

App

A tablet-based solution
for training immunization
facility workers in Laos



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The vaccine cold chain transports temperature-sensitive vaccines from the national level down to local health facilities.



Cold chain managers, health facilities, and vaccine recipients can benefit from accurate, up-to-date information.



Each month, immunization centers in Laos must report a summary of vaccine stock levels and cold-chain refrigerator performance.

SL PC 102 PE 81

Stock level

PCV vaccine: 102

Penta vaccine: 81

**These summaries are sent
as structured SMS messages.**



But, many people in Laos have never used SMS.

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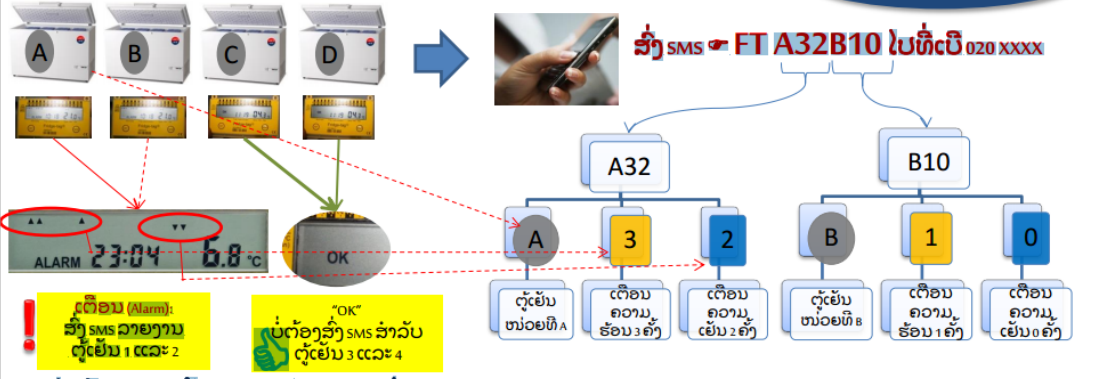
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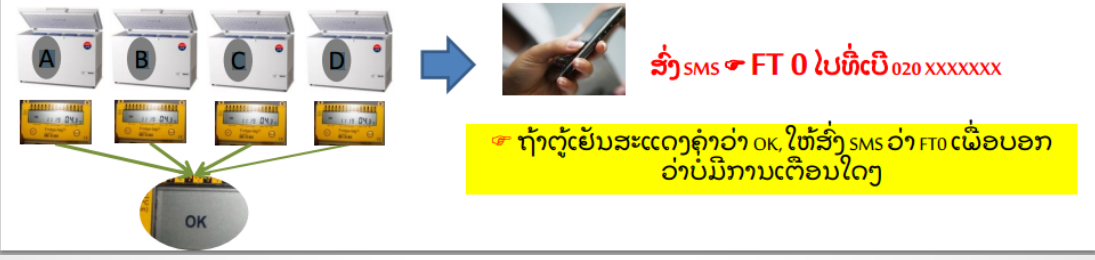
Health facilities need to quickly train workers to send these messages correctly.

ຈະສົ່ງຂໍ້ຄວາມສັ່ນ (SMS) ແບບໃດ ເມື່ອອຸປະກອນສະແດງ ການເຕືອນ "Alarm"

ສົ່ງ SMS ທຸກໆ
 ວັນຈົນ ທີ່ອິດຂອງ
 ເດືອນ



ຈະສົ່ງຂໍ້ຄວາມສັ່ນ (SMS) ແບບໃດ ເມື່ອອຸປະກອນສະແດງ "OK"

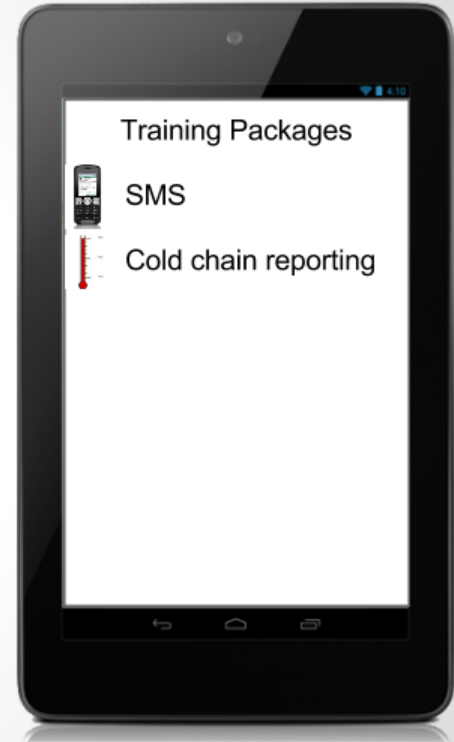


Currently, new workers have to learn from PowerPoint slides.

Our solution

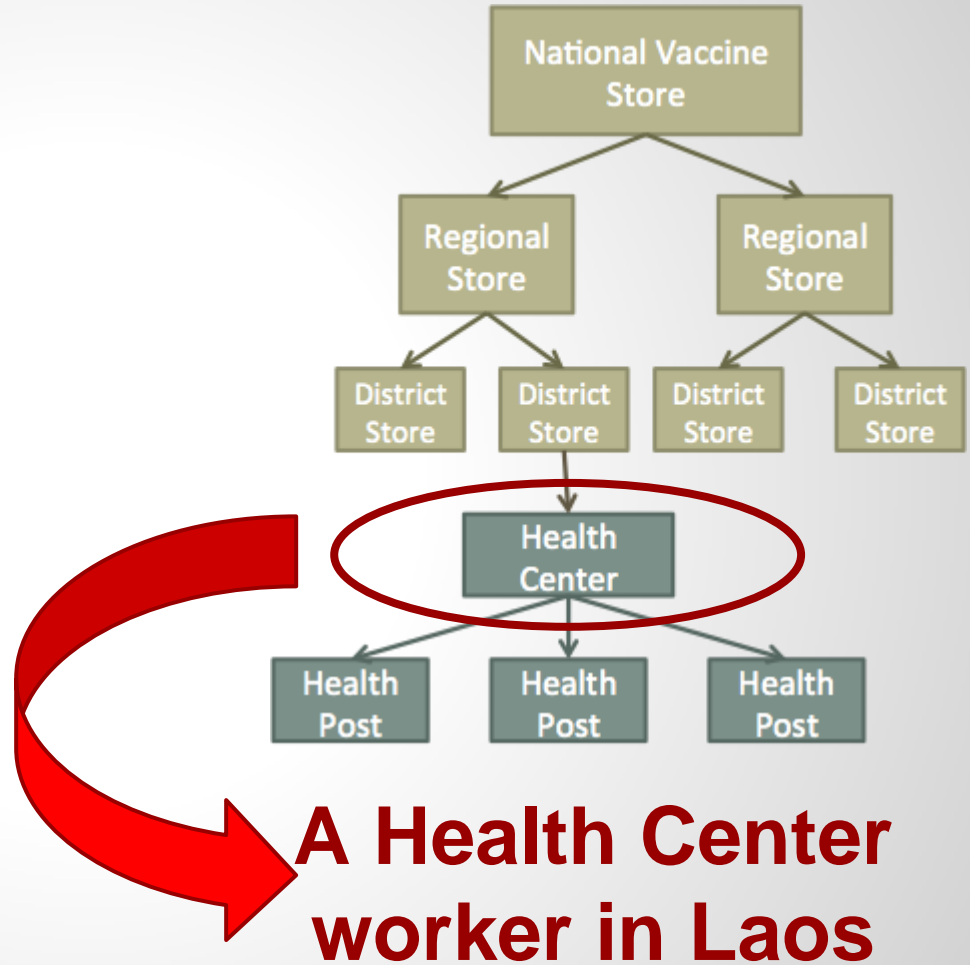
A tablet-based
interactive training
application using
Android

- Training videos
- Interactive quizzes
- Instructive puzzles





Meet Akamu,

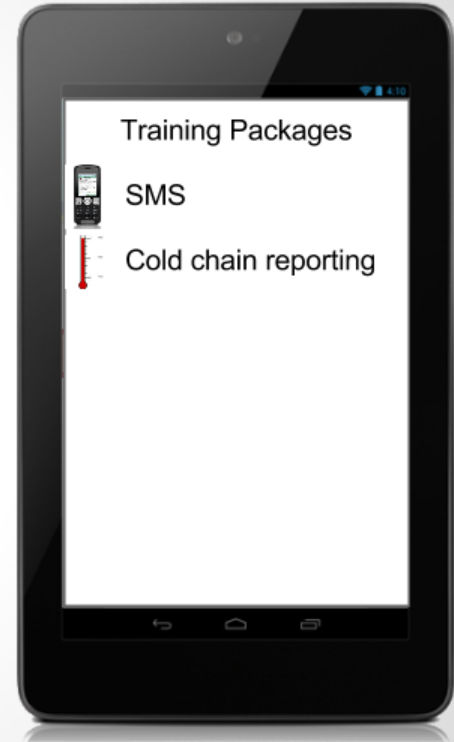


**A Health Center
worker in Laos**

Browsing instructional packages

An instructional package consists of...

- a video on a specific topic
- a related instructional quiz
- instructional puzzles



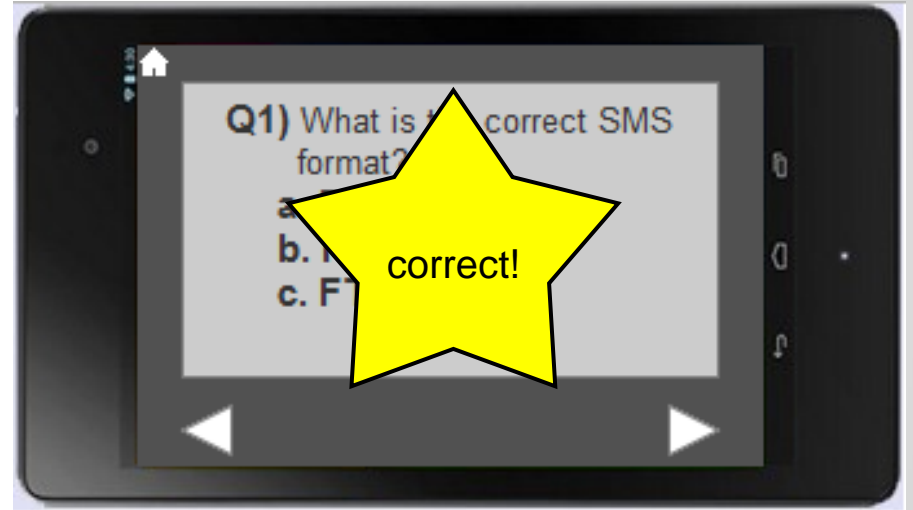
Training videos

- Consistent
- Videos can be refined by instructors
- Video segments can be replayed as necessary
- More workers can be trained, quickly



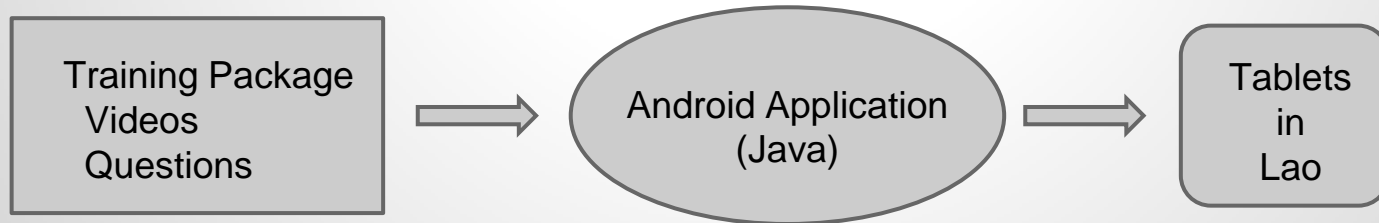
Interactive quizzes

- Dynamic feedback
- Gamification can enhance learning



Architecture

- Android application
 - Video playback support
 - Interactive sections
- Extensibility
 - Implement other training packages



Design challenges

- Working with Lao
- Making the interactive training intuitive and effective
- Creating an extensible platform, so that new instructional packages can be added easily



Prototype iteration

Prototype revisions will be based on...

- Feedback from Ranjit and Viorica
- User testing in Laos

Current status

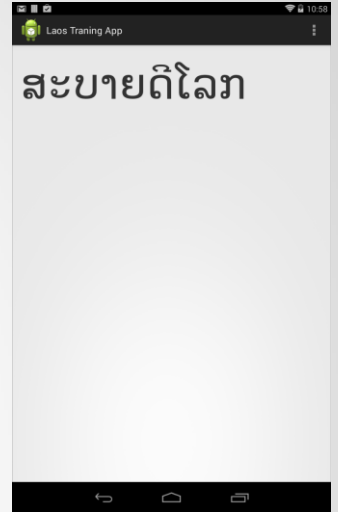
We have met with...

- Ranjit Dhiman
UNICEF cold chain consultant
- Viorica Berdaga
UNICEF Chief of Health and Nutrition in Laos
- Trevor Perrier
UW grad student



Next quarter

- **Before next quarter:**
 - *“Hello, World”*, in Lao
- **Next quarter:**



APRIL	MAY	JUNE
Initial App Development	User Testing and Revisions	Final Application
	Midterm Presentation	Final Pres

Related work

- Digital Green
- Digital Public Health
- MultiLearn



The goal

- Enhancing the learning experience
- Reliable, up-to-date information on vaccine stock levels and the cold chain
- An extensible platform for adding new instructional packages

Questions?

Thank you