

Digital Strategy for International Development

Bringing Together Broad Digital
Expertise to Improve Programs
and Practices



RTI by the Numbers



1,219
FY2020 Clients



3,990
FY2020 Projects



\$912M
FY2020 Revenue

At RTI International, we design and implement programs across a wide range of sectors to help low- and middle-income countries and communities address complex problems and improve the lives of their citizens. Working with local partners and stakeholders, we devise solutions that promote innovation, sustainability, and resilience.

Clients rely on RTI to answer questions that demand a rigorous, objective, and multidisciplinary approach. We have managed 345 Indefinite Delivery, Indefinite Quantity (IDIQ) contracts, 88 of which were active in fiscal year 2020 with 325 active task orders and funding of over \$1.1 billion. RTI has been a leading implementing partner for the United States Agency for International Development (USAID) for five decades and has implemented more than 750 USAID-funded projects in more than 150 countries.

Broad Digital Expertise

RTI's digital experts are a diverse group. From cutting-edge applications harnessing artificial intelligence and FinTech to proven experience in digital governance and country assessment, RTI provides a powerful combination of expertise in technology and international development to provide digital solutions for partner countries.

A Top USAID Implementer and Top Emerging Technology Consultancy

In February 2021, the [Federal Emerging Technology and Consulting Hub](#) (FETCH) recognized RTI as a top Federal Emerging Technology and Consulting firm in the government marketplace citing our groundbreaking research and impactful results in support of various missions across the Federal sector. FETCH featured RTI as an organization that is poised to have a lasting influence in terms of Leading for impact in Federal IT and Consulting by continuing to reinvent itself, invest, and challenge the status quo.

A Top USAID Implementer for Five Decades



750+
Projects



150+
Countries

Artificial Intelligence (AI) Technologies and Responsible Use

Extracting actionable insights from large datasets is time-consuming and costly. At RTI, we have fused the latest advancements in research, science, and technology to develop RTI Merge™, a platform that integrates data acquisition and ingestion, knowledge curation, and mixed modeling and simulations. The AI-driven research platform is comprised of a full suite of open source and proprietary AI-driven tools that enable households, businesses, and political leaders to make informed decisions based on real-time data.

RTI's [COVID-19 Data Insights Tool](#) was built on RTI Merge™ and provides policymakers and public health officials with real-time data, along with forward-looking projections, on the COVID-19 pandemic in their respective communities. We publish our tools on GitHub and present them through venues such as peer-reviewed journals and conferences. Our team has also published on [ethical implications of AI](#).

Digital Finance

To address the need for fast and accurate mobile payments, our experts in information and communications technology (ICT) integrated two RTI technologies—[Gooseberry](#) and [Strawberry](#)—to provide rapid, transparent, and secure mobile money transactions for development projects.

Under the USAID-funded Tusome Early Grade Reading Activity in Kenya, our project team integrated the Gooseberry and Strawberry tools with the M-Pesa mobile money transfer system to pay up to 100,000 teachers accurately and efficiently across the country every three months. Gooseberry effectively reduced administrative costs associated with in-person payments by 75 percent, while providing full transactional transparency.

Telecommunications

The importance of high-quality, reliable internet connectivity and infrastructure is more apparent now than ever, as the heavier reliance on remote work and online communication during the COVID-19 pandemic drives a dramatic surge in global internet usage.

Facebook hired RTI in 2020 to analyze the employment, income, economic growth, and firm-level impacts from submarine fiber optic cables—among the most important components of the internet's infrastructure—and improvements in broadband connectivity in [Indonesia](#), [Malaysia](#), and [six countries in sub-Saharan Africa](#). These findings are now informing Facebook engineering infrastructure investment decisions in Africa and Asia.

E-commerce and Digital Trade

Context-appropriate e-commerce and digital trade solutions that work in low-bandwidth, developing-economy contexts are critical for economic growth. For example, we deployed [low-cost data and technology solutions to cooperatives and farmer associations](#) in Senegal which enabled them to improve production yields and aggregate at greater scale, thereby increasing sales and access to finance and mechanization services.

Human-Centered Design (HCD)

RTI uses [HCD](#) to support the development of technology solutions, social behavior change communications, and innovative design of engineering solutions. RTI's [Innovation Advisors](#) team has conducted [training in partnership with the LUMA Institute](#) on HCD and innovation frameworks, and regularly deploys HCD in its programs.

For example, the U.S. Centers for Disease Control and Prevention's [Treating for Two initiative](#) aims to improve the health of women and babies by identifying safer treatment options for managing common conditions before and during pregnancy. Through a co-creation workshop using journey mapping and storyboarding, we worked with health care professionals to brainstorm ideas for an educational video about prescribing medications safely during pregnancy. This approach proved much more successful than having them react to a product we created on our own.

Digital Governance

Supporting e-government and digital governance solutions improves efficiency, transparency and accountability of government and provides citizens and civil society with transparent mechanisms for accessing services and communicating with government. RTI has both supported the digital transition within government and the digital development of host-country counterparts.

In Uganda, RTI identified and scaled-up several domestic revenue mobilization innovations, including tax and user-complaints text-messaging systems, revenue dashboards for better citizen and business understanding of government revenue use, and value-added tax (VAT) reforms that increased national to local revenue transfers. In Indonesia, RTI supported the national planning body to develop an innovative, e-planning and budgeting system, called KRISNA, directly linked to the Ministry of Finance's system. Within a year, this system was being used by 125 government agencies to plan and allocate funds to local governments using online applications.

Country Assessments

As part of the USAID-funded Science, Technology, and Innovation for Development program in the Philippines, RTI conducted innovation ecosystem assessments (first in 2014 and again in 2020) to assess the country's human capital and education, creation and transfer of knowledge (e.g., research, invention, product development, licensing of intellectual property), the entrepreneurial community (e.g., entrepreneurs, funding, mentors), and collaboration (both within and across stakeholder groups including academia, industry, and government). The first Innovation Ecosystem Assessment, released in November 2014, informed several Philippine Government policies, including the Philippine Development Plan 2017–2022.

Building Capacity of USAID Missions, Washington Operating Units, and Partners

RTI offers award-winning professional development solutions grounded in the principles of adult learning, and incorporate participatory methodologies, innovation, and the latest technologies to enhance the learning experience. As the leading implementer of USAID's Worldwide Training IDIQ contract since 2015, RTI has delivered over 600 courses to 16,000 participants in 45 countries. Through the National Institute of Standards and Technology's Manufacturing Extension Partnership program, RTI developed and delivered experiential training on topics including needs assessment, market research, value proposition, and decision tools for more than 800 participants.

Digital Project Highlights

RTI does not just design digital solutions—we deliver them. In addition to examples mentioned above, we have a record of successfully integrating digital solutions into USAID-funded programs to improve efficiency, effectiveness, and outcomes across sectors.

Improving Health Informatics and Data Use in Tanzania

RTI is working with the U.S. Centers for Disease Control and Prevention and the Tanzania Ministry of Health and Social Welfare to improve informatics and data use within the health sector. The RTI team includes University of Washington's Center for Public Health Informatics, the Regenstrief Institute, and the Open Health Information Exchange. [RTI co-led development of the Tanzania National eHealth Strategy](#), which launched in September 2013. Our experts are providing technical assistance for harmonizing indicators, developing the national indicator data set, and rolling out the revised health management information system (HMIS) and associated supportive supervision nationally. We are also developing district health profile templates and guidelines, the data dissemination and use strategy, eHealth enterprise architecture, the eHealth strategy, HMIS solutions and ICT systems, and a facility registry system.

Tangerine® for Early Grade Reading and Mathematics Assessments [Tangerine® is a mobile application](#) used to efficiently record and analyze student responses in Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA), as well as student, teacher, and principal responses to home and school context interviews using low-cost tablets. Based on the positive results of an RTI-led randomized controlled trial in Kenya, Google donated enough tablets to enable Kenya's teaching tutors to help improve literacy and numeracy nationwide. Data from classroom observers can now be matched with daily assessments of learning outcomes in literacy and numeracy to fundamentally improve the amount of usable, real-time, national- and county-level data.



Tangerine® has been used to collect more than 500,000 observations in 50 languages by 20 development organizations in 30 countries.

Mobile Crime Reporting System in El Salvador

We partnered with Qualcomm Wireless Reach™, the Council of Mayors of the Metropolitan Area of San Salvador, the Office of Planning of the Metropolitan Area of San Salvador, municipal and national police, and Millicom/Tigo El Salvador to develop the [Seguridad Inalámbrica](#) (Wireless Security) system, a mobile crime reporting system built on Ushahidi open-source software. It enables law enforcement officers to submit and retrieve incident reports via smart phones, maps the geo-located data, and provides crime observatories unprecedented capability. Combined with free, open-source CrimeStat and QGIS software, this enables near real-time spatial and trend analysis.



Police officers in six municipalities have used the Seguridad Inalámbrica system to submit more than 11,700 crime reports and municipal crime observatories have analyzed and used these data to improve crime prevention programs.

Satellite Analysis and AI in Rwanda

[RTI has used satellite images and artificial intelligence](#) to improve agricultural resilience and promote precision agriculture practices in Rwanda on the USAID-funded Private Sector Driven Agricultural Development activity. The project helped farmers use spatial analyses to examine the potential that alternative practices could have on their crop yields and the potential climate impacts. RTI developed algorithms that blend satellite and unmanned aerial vehicle data to improve assessment of country-level crop inventory, informing policy making and interventions to improve quality and productivity.

More Information

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RTI International is an independent, nonprofit research institute dedicated to improving the human condition. Clients rely on us to answer questions that demand an objective and multidisciplinary approach—one that integrates expertise across the social and laboratory sciences, engineering, and international development. We believe in the promise of science, and we are inspired every day to deliver on that promise for the good of people, communities, and businesses around the world. For more information, visit www.rti.org.

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