Namibia, Africa
Navajo Nation
Four Corners, USA
What do Namibia and the Navajo Nation have in Common?
Energy Access Problems...

Vast Distances
Little Access to Capital
Other Government Priorities
Short-term thinking
Cultural Issues
Legal Barriers
No Information About Alternative Energy
Poor Infrastructure
The Global Problem

1.4 Billion People Without Access to Electricity
SOLAR LIGHT PROJECT: 2008
1 GUY + 50 LIGHTS IN A BACKPACK
NAMIBIA-WIDE: 2014
DOZENS OF OUTLETS & 10,000 PLUS SALES
**BUT, the Problem is that the Best Products are Too Expensive…**

<table>
<thead>
<tr>
<th>Products</th>
<th>What is Available</th>
<th>What is Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Affordable toy lights</td>
<td>Affordable, rugged, multifunctional products</td>
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<tr>
<td></td>
<td>- Quality, expensive lights</td>
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<tr>
<td>Financing</td>
<td>- Up-front payments</td>
<td>Cost-effective pay-as-you go plans</td>
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<td>- Subsidized credit schemes</td>
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<tr>
<td>Distribution</td>
<td>- Shops in market centers</td>
<td>Viral consumer-to-consumer distribution in rural areas</td>
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<td></td>
<td>- Subsidized micro-consignment models</td>
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</tbody>
</table>
Portable, Rugged, Multi Function:

- 8-30 hours of light per day
- Charges mobile phones
- Multi-year battery life
- 2.5 watt solar panel

**BUT, cost US$40 or more**
PRODUCT DEVELOPMENT
The Solution is:

A multi-function solar lamp with added divi technology providing:

- Lamp-to-lamp communication
- Electronic days-of-light metering
The Solution is:

A transaction based web application running in the cloud.
A smart phone application that talks to both to:

- conduct days-of-light sales
- register owners & lamps

The solution is:
The **divi** Light is Affordable

- Small up-front price of $5-10 dollars
- Pay-as-you-go using existing candle/kerosene expense of 30 cents per day
- Free after 120 days of light purchased and consumed
- Focuses on community tradition of dividing/sharing
Distributes Itself

- Purchase days of light wirelessly via mobile phone app.
- OR purchase days of light via lamp-to-lamp wireless connection
- Lamp owners empowered to share, trade, and sell days of light to friends and family
- Sales incentives for good salespeople
### Rollout in Namibia and Zambia

<table>
<thead>
<tr>
<th></th>
<th>Namibia</th>
<th>Zambia</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td><strong>Population (M)</strong></td>
<td>2.28</td>
<td>12.93</td>
<td>15.21</td>
</tr>
<tr>
<td><strong>Off-Grid</strong></td>
<td>40%</td>
<td>70%</td>
<td>-</td>
</tr>
<tr>
<td><strong>Off-Grid Households (M)</strong></td>
<td>0.23</td>
<td>2.26</td>
<td>2.49</td>
</tr>
<tr>
<td><strong>Potential Adopters (M)</strong></td>
<td>0.25</td>
<td>2.5</td>
<td>2.75</td>
</tr>
<tr>
<td><strong>TAM (M) @ ASP = $50</strong></td>
<td>$12.5</td>
<td>$125</td>
<td>$137.5</td>
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</table>
Elephant Energy Barnraiser

July 23, 2014
6:30-8:30 pm

Posner Center for International Development
1031 33rd St., Denver CO
Contact & Donate

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