QUALCOMM
Wireless Reach

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Wireless Reach™

Qualcomm's Approach to Improving People's Lives Worldwide

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Letter from Our CEO

Empowering Communities Worldwide with Qualcomm Technology

Qualcomm is the world leader in next-generation mobile technologies. For nearly 30 years, Qualcomm's ideas and inventions have driven the evolution of wireless communications, connecting people more closely to information, entertainment and one another. Today, Qualcomm technologies are powering the convergence of mobile communications and consumer electronics, making wireless devices and services more personal, affordable and accessible to people everywhere.

At the heart of Qualcomm's culture is the belief that mobile technology presents an opportunity to create value, extend our reach and make a genuine impact. We believe that building lasting value to realize this vision requires more than a focus on shareholders-it requires a significant commitment that impacts the entire global community. Qualcomm Wireless Reach is one example of our commitment to the communities where we live and work.

Wireless Reach is a strategic initiative that brings wireless technology to underserved communities globally. Our goal for the program is to invest in projects that will help people use mobile technology to transform their lives and have a deep and sustained impact for their families and communities. Formalized in 2006, it has grown to include nearly 100 projects in more than 35 countries. Wireless Reach invests in projects that foster entrepreneurship, aid in public safety, enhance the delivery of health care, enrich teaching and learning and improve the state of our environment. To date, we have worked with over 400 partners and are continuing to build new relationships through sustainable, advanced wireless projects that strengthen economic and social development.

With more than 1 million new smartphone users added every day, mobile technology is now a major driver for economic growth, technology advancement and innovation, at every level of the social and economic pyramid. Mobile technologies have become so prevalent that they are breaking down barriers-geographic, socioeconomic, educational and cultural-that have historically obstructed progress in developing countries.

Qualcomm has made a long term commitment to the expansion of our Wireless Reach programs and we are incredibly pleased by the progress that the initiative and its partners have achieved around the world. I hope you enjoy reading about these inspiring projects that are demonstrating innovative uses of Qualcomm technology for social good and helping to drive human and economic progress in underserved areas.

Sincerely,

Steve Mollenkopf
CEO, Qualcomm

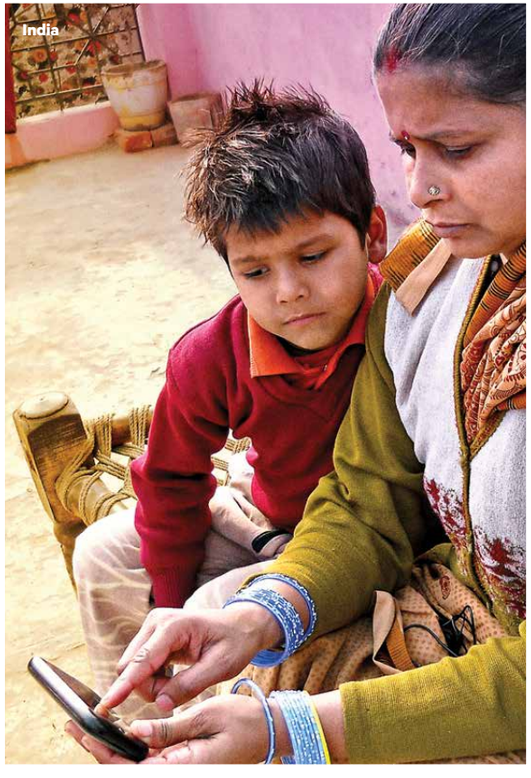
Enriching **Teaching and Learning**

Education is a key driver for growth, economic development and the advancement of societies. Mobile phones can bring high-quality education to all communities, regardless of their income status or location. For the millions of children in emerging countries who lack access to formal education, the proliferation of mobile devices could provide a new opportunity, and their only means, for accessing learning resources. Wireless Reach is exploring how these devices in our pocket can be used in education so that all students have the opportunity to learn, prepare for good jobs and participate in our global economy.

India

India – Radiophone, Using 3G Mobile Technology to Provide Quality, Early Learning Experiences for Underserved Migrant Children

Sesame Workshop India, the organization behind Galli Galli Sim Sim (the Indian Sesame Street), develops and distributes high quality and engaging content that aims to facilitate young Indian children's basic academic and life skills. Wireless Reach collaborated with Sesame Workshop in 2010 to produce Radiophone, a service that distributes Sesame Workshop India's radio content with fun lessons about healthy living via mobile devices. Now, a second project, Play and Learn, includes engaging game-based educational applications for children ages 6 to 8. Approximately 40 children in a low-income area of New Delhi are currently using the games. Project stakeholders plan to expand the program to additional underprivileged areas, and to add an in-school component.



Singapore

WE Learn, Building the 21st Century Classroom with 3G Smartphones

By putting the power of computers in the pockets of 3rd and 4th grade students at Nan Chiau Primary School in Singapore, the WE Learn mobile education project uses 3G-enabled Snapdragon® smartphones to transform learning into a student-centric and inquiry-oriented model. Access to resources in and out of the classroom allows students to acquire and practice 21st century competencies and knowledge. As a result of the project, students' test scores on self-directed and collaborative learning skills improved significantly. Teachers are also adapting their teaching methods to incorporate technology and reflect the positive results and responses from students.

United States

Augmented Reality Experience Enables Students to Explore New Worlds

Wireless Reach has teamed up with School in the Park (SITP), The San Diego Museum of Art, the San Diego Zoo and the San Diego History Museum to develop unique educational Augmented Reality (AR) experiences using 3G-connected mobile devices. AR experiences in SITP overlay digital educational material onto physical environments using Qualcomm Vuforia™ on MoGo's FreshAiR™ platform. By enhancing teaching and engaging students, SITP is using valuable 21st century technologies to support learning in informal settings. Overall, student survey responses show a positive shift in their attitudes about their ability to understand focal topics and draw connections between what they are learning in class and the real world.

Japan

3G Smartphone and Tablet x Digital Textbook

With 3G- and LTE-enabled smartphones and tablets and 24/7 access to educational content, students at Renaissance High School, a private correspondence school in Japan, can conveniently study anywhere, anytime, with the aim of earning diplomas, while seeking vocational training or holding part-time jobs. The 3G Smartphone and Tablet x Digital Textbook project, a collaborative venture between Wireless Reach and Renaissance Academy Corporation, provides students with tools and content relevant to their lives and helps them to complete their education. Surveys show that students enrolled in the 2013 school term overwhelmingly favor smartphones and tablets over PCs for learning. In addition to the English course, Renaissance High School now offers all subjects on both the smartphone and tablet, including math, science and social studies.

Kenya

180 MILLION STUDENTS

in emerging regions can

FURTHER THEIR EDUCATION

with mEducation

Source: GSMA 2013.

Fostering **Entrepreneurship**

Advanced wireless technologies are driving global entrepreneurship by providing people with products and services for managing their finances and growing their businesses. Mobile devices help people communicate with one another, access market information, sell products across geographic areas, reach new consumers and access mobile payment systems. Mobile devices are also invaluable tools for empowering women business owners.

Indonesia

Mobile Microfranchising and Application Laboratory (AppLab) Initiatives

Underserved residents in Indonesia, most of whom are women, are using mobile technology to access unique business opportunities and gain the skills needed to lift themselves out of poverty. Grameen Foundation, the implementing nonprofit organization, is working with Wireless Reach and RUMA, a local social enterprise, to help poor micro-entrepreneurs become electronic airtime resellers, and expand their businesses with new applications, products and services that will further increase their income. The project demonstrates an innovative mobile microfranchising model that is market-oriented and builds on the strength of microfinance – a leading poverty alleviation strategy. An estimated 47 percent of the entrepreneurs who stay in the portfolio for more than four months are able to nearly double their incomes, effectively moving them over the World Bank poverty line of $2.50 per day.

Malaysia

Mentoring Women in Business Program

The Mentoring Women in Business Program utilizes mobile technology to connect business professionals around the world with women entrepreneurs in Malaysia. The program was developed to enhance women's skills and knowledge in the areas of business and technology in order to support them in growing and maintaining their own successful businesses, improving their self-confidence, maximizing their entrepreneurial potential, improving their socio-economic status and empowering them to become self-reliant. Due to the support of their mentors and involvement in the program, 76 percent of mentees built confidence, 65 percent increased their networks, 62 percent revised their business strategies, 44 percent kept their businesses from going under and 38 percent increased sales.

Spain

Augmented Reality Assists Workers with Intellectual Disabilities

Wireless Reach and Vodafone Spain Foundation are collaborating on an Augmented Reality project that provides mobile applications for workers with intellectual disabilities to help them successfully perform their daily tasks, increase their autonomy and advance their careers. The project, "Augmented Reality for e-labora," includes applications with step-by-step training guides, multimedia tutoring materials and access to other work-related information. Participants gain a new sense of ownership over their work with an increased level of confidence when performing tasks.

Spain

Spain – Fostering Young Innovative Entrepreneurs Project

By establishing the first Massive Open Online Community (MOOC) on mobile application development and entrepreneurship in Spain, the project gives unemployed university students access to a wide range of online entrepreneurial education material, advanced knowledge of leading-edge technologies and access to a collaborative online community of peers, professors, technology experts and application developers. The goal is to demonstrate how Qualcomm technology can foster a Spanish entrepreneurial community on mobile application development, create new business opportunities for young people and overcome the deficit of digital entrepreneurs in Spain. Upon completion of the MOOCs, students receive a certification from Spain's National Distance Education University.


Spain


Malaysia


Indonesia

Vietnam

The total value of physical & digital

GOODS PURCHASED VIA MOBILE DEVICE is on pace to **EXCEED $730 BILLION**

a year by 2017

Enhancing the Delivery of **Health Care**

Wireless technology is not just an enabler, it is a multiplier and game changer. This is especially true within the health care industry. 3G and 4G mobile broadband technologies can enable point-of-care devices to provide access to information, help lower costs, facilitate remote care, increase efficiencies and better connect people to their health care providers. It is our hope that through the use of Qualcomm's technology, and our Wireless Reach projects, we can extend health care resources globally and provide communities with unparalleled access.

Mexico

Dulce Wireless Tijuana, Empowering Communities to Promote Diabetes Care and Prevention through 3G Technologies

The current epidemic of diabetes in northern Mexico and around the world highlights the urgent need for innovative, efficient, technology-supported interventions to prevent and monitor the disease. Dulce Wireless Tijuana is a bi-national, multi-sector study that examines how the chronic care model together with 3G wireless Internet access can be used in diabetes management to improve patient care for marginalized communities.

Philippines

Wireless Access for Health

Wireless Access for Health (WAH) uses 3G wireless technology to improve health care in the Philippines by reducing the time required for reporting and by improving access to accurate and relevant patient information. Through this multi-sector collaboration, stakeholders are addressing the fragmented management of public health data across the country. Reports that were once delivered by people using motorcycles or jeepneys (a local mode of transportation) can now be sent instantly via 3G directly to the people who need them most. As of December 2013, more than 520,000 patient consultations and nearly 450,000 patient records have been recorded in 55 clinics through the WAH platform.

South Africa

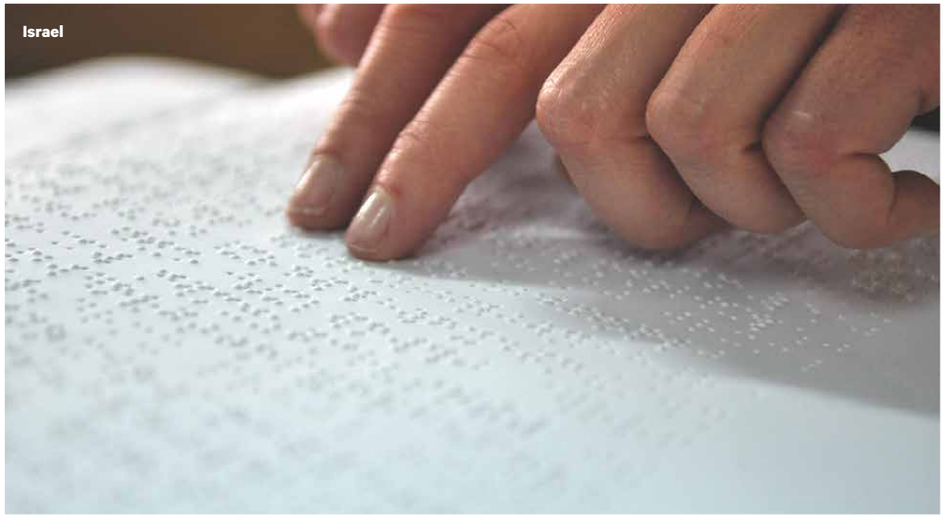
Mobile Health Information System

In South Africa, where access to relevant health literature and broadband Internet access is limited, nurses and doctors across the Eastern Cape are using 3G-enabled devices to overcome access-to-information challenges and provide better care to their patients. Through the Mobile Health Information System commercially available smartphones and tablets are pre-loaded with a clinical library that provides vital information in real time. Nurses and doctors report that being able to access health information at the point of care assisted in making an accurate diagnosis, prescribing the correct treatment for their patients and reducing patient mortality.

Israel

A "RAY of Light" on Independence for Blind and Visually Impaired People

Project RAY demonstrates the power of advanced wireless smartphone technology with the creation of the RAY device: an always-on, easy-to-use, multi-function, mobile phone with a user interface optimized for eye-free interaction. Poised to become the new gold standard in accessibility tools for blind and visually impaired people, the RAY solution uniquely enhances the typical Android smartphone. Wireless Reach and Project RAY are collaborating with Israel's Central Library for the Blind, Visually Impaired and Handicapped to enable people with visual impairments to make calls, send messages, recognize objects, engage in social networking, access remote assistance, and use leisure and entertainment services.



Wireless Reach has nearly

100 PROJECTS

in various stages of development in more than

35 COUNTRIES

Aiding in **Public Safety**

An increase in community safety is proportionally related to lower crime rates, faster emergency response times and improved emergency preparedness. To aid in improving efficiencies in public safety, a wireless broadband network can allow access to critical information and communication between mobile users and dispatch centers in real time. Wireless Reach public safety projects aim to enhance the safety ecosystem by encouraging scalable and sustainable solutions that focus on disaster relief, transportation safety and effective police operating systems by integrating 3G, 4G and next-generation wireless technologies.

El Salvador

Seguridad Inalámbrica (Wireless Security), Strengthening Crime Mapping through Telecommunications Technology

Seguridad Inalámbrica uses Qualcomm 3G technology to enable law enforcement and municipal government personnel to increase public safety through the mapping and sharing of information on crimes as they occur. The new system provides participants with mobile- and web-based applications that allow both the mapping and analyzing of real-time crime data. The collecting, sharing and mapping of crime information is currently being used successfully in several municipalities and has the potential to be implemented in other cities in El Salvador and countries in the region.

India

Fisher Friend, Bringing Helpful Information to Rural Fishermen

Fishermen in the tsunami-affected Tamil Nadu region of India were provided mobile phones with an application called Fisher Friend that provides instant access to helpful information in their local language. Fishermen have reported that application features – weather conditions, wave height, news on potential fishing zones and government services – make them more efficient, allow them to feel safer in the water and improve their income. Adding GPS functionality has enhanced the solution. In addition to Tamil, Fisher Friend will also be available in the Telugu language. Next, project stakeholders expect to expand the project to the state of Andhra Pradesh.

China

Let's Get Ready! Mobile Safety Project

There are over 100 million children under the age of 7 in China. Natural disasters affect many of these children and their families, yet limited resources exist to help families prepare for potential emergencies. The "Let's Get Ready!" mobile safety project uses a 3G mobile website, mobile application and fun content featuring Sesame Street characters to create an interactive and engaging experience that empowers families in China with young children to learn about emergency preparedness. Research shows that every dollar spent on preparing for natural disasters could save US$7 in humanitarian disaster response. The project emphasizes the importance of children knowing their name and address, having a family emergency plan, packing an emergency kit and learning about people and places within the community that can help in an emergency. The mobile content is available to users throughout China.


India

China

El Salvador

Improving **Environmental** Sustainability

Qualcomm is committed to minimizing negative impacts to the environment throughout all aspects of our business. We expand our operations while minimizing our carbon footprint, conserving water, reducing waste and developing products that take into account environmental and social impacts. Living in a world of finite resources demands innovative thinking, and as we strive to consume less energy at work, home and everywhere else, we are also committed to helping others do the same. Wireless Reach works with stakeholders to demonstrate the advantages of mobile technologies in protecting and enhancing the environment now and for future generations to come.

Brazil

Pescando com Redes 3G (Fishing with 3G Nets), Promoting Sustainable Fishing and Entrepreneurship through Digital & Social Inclusion

Pescando com Redes 3G was created in 2010 to promote sustainable social and economic development in Brazil. Over-fishing, coupled with a lack of investment, has resulted in diminishing incomes for fishing communities and the emigration of young people to other cities in search of jobs. The project aims to support the implementation of sustainable fishing practices and help improve and diversify the fishermen's trade through the use of 3G connected smartphone and tablet applications. As an alternative economic activity to traditional fishing, an oyster farm was created in Santo Antonio, contributing to job creation and income generation for families in the region. Most mariculturists caring for the oyster farm are women, and they teach others about the importance of keeping the environment free of pollution – information and data they have acquired using smartphone applications.

India

SootSwap, A Mobile Application to Monitor Use and Incentivize the Adoption of Clean Cooking Technologies

The SootSwap project demonstrates how mobile phones can aid in advancing the economic, health and environmental objectives of individuals and communities. SootSwap provides an affordable, reliable, mobile phone-based monitoring device to enable widespread participation in a voluntary carbon market when individuals use clean cookstoves. Approximately 3 billion people – about 40 percent of the world's population – depend on traditional cookstoves that use fuels like firewood, cow dung and crop residues for their cooking needs. The Global Burden of Disease Study 2010 estimates that 4 million people die each year as a result of inhaling the smoke and soot produced by cooking over traditional cookstoves. Encouraging people to switch to clean cookstoves, and helping them afford the cost of this switch, can reduce the amount of firewood used in open fires, as well as the amount of smoke indoors and outdoors – leading to both improved health and a positive environmental impact.

Brazil


India

"Years ago, I didn't know if I was making a profit or a loss from fishing. With this project, **I can check quantities and costs on my mobile phone** before returning to land. And with the 3G network, **I can talk to lots of clients** about how much fish I have and later email the price and ask if they want to buy my catch."

— Adeildo da Conceição Lacerda,
Fisherman in Cabrália

The benefits of wireless **are global**

Mobile Is Improving Lives and Breaking Down Barriers Across the Globe

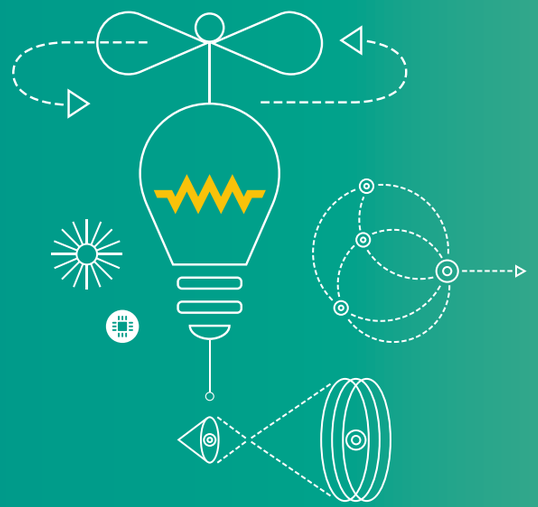
Mobile devices offer the possibility to enable new, creative solutions to help people improve their lives, from basic needs like clean water and healthy food, to improved public safety and robust educational tools. According to Jeffrey Sachs, Director of The Earth Institute at Columbia University, “the cell phone is the single most transformative technology for development.”

We have seen firsthand through innovation in medical treatment and public safety, how mobile technologies have saved lives. Mobile is also transforming the way students are learning, allowing them the opportunity to stay focused on their education in developing countries.

Our experience with Wireless Reach has shown us that while mobile technology is having a dramatic effect on the world’s biggest problems, it is the people, the partnerships and a commitment to working together that is leading to meaningful results. When individuals, communities and organizations have access to information and can communicate instantly, old barriers and obstacles can quickly be overcome thanks to mobile technology.

We know that billions of people across the globe are striving to make their lives better. And we, at Qualcomm, are working tirelessly with our partners to provide the tools, insights and experience for everyone that seeks to meet the world’s biggest challenges. This will take creativity and innovative thinking that ventures through unprecedented territory and pushes boundaries. It will require collaboration with policy makers, local leaders and communities. As a company that has been on the forefront of the mobile evolution for more than 27 years, Qualcomm looks forward to being an integral part of this effort for years to come.

To learn more about Qualcomm Wireless Reach, please visit us at **www.qualcomm.com/wirelessreach** and follow us **@Qualcomm_GA** on Twitter.



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— Paul Jacobs