Power a Village, Empower Community



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IEEE Smart Village & Rotary International

IEEE Smart Village Mission & Vision

Mission

 IEEE Smart Village integrates sustainable electricity, education, and entrepreneurial solutions to help empower off-grid communities

Vision

 A world where all people enjoy equal access to electricity and education to grow opportunities and leverage change for themselves and others.



IEEE Smart Village volunteers and local entrepreneurs work together to change lives in the villages they serve

"Power a Village, Empower Community"

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ISV Approach a Foundation for Change



community-based education, historically all sustainable development efforts will fail" - Nobel Economist Amartya Sen et al

painfully dim the world was before electricity. A candle, a good candle, provides barely a hundredth of the illumination of a single 100 watt light bulb." Author Bill Bryson A Short History of Almost Everything





Prior Approach: Problems

Charity vs. Empowerment

- Historic: Over a trillion dollars spent
 - Private charity, government-to-government foreign aid programs have failed to budge ~20% global poor
- Most aid programs not designed to empower
 - Big business or government solutions have inherent conflicts -- profit focus, misuse of funds,
 - Charity breeds chronic dependency and are unsustainable long-term
- Basic Electricity necessary but not sufficient
 - Need holistic approach including education, clean water, sanitation, health care, and jobs creation
 - Initiatives cannot become sustainable or scalable unless they are community-owned & profits reinvested locally
- *Reciprocal Learning w/Community vital for Empowerment*
 - Ownership and desire for transformation must lie primarily within community members themselves.
 - ISV or any other outside force is Change Agent only, not solution



IEEE Smart Village Solution

Local Empowerment

- **Community** Engage all stakeholders at local level
- Entrepreneurs Carefully select partner with local ownership
- **Government authorities** Local Civic, Tribal & Government thought leaders
- Educators Engage local teachers, administrators, Universities. Impact local schools
- **Go** "Beyond the Light Bulb" WASH programs, healthcare, women's entrepreneurship, businesses, agriculture. Customized local vocational training

Connect with International Resources

- **Investors** Foundations, United Nations, Government, Industry, and Private
- **Education-** K-12 Digital Curriculum on local server, song distance Internet connectivity for global access. Posner Center for International Development
- 80+ NGOs
- Rotary International & others of investment partners

Build a Recurring Cycle of Smart Villages

Success brings prosperity. Fnables others to easily duplicate in nearby communities.







ISV Aligns with Rotary Initiatives



- Promote peace
- ✓ Provide clean water, sanitation, and hygiene
- ✓ Saving mothers and children
- ✓ Supporting education
- ✓ Fighting diseases
- ✓ Growing local economies



Promoting peace

Rotary encourages conversations to foster understanding within and across cultures. We train adults and young leaders to prevent and mediate conflict and help refugees who have fled dangerous areas.



Providing clean water, sanitation, and hygiene

We support local solutions to bring clean water, sanitation, and hygiene to more people every day. We don't just build wells and walk away. We share our expertise with community leaders and educators to make sure our projects succeed long-term.



Saving mothers and children

Nearly 6 million children under the age of five die each year because of malnutrition, poor health care, and inadequate sanitation. We expand access to quality care, so mothers and their children can live and grow stronger.



Supporting education

More than 775 million people over the age of 15 are illiterate. Our goal is to strengthen the capacity of communities to support basic education and literacy, reduce gender disparity in education, and increase adult literacy.



Fighting disease

We educate and equip communities to stop the spread of life-threatening diseases like polio, HIV/AIDS, and malaria. We improve and expand access to lowcost and free health care in developing areas.



Growing local economies

We carry out service projects that enhance economic and community development and create opportunities for decent and productive work for young and old. We also strengthen local entrepreneurs and community leaders, particularly women, in impoverished communities.

smart village

- Local economic growth by direct and indirect job creation
- Better education through lighting, intranet, Internet access, and computers
- ✓ Better medical care through powered clinics, refrigerated medicine, and instrumentation
- Clean water with powered wells and pumping stations
- ✓ Female empowerment with efficient food prep and storage
- ✓ Mothers and children have better nutrition and non-toxic cooking
 - Employment opportunities help bring stability to communities, reducing crime





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ISV & Rotary Alignment on SDGs



International Rotary Process





Existing Rotary and ISV Partnerships

Madan, Papua New Guinea

Washington State Rotary clubs providing program for 30 schools with local intranet for curriculum distribution. Rotary WASH program and ESL lessons included. ISV providing Solar Power equipment, vocational training and educational network



Current Madan Papau New Guineau Class: Note straw floor, slate blackboard, no seats, desks, lights, water, toilets



One of 30 schools in Madan, PNG to receive lights, digital tools, Intranet connectivity, projectors, tablets, teacher laptop, STEM curricula, ESL



Rotary and ISV Partnerships

Uttar Pradesh - India

City of Orange Rotary club help fund Shakti Empowerment Solutions. Initial deployment in Tirmasahun serving 2500 villagers with plans for regional expansion. Includes power to local schools serving 100 students/school day. Water purification unit serving 100 families/day. Vocational and education for solar system operation, literacy, women's study groups, and financial management.



Reliable solar power provides jobs in the community including ... an e-taxi driver!



Direct job creation includes sales and operation for the new electric utility company in the community



Recent ISV Projects

Local Organization	Country
Green Village Electricity	Nigeria
Shakti Empowerment Solutions	India
African Development Promise	Uganda
Shaybis Nigeria Ltd	Nigeria
Torchbearers Foundation	Cameroon
Community Transformation Centers	Papua New Guinea
Renewable Energy Innovators	Cameroon
Solar Soul Collective	India (In Process)

IEEE Smart Village awarded over \$1.2M to these organizations to seed fund initial start-up of business operations

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Join us in our effort to help empower 50 million people by 2025









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What can you do?

- Personal financial support of Rotary Foundation and ISV.
- Become a Sponsor Club. Raise support to fund IEEE Smart Village project. (Typical \$200K)
 - E.g. Single Club funds of \$15K + District match + TRF Global Grant = \$52k per club per year)
- Lead collaboration with nearby Rotary Clubs for joint projects
- Engage Host Clubs near Project. Provide guidance and consultation along with IEEE experts.
- Jointly manage oversight, site visits, evaluate and share best practices with IEEE SV and Rotary International
- Collaborate with ISV Development Committee & Support Team for joint projects

www.ieee-smart-village.org/donate





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