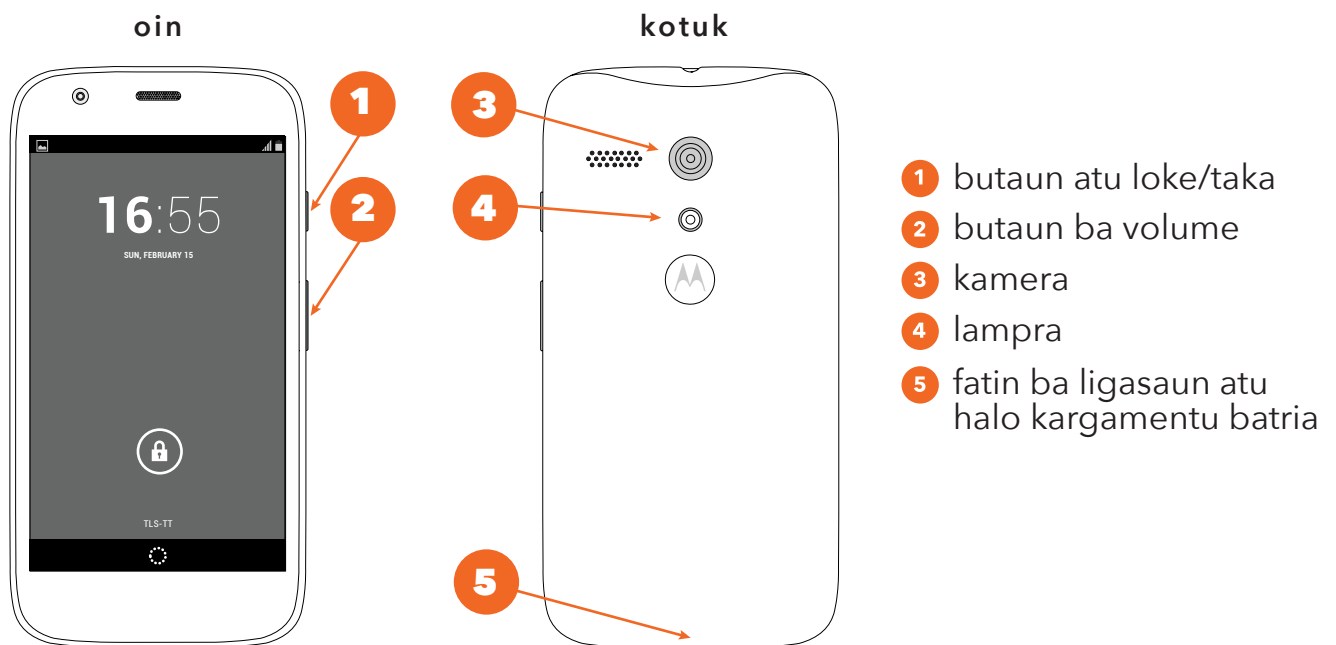
2 Liga fiu kargador ba telemovel
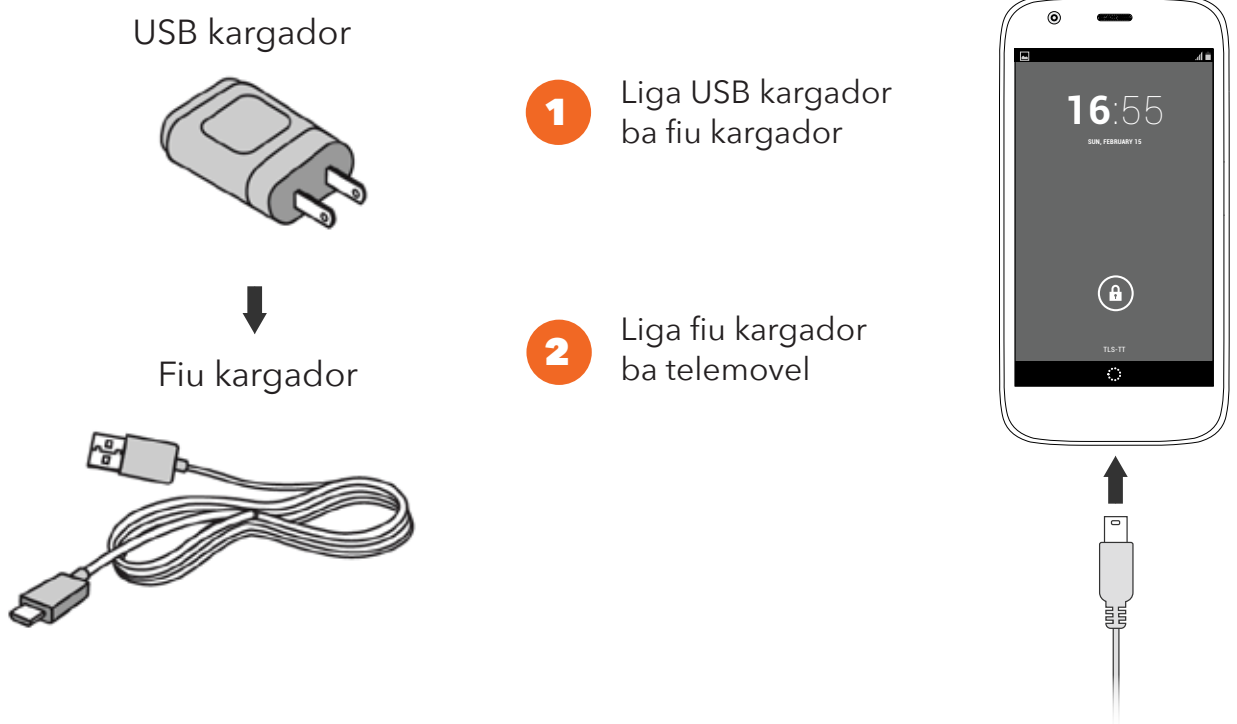
2.2 Asesu ba telemovel no janela duluhuk

Asesu ba telemovel

1 hanehan ho liman-fuan no dada ba sorin loos

2 hili íkon telefone

Janela duluhuk

Favoritus

1 halo chamadas

2 SMS aplikasaun

3 lista aplikasaun

4 aplikasaun ba lampra

5 aplikasaun atu kalkula estadu grávidas

Navegasaun

7 fila fali

8 fila ba janela dahuluk

9 aplikasaun sira ne'ebé foin

Oinsá atu halo chamada ida

1 hanehan íkon telefone iha janela dahuluk

2 hanehan iha ne'e

3 hanehan númeru atu kontaktu ba

4 hanehan butaun telefone

5 keta haluha hanehan butaun telefone dala ida tan atu hakotu kontaktu

KOKO TOK! | **1** | *Koko telefone imi nia maluk. Wainhira hotu keta haluha hakotu telefone. Husu ba imi nia maluk atu telefone imi.*

Oinsá atu simu telefone

1 hanehan iha butaun ne'e no mantein nafatin liman fuan, no…

2 …dada ba sorin loos atu hatan telefone

3 keta haluha atu hakotu telefone wainhira koalia hotu ona!

9
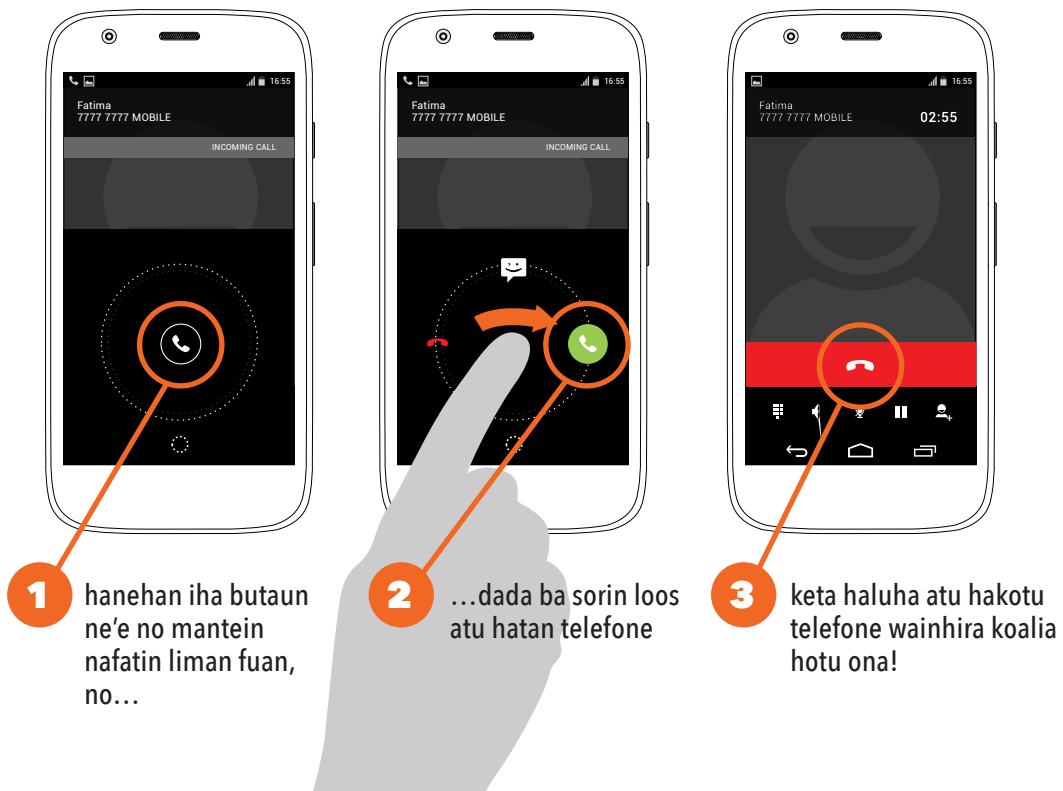
Opsaun seluk atu hakotu kontaktu

1 hanehan ho liman-fuan no dada ba kraik

2 hili "Hang up"

Asesu ba menu istória

1 hanehan íkon telefone iha janela dahuluk

2 hanehan butaun istória

3 Hili naran iha lista atu bolu

4 keta haluha hanehan butaun telefone dala ida tan atu hakotu kontaktu

Atu haruka SMS

1 hanenan íkon SMS iha janela dahuluk

2 hili 'new SMS'

3 hakerek númeru telefone iha area 'To'

4 hakerek imi nia mensajen iha area 'Type message'
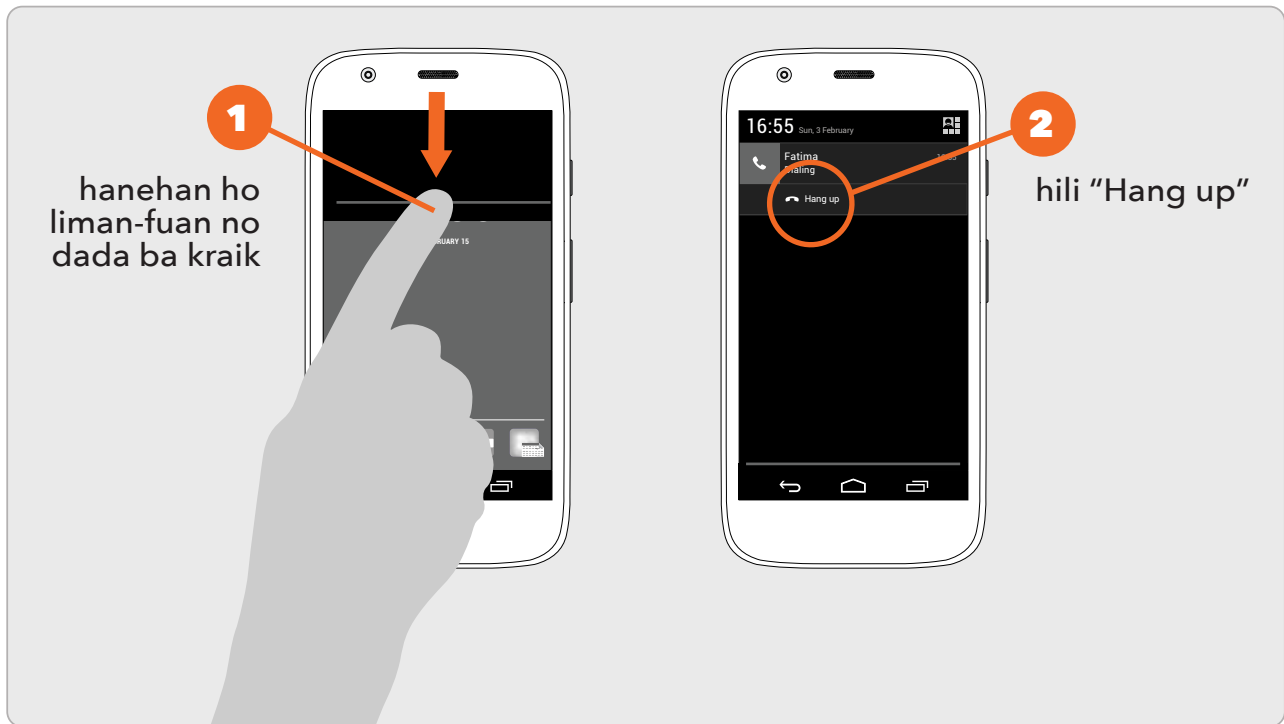
5 hanehan butaun 'send' wainhira imi prontu ona atu haruka SMS

KOKO TOK! | **2** | *Haruka SMS ba imi nia maluk. Hatan ba SMS.*
Husu imi nia maluk atu SMS imi.

Atu simu SMS

1 hanehan íkon SMS iha janela dahuluk

2 hili mensajen SMS ne'ebé imi hakarak atu lee

3 hakerek imi nia mensajen iha area 'Type message'

4 hanehan butaun 'send' wainhira imi prontu ona atu haruka SMS

Numeru no Pontuasaun

1

Hili "?123"

2
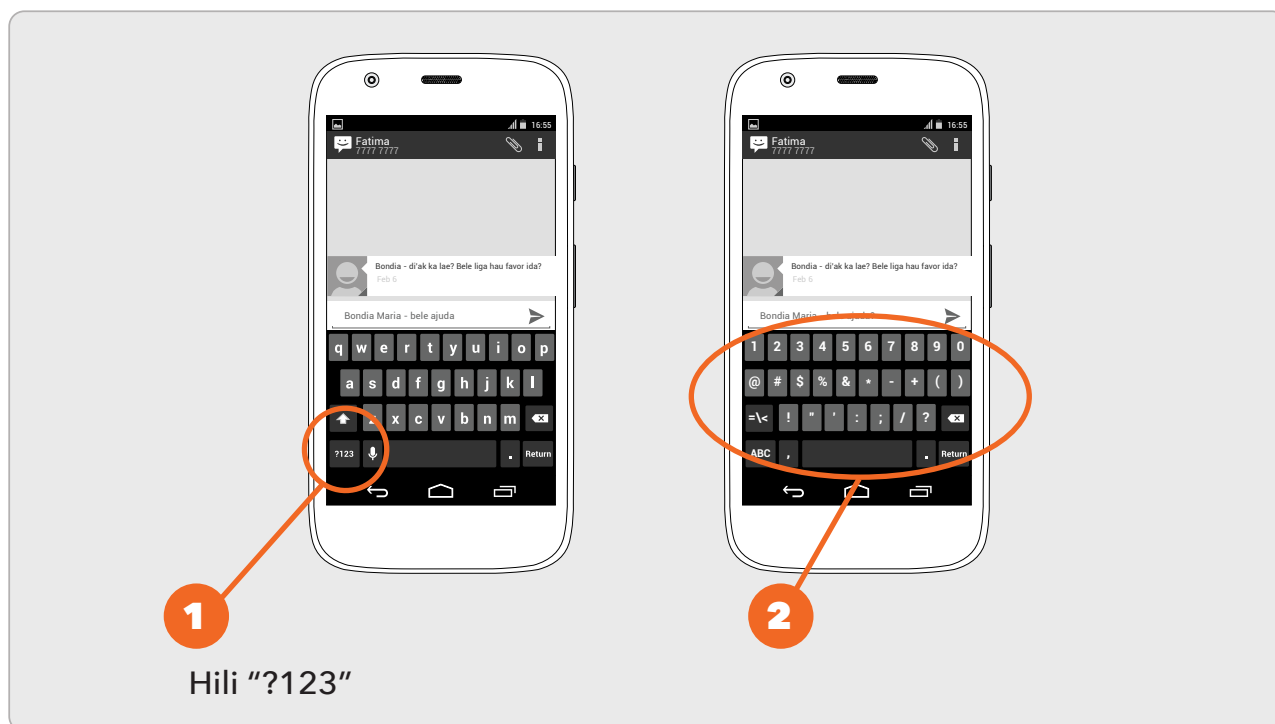
2.5 Oinsá atu asesu ba aplikasaun sira

Atu asesu ba Aplikasaun sira

1 Hili butaun lista aplikasaun nian

2

Kose ba karuk ka loos atu asesu ba pajina aplikasaun sira no hili aplikasaun ida ne'ebé mak imi hakarak atu uza

---

KOKO TOK! | **3** | *Buka aplikasaun kalkuladora iha imi nia telefone. Loke kalkuladora. Kalkula to'ok 3.15 x 42 + 2/9 =...?*

3 Introdusaun ba Liga Inan

Iha sesaun ida ne'e imi sei aprende oinsá atu:

- rejistu inan ida ba Liga Inan
- haloos ka troka detalla inan nian
- haruka SMS ba grupu inan hotu ne'ebé rejista ona
- haruka SMS ba grupu inan sira ne'ebé hela iha Suco ida
- simu lista inan sira ne'ebé besik tuur-ahi ona
- konfirma katak bebé moris ona
- hapara Inan sira atu kontinua simu mensajen programadu sira ne'ebé sira lakohi
- inan sira mós bele asesu ba Liga Inan

Kartaun Referensia

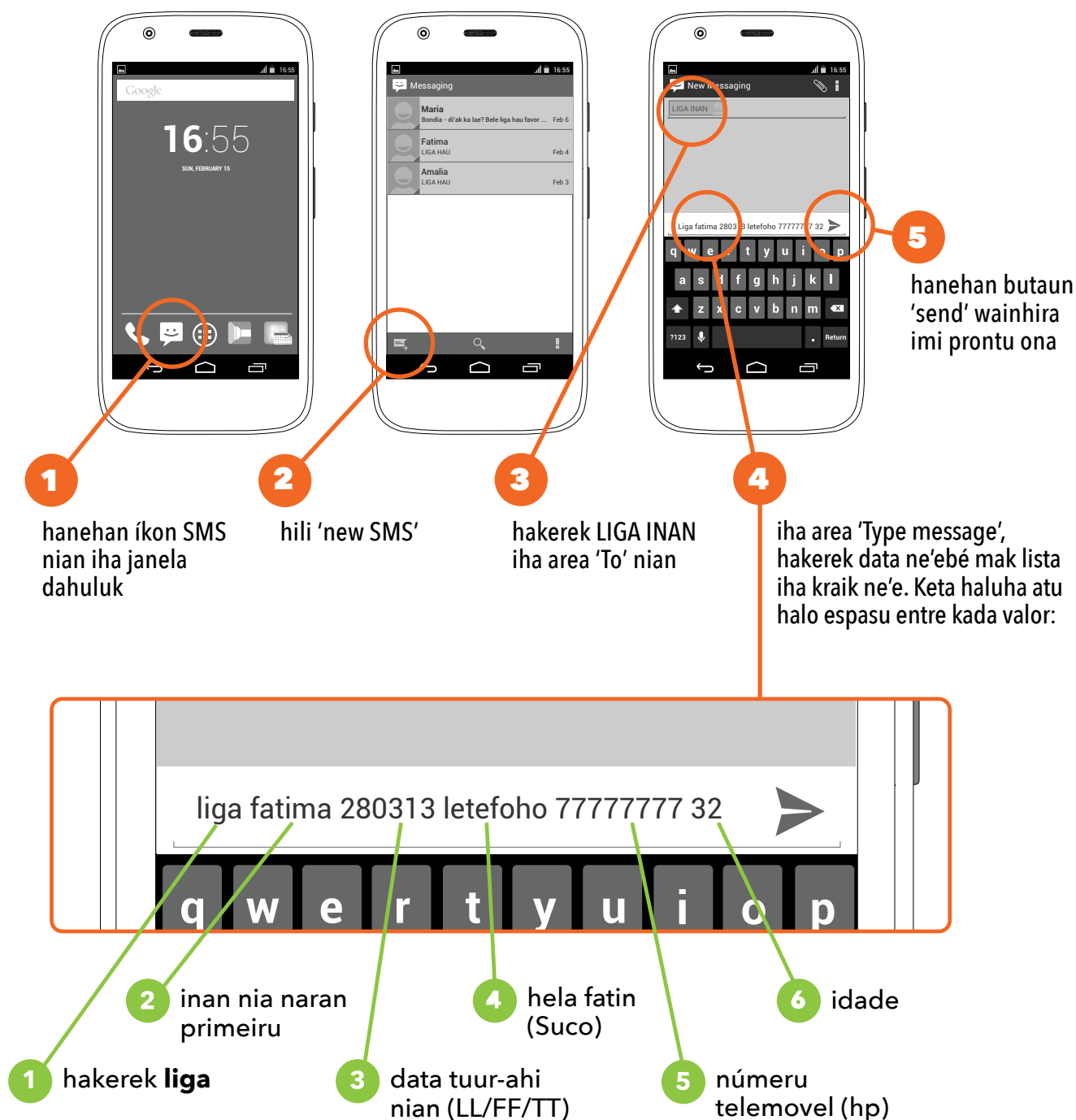Keta haluha uza imi nia kartaun referensia Liga Inan atu ajuda imi ho ezersísiu hirak ne'e.
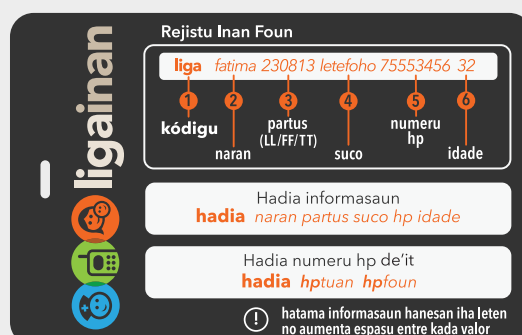
"Wainhira Liga Inan seidauk iha, inan sira mai konsulta dala ida ka dala rua de'it, ami mós la iha tan komunikasaun ba malu. Maibé hafoin iha Liga Inan, ami sempre kontaktu nafatin ho inan sira, ne'ebé ami sente hanesan ami (parteiras no inan isin-rua sira) ne'e hanesan familia ida."

Rejistu Inan foun

Atu rejistu Inan ida ba programa Liga Inan ne'e fasil, hanesan wainhira haruka SMS:

5 hanehan butaun 'send' wainhira imi prontu ona

1 hanehan íkon SMS nian iha janela dahuluk

2 hili 'new SMS'

3 hakerek LIGA INAN iha area 'To' nian

4 iha area 'Type message', hakerek data ne'ebé mak lista iha kraik ne'e. Keta haluha atu halo espasu entre kada valor:

liga fatima 280313 letefoho 77777777 32

2 inan nia naran primeiru

4 hela fatin (Suco)

6 idade

1 hakerek **liga**

3 data tuur-ahi nian (LL/FF/TT)

5 número telemovel (hp)

IMPORTANTE!

Keta haluha, SEMPRE halo espasu ida entre kada valor!
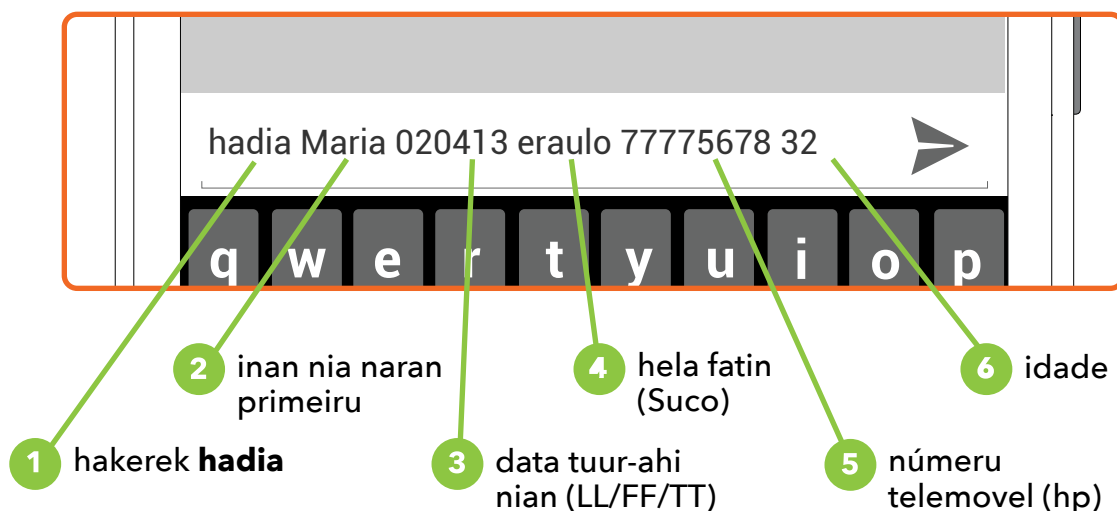
KOKO TOK! | **4** | **Introdus inan ida ba Liga Inan:**
Husu inan nia informasaun detallu no rejista nia uza LIGA

3.2 Atualiza (koriji) informasaun (HADIA)

Oinsá atu koriji informasaun

Imi bele troka detallu husi inan ne'ebé rejistu ona liu husi uza liafuan HADIA. Haruka SMS ida ba Liga Inan ne'ebé dehan 'Hadia' ho informasaun foun kompletu haktuir formatu tuir mai ne'e:

hadia Maria 020413 eraulo 77775678 32 ➤

q w e r t y u i o p

2 inan nia naran primeiru

4 hela fatin (Suco)

6 idade

1 hakerek **hadia**

3 data tuur-ahi nian (LL/FF/TT)

5 número telemovel (hp)

KOKO TOK! | **5** | **Ita hetan sala ida iha inan nia detallu!:**
HADIA inan nia naran ba Jacinta no nia tinan ba 28

Oinsá atu koriji número hp

Imi bele troka número telefone liu husi uza liafuan HADIA. Halo tuir deit formatu iha kraik ne'e, no haruka SMS ba 'Liga Inan':

hadia 77777777 88888888 ➤

q w e r t y u i o p

1 hakerek **hadia**

1 hakerek número tuan

1 hakerek número foun

KOKO TOK! | **6** | **Ita hetan sala ida iha inan nia número telemovel:**
HADIA inan nia número hp

Oinsá atu haruka mensajen ba inan sira hotu

Imi bele haruka SMS grupu ba ema hotu ne'ebé mak rejista ona ho imi. Uza formatu tuir mai ne'e:

inan: aban klinika LA IHA

q w e r t y u i o p

1 hakerek **inan:**   **2** hakerek imi nian mensajen iha ne'e

IMPORTANTE!
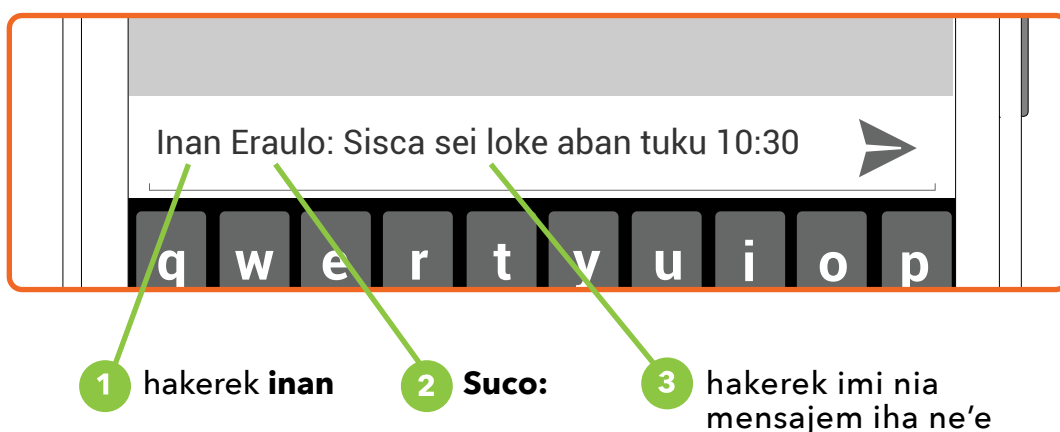Keta haluha, SEMPRE halo "**:**" depois **inan**

KOKO TOK! | **7** | **Fulan ida ne'e mak Fulan Mundial ba Vasinasaun nian, informa inan hotu atu lori sira nia oan mai vasina:**
Haruka mensajen INAN ida ba inan hotu

Oinsá atu haruka mensajen ba Inan sira iha Suco ida de'it

Se imi presiza atu haruka SMS grupu ba ema sira ne'ebé hela iha *Suco ida de'it*, entaun ninia formatu mak hanesan tuir mai ne'e:

Inan Eraulo: Sisca sei loke aban tuku 10:30

q w e r t y u i o p

1 hakerek **inan**   **2** **Suco:**   **3** hakerek imi nia mensajem iha ne'e

IMPORTANTE!
Keta haluha, SEMPRE halo "**:**" depois Suco
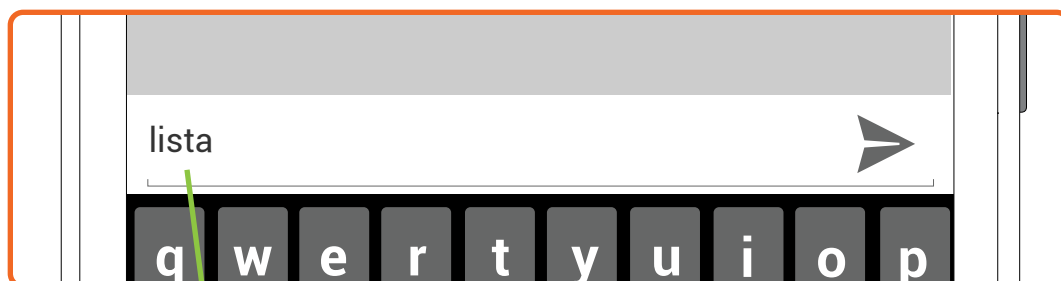
KOKO TOK! | **8** | **SISCA sei halo iha Tersa iha imi nia Suco SISCa:**
Haruka mensajen INAN ida ba inan hotu ne'ebé hela iha ita nia suco no informa sira atu mai tuir SISCA iha Tersa.

3.4 Lista partus ne'ebé besik ona (LISTA)

Informasaun partus nian

Atu simu SMS konaba lista husi inan sira hotu ne'ebé besik atu tuur-ahi ona iha semana rua mai ne'e nia laran, imi bele uza funsaun LISTA:

lista

**1** hakerek **lista**

KOKO TOK! | **9** | **Agora tempu atu haree se inan sira halo planu ba partus nian:**
Haruka LISTA atu haree inan sira ne'ebé mak besik atu tuur-ahi ona.

3.5 Konfirma bebé moris ona (BEBE)

Oinsá atu konfirma katak bebé moris ona

Imi bele atualiza Liga Inan nia sistema liu husi konfirma katak bebé ida moris ona. Atu halo ida ne'e, imi bele uza funsaun BEBE. Ida ne'e sei garante katak inan ne'ebé mak foin fó partus ne'e bele simu mensajen saúde nian ne'ebé própriu. Funsaun BEBE nian mak formatu hanesan tuir mai ne'e:

bebe 77777777
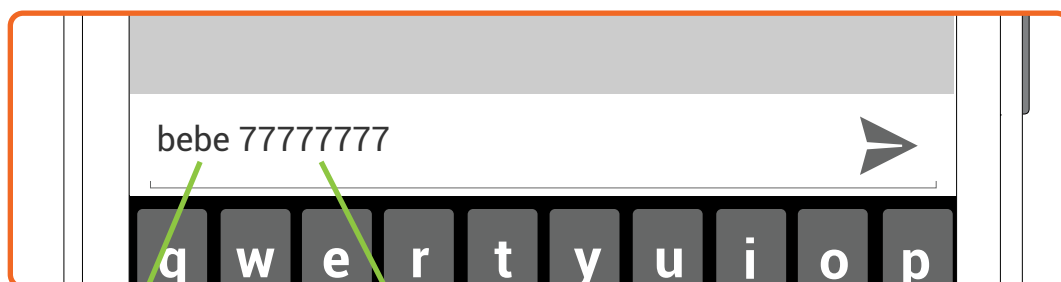
1 hakerek **bebe**   **2** inan nia númeru hp

KOKO TOK! | **10** | **Imi foin asisti partus ba bebé feto ida!:**
Haruka BEBE atu asegura katak bebé nia inan sei simu mensajen sira ne'ebé loos

18

Oinsá atu hapara mensajen ba inan sira

Funsaun PARA ne'e uza atu hapara imediatamente mensajen automatizada sira konaba informasaun saúde nian ba inan sira. Ninia lala'ok mak hanesan tuir mai ne'e:

Para 77777777

1 hakerek **para**   2 inan nia número hp

KOKO TOK! | **11** | **Inan ida la presiza atu kontinua simu mensajen sira:**
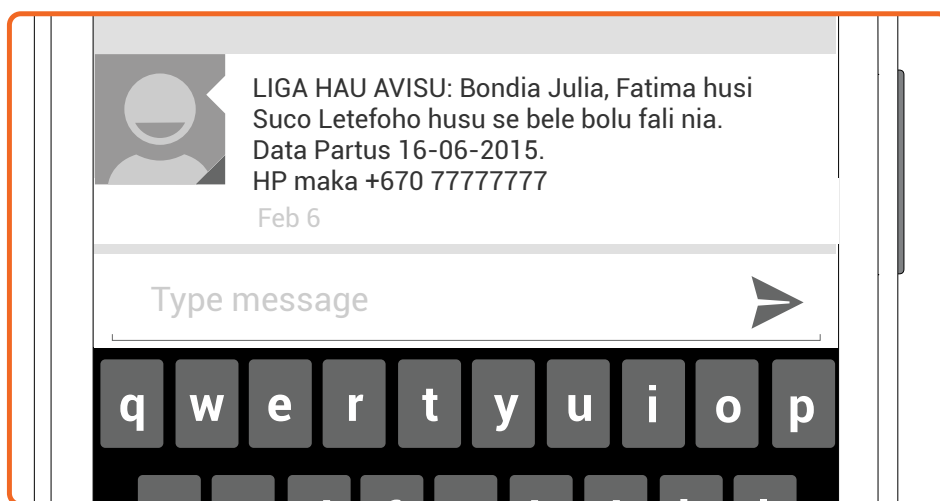*PARA inan sira nia mensajen*

19

Funsaun Liga Inan ba Inan sira ne'ebé rejista ona

Liga Inan iha funsaun adisional rua ne'ebé espesífıkamente ba inan sira ne'ebé rejistu ona atu bele uza. Funsaun rua ne'e mak LIGA HAU no PARA. Se inan ida konkorda ona atu rejistu ho Liga Inan, entaun nia sei simu informasaun iha adezivu (stiker) ida atu taka iha ninia LISIO:

Funsaun rua ne'e simples tebes ba inan sira at uza - sira haruka deit SMS ida ho liafuan 'LIGA HAU' ka 'PARA' ba Númeru Liga Inan!

Funsaun LIGA HAU haruka SMS ida direitamente ba Parteira ne'ebé servisu hela, husu parteira ne'e atu telefone ba inan ne'ebé refere. Tanba Liga Inan kolekta ona ninia informasaun saúde, entaun informasaun ne'ebé haruka ba parteira sei automatikamente inklui informasaun hotu ne'ebé relevante ba inan ne'ebé husu atu bolu fali nia ne'e. Tuir mai mak ezemplu husi mensajen LIGA HAU ne'ebé karik imi sei simu:

| KOKO TOK! | 12 | **Ita boot inan ida no presiza asistensia husi profesional saúde ida:** *Haruka LIGA HAU* |

Funsaun 'PARA' sei hapara inan atu simu tan mensajen sira konaba saúde nian.

| KOKO TOK! | 13 | **Ita boot inan ida no la presiza atu simu tan mensajen programadu sira:** *Haruka PARA* |

NOTA

ANNEX 4: ABOUT CATALPA

Catalpa International is a not-for-profit design and technology agency which provides innovative, simple and effective solutions in a development context. Catalpa's work is governed by the values of human-centered design, appropriateness and simplicity. The overall success of our work is measured by its impact on the individual.

Launched in 2010, Catalpa builds tools to assist governments, NGOs, communities and donors to make decisions to improve the delivery of aid and services.

Catalpa focuses on how technology can be used to improve the management of information in various sectors, including health, agriculture, finance, enterprise, governance, telecommunications services and advocacy. We combine innovative technologies with projects that improve the lives of individuals. We believe that technology can be an agent for change.

"We believe that technology can be an agent for change."

Catalpa brings together a team of technical providers with a wide range of skills and experience. Our proposed project staff are fluent in Tetum, have experience working in the health sector in Timor-Leste, and are international development, as well as IT professionals.

Our previous work has included partnerships with the Government of Timor-Leste, the Government of Myanmar, and donors such as ILO, FAO, UNICEF, WHO, USAID, European Commission, World Bank and the Asian Development Bank.