Qualcomm<sup>®</sup> technologies accelerate human progress.

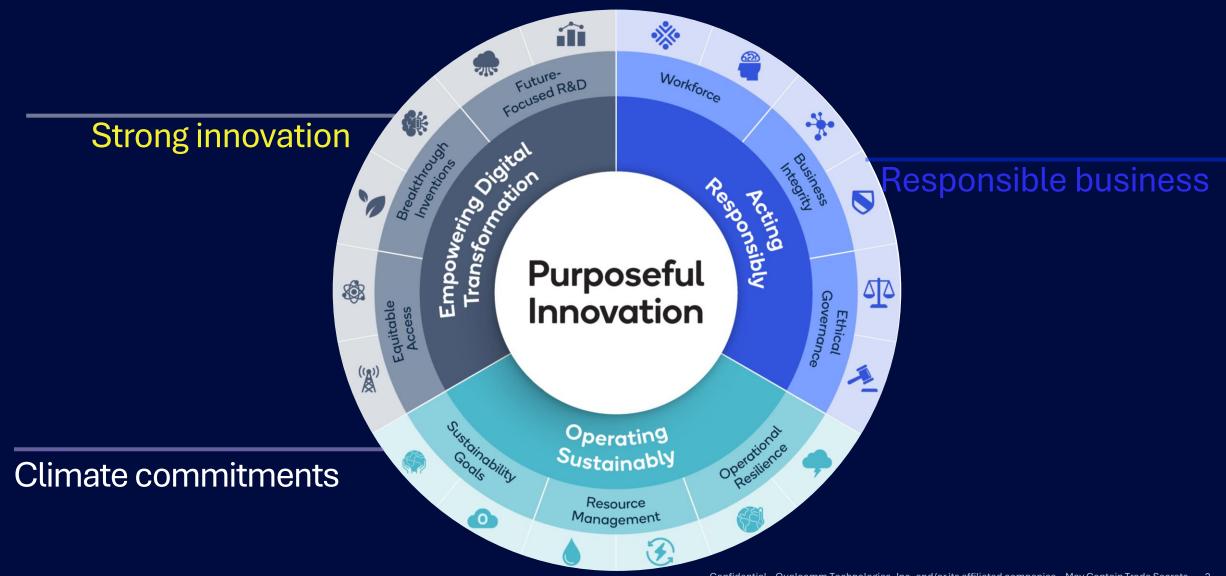
One way we do this is through our Qualcomm<sup>®</sup> Wireless Reach<sup>™</sup> Initiative.







#### **Purposeful Innovation**





Wireless Reach brings to life a world of opportunities

in places where it will make the greatest social impact and demonstrates what's possible through the adoption of wireless technologies.



### Qualcomm® Wireless Reach™ Initiative Impact

# 150

Projects in over 50 countries benefitting 27+ million people

## Wireless Reach Bringing the Qualcomm Story to Life



and societies...

## Wireless Reach Program Selection











Must demonstrate how Qualcomm technologies can improve lives Must be aligned with one of the five Wireless Reach verticals

Must involve collaborating with stakeholders Must meet a community need that is aligned with local government goals & initiatives Must be scalable and sustainable

## WISE, Senegal

Improving the livelihoods of small-scale fishers and fish processors

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#### LOCATION: Nationwide, Senegal

The Wireless Solutions for Fisheries in Senegal (WISE) program uses technology to improve fish catch and processing practices in the country's artisanal fish industry. The program aims to make the practice of fishermen and fish processors, who are predominantly women, safer and more efficient, improving the income and lives of those working in the sector. WISE's comprehensive approach includes the generation and dissemination of safety practices, navigational resources for fishermen, price data collection and efficient sharing systems, and access to finance. To deliver these products, the WISE App offers daily information on fish market prices, weather forecasts, navigation resources, microfinance and health insurance calculators, and information on fishing and fish processing best practices. The program is being adopted by the government and plans to scale nationwide.



- Participating fishermen and fish processors have reported improved annual income of US \$300-400 on
- average Fish processors report increased fish processing capacity of 100% (up to 1,000kg/month) on average



7,000+ Artisinal fishers and fish processors in five major fish landing sites – Dakar, Mbour, Mballing, Joal and Pencum. At scale, WISE will provide services and resources to over 70,000



3G/4G enabled phones equipped with the WISE mobile app, which has both online and offline capabilities



#### **Strategic Stakeholders**

- FHI 360
- Intermondes
- Ministry of Digital Economy and
  - Telecommunications
- Food Security
  Commission
- Ministry of Fisheries and Maritime Economy
- Free
- "WISE contributes to the SDGs by improving the income of small- scale fishermen and fish processors, increasing women's access to technology and supporting the sustainable use of marine resources,"
- Berhane Gebru, Technical Advisor for Digital Development, FHI 360

## KidzAlive Mobilized, South Africa

Leveraging mobile technology to enhance HIV prevention, care and treatment for children and adolescents

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#### **LOCATION:** Nationwide, South Africa

Great strides have been made in the fight against HIV and AIDS globally. This is especially true in South Africa, which has the world's largest HIV treatment program. However, largely due to social and structural barriers, children and adolescents are still being left behind and not receiving life-saving treatment. KidzAlive Mobilized is a holistic, wrap-around mHealth solution that addresses the various touch points where children and adolescents living with HIV can access HIV information and services, and includes all the key individuals involved in their care, increasing the likelihood of treatment adherence and therefore improved health outcomes. A suite of mobile apps and platforms - the KidzAlive Talk Tool App (KATTA), @Home App, and Caregiver Connect – provides children, healthcare providers and caregivers with access to actional information and tools that aim to decrease childhood mortality and morbidity.





- In a pilot, KATTA identified 7% of patients as HIV+, a significant improvement over the national case identification average of 2%
- Providers report, on average, a 62% increase in confidence and competence in providing age-appropriate care
- 100% of HIV+ patients referred to treatment





- Over 30,000 children and adolescents reached with the KATTA in ~120 clinics 700+ healthcare workers trained
- on the KATTA 400+ primary caregivers reached through Caregiver Connect mobile platform
- Levono Tab 4 10 Snapdragon<sup>®</sup> enabled tablets with embedded mobile LTE capabilities The KATTA, @Home App, and Caregiver Connect Whatsapp-based platform

Solution



#### Strategic Stakeholders

- Zoë -Life Innovative Solutions
- Department of Health
- Keep a Child Alive
- Plus Narrative
- "We believe that advanced mobile technologies have a great role to play in improving access to healthcare services, lowering costs and increasing efficiencies."
- · Elizabeth Migwalla, Vice President and Head of Government Affairs (Middle East and Africa), Qualcomm Inc.



## Her Digital Skills for Life, *Pan-Africa*

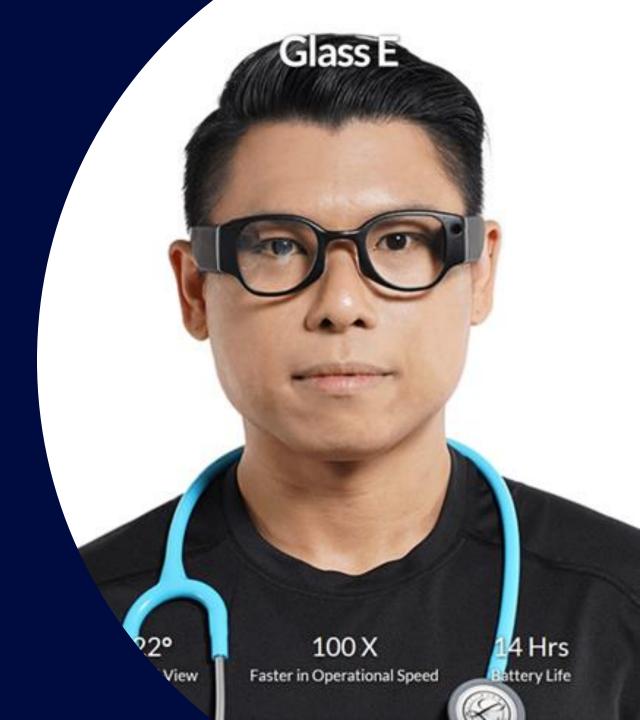
Collaborating with ITU to advance foundational digital skills for women and girls

## Paramedics Augment Reality Smart Glasses

Saving lives with Augmented Reality Glasses

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#### LOCATION: Multiple, Singapore

The Paramedics Augmented Reality Smart glasses project will provide Paramedics and Doctors from the Trauma & Acute Care Department at the Singapore Public Hospitals with access to Augmented Reality (AR) Telemedicine communication. With the AR Glasses, Paramedics will be able to receive contextualized mission-critical information in real time such as identifying and retrieving relevant patient medical data to stabilize the condition of the patient with the purpose of reducing any clinical errors.



#### **Strategic Stakeholders**

- <u>Moon</u>
- Singtel



Equip paramedics with essential real-time information that can save the lives of emergency patients



During the first year of implementation, the Recipient will deploy approximately 20 of smart glasses in the field, train 50 of paramedics and doctors, and collaborate with 3 hospitals.



Upon successful clinical and operational trials success, Singapore Ministry of health will order up to 4,000 pieces of Qualcomm-enabled AR glasses (XR1)



## ASCON, Brazil

Enabling a world where all students are intelligently connected from home, from the classroom, or virtually from anywhere.

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#### LOCATION: Goiania, Brazil

Many young adults report lacking the essential digital literacy and computer skills needed to succeed in the workplace. In Brazil, the high cost of connectivity, low speeds, and limited infrastructure represent a significant challenge for students from underserved areas. The ASCON program aims to bridge that gap and ensure digital inclusion by enabling a world where all learners, regardless of their economic status and location, are intelligently connected from home, the classroom, or virtually anywhere. The ASCON program provided middle school students and teachers across four schools in Goiania with Qualcomm-enabled ACER Chromebook511 notebooks. In the second and third year, the program expanded to include VR headsets and to implement VR labs at the participating schools.



pact



The ASCON program seeks to enhance teachers' competencies and students' digital skills by equipping them with devices with mobile connectivity and providing teachers with professional development to aid in the educational journey facilitated by the use of technology.



During the first year, the ASCON program has benefited 230 middle school students and 19 teachers across four schools in the City of Goiania.



ACER Chromebook511 notebooks equipped with a Snapdragon® 7C processor and mobile LTE capabilities and **Beenoculus DP1 VR** headsets with X1 QC platform



#### Strategic Stakeholders

<u>ACER</u>	Embratel
<u>Calriz</u>	Instituto Crescer
<u>Claro</u>	Prefeitura de Goiãnia

"In a world that is more connected, it is essential to improve digital skills so students can take advantage of all the opportunities that digital technologies and connectivity can offer."

— Instituto Crescer Dr. Luciana Allan, Director

# Thank you

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## Smart Agriculture, *China*

Helping traditional agricultural cooperatives compete in the digital age

#### **LOCATION:** China

Building digital villages fosters rural revitalization. Wireless Reach and the China Foundation for Rural Development have partnered on a Smart Agriculture program designed to enhance the capacity of agricultural cooperatives and drive industrial upgrading by introducing a smart agricultural management system to traditional farming. Launched in 2020, the Smart Agriculture program has installed Qualcomm IoT technology to help local farmers monitor meteorological conditions, water quality, soil conditions, and crop pests in 3 counties of China. By facilitating the collection and analysis of farm-specific data, this program helps inform production and quality control decisions making and increasing the efficiency of traditional agricultural cooperatives. From 2023, this program will leverage digital agriculture technology to enhance working efficiency of farmers

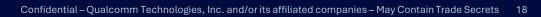


#### **Strategic Stakeholders**

China Foundation for Rural Development State Administration for Market Regulation Ministry of Industry and Information and Technology

The Smart Agriculture project leverages mobile IoT technologies with traditional agricultural production. The platform enables comprehensive monitoring of meteorological conditions, water and soil quality, and crop pests and diseases through various sensors, monitoring stations and cameras deployed in 3 counties. The program boosts productivity and raises farmers' incomes by building a more scientific, precise, and standardized agricultural management system.

 Ding Yadong, Deputy Secretary-General, China Foundation for Rural Development





60% of smart agriculture system visitors in Tiandong county reported an increased volume of Mango.

80% of farmers in Tiandong reported increased income



8,200 farmers have benefited from the program

Solution

Qualcomm technology enabled monitoring system.

Qualcomm technology enabled agriculture drones and unmanned ground vehicle



## ColdTrace, Global

Aiding in the safe vaccine delivery to the last mile

#### LOCATION: India, Kenya, Tanzania

ColdTrace X is an innovative wireless solution designed to empower countries to monitor their cold chain system effectively and protect life-saving vaccines. Qualcomm technology is being used to provide a reliable solution for the safe and timely delivery of vaccines in low- and middle-income countries. The COVID-19 pandemic has shed light on important cold chain management requirements for vaccines. ColdTrace X demonstrates the power of wireless technology to improve the reliability, efficacy, and resiliency of vaccine distribution globally. ColdTrace X provides a robust and affordable solution for effective cold chain management in low- and middle-income countries. The wireless Bluetooth and cellular-enabled ColdTrace X system drives change at the national and regional level by providing remote visibility across the cold chain and sending temperature alerts and alarms to nearby health workers that can take action to protect vaccines at risk.



Impact

**Resilient Cold Chain -** ColdTrace X data provides the basis for a resilient, well-functioning cold chain system.

**Saves Lives -** ColdTrace X helps countries keep vaccines in the proper temperature range, which means vaccines work the way they should —and when a person or child is vaccinated, they get the intended immunity



The United National Development program has installed 7000 ColdTraceX devices in public health facilities in India



ColdTrace X base station has been built around the Qualcomm® 9205 LTE IoT modem. The ColdTrace X wireless temperature sensor nodes are placed inside the vaccine refrigerator The device uploads temperature data via the cellular network or Wi-Fi.

#### Nexleaf ColdTraceX solution



#### **Strategic Stakeholders**

UNDP	Ministry of Health Republic of Kenya
GAVI	Ministry of Health United Republic of
VVDN	Tanzania

Real-time data is essential for maintaining and improving cold chain performance to store vaccines at the optimal temperature. We're proud to partner with Nexleaf Analytics to strengthen vaccine systems and tackle immunisation challenges

• GAVI, the Global Alliance for Vaccines