Can the “ten types of innovation” help us understand success factors in getting development ventures to scale?

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“The Ten Types of Innovation”

by Keeley, et al. - Doblin Group

- Profit model
- Network
- Structure
- Process
- Product performance
- Product system
- Service
- Channel
- Brand
- Customer engagement

Configuration

Offering

Experience

Ten Types of Innovation, Keeley, L., Pikkel, R., and Walters, H., 2013 Deloitte Development LLC.
research question

Can the *Ten Types of Innovation framework* yield insight into what contributes to the ability of development ventures to succeed and achieve their desired degree of scale?

‣ Are there consistent patterns in terms of a specific set or combination of types of innovation that distinguish development ventures that are achieving scale from those that are not?

‣ Do these patterns differ from those that have been documented in the developed-economy context in which the framework was first deployed?

hypothesis

Development ventures that are scaling successfully will define a consistent and observable pattern in terms of the number and combination of types of innovation where they show excellence and competence.
approach

case studies of development ventures in the solar lighting sector

- 5-7 initial cases (in process)
- data from published reports and in-depth interviews with key informants
- developing method of applying “ten types of innovation” framework to case data
greenlight planet

Sun King™ product line

- high-quality, durable, multi-function products (solar lantern + usb charger), sold for $20-40.
- operating in more than ten countries
- extensive, robust distribution network and on-the-ground relationships
- combining innovative payment options (mobile, pay-per-use) with product design

Figure 2-1: Solar Lantern Comparative Rating Chart

<table>
<thead>
<tr>
<th>Product</th>
<th>Overall Score</th>
<th>Cost (USD)</th>
<th>Type</th>
<th>Run Time on High Setting</th>
<th>Charge Time</th>
<th>Brightness</th>
<th>Task Lighting</th>
<th>Ambient Lighting</th>
<th>Luminous Range</th>
<th>Water Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>SunKing Pro</td>
<td>88</td>
<td>$39.95</td>
<td>HD</td>
<td>13.1</td>
<td>6.7</td>
<td></td>
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<tr>
<td>WakaWaka Power</td>
<td>85</td>
<td>$79.99</td>
<td>HD</td>
<td>21.2</td>
<td>17.7</td>
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<td>d.light S300</td>
<td>77</td>
<td>$49.95</td>
<td>H</td>
<td>6.1</td>
<td>13.3</td>
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<tr>
<td>SunKing Solo</td>
<td>87</td>
<td>$39.95</td>
<td>HD</td>
<td>22.1</td>
<td>13.4</td>
<td></td>
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<tr>
<td>WakaWaka Light</td>
<td>59</td>
<td>$39.99</td>
<td>D</td>
<td>18.1</td>
<td>19.4</td>
<td></td>
<td></td>
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<tr>
<td>Firefly Mobile Lamp</td>
<td>58</td>
<td>$36.99</td>
<td>D</td>
<td>7.5</td>
<td>6.7</td>
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<td>SunKing Eco</td>
<td>67</td>
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<td>H</td>
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<tr>
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<td>19.0</td>
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</tr>
</tbody>
</table>
greenlight planet

**Sun King™ product line**

other relevant success factors:

- sufficient competence across a range of core business functions
- commitment to organizational learning and improvement (risk analysis, focused experimentation, feedback loops)
- company values and culture: humility, cooperation, openness to critique
- consumer insights through on-the-ground presence
little sun

solar lamp

- high-end engineering and design combined with aspirational brand focused on global connectedness
- the same product sold in rural Ethiopia for $12, the MoMA museum shop for $30
- operating in 9 countries
- scale goal: “as many lamps as possible in the hands of people without electricity.”

“You have to trust that what you are playing a lot of money for will deliver, and that's where brand recognition is quite important. There's a general fatigue with people all over the place of crappy, second-rate products…

The (Little Sun) airflow system and compartment are not just designed to look cute, but also an internal technical design that is relevant, so we look cute and funny, but it's a robust product made with really high-quality components.” - Felix, CEO, Little Sun
little sun

solar lamp

other important factors:
- shared purpose: strong alignment of staff and partners to mission
- use existing distribution channels
- flexible structure: adopt to what works well locally
- unique expertise in both technology and design components
lighting the way

**smart light**

- started as a UC Davis project and received a World Bank grant in 2008 for development of the product.
- manufactured in 2010 and was considered a high quality product at its release.
- goal was to sell in Bangladesh, but stopped by import and tax hurdles.
- partnered with “Disacare” for sales in Zambia.
lighting the way

smart light

other important factors:

- initial production batch of 1,500 units.
- sold about 500-1,000 of the total units produced.
- sold for $12 to consumer.
- product is a very cost efficient distributor of light.
- focus on high quality product and engineering.
- customers were very interested in having a warranty as a perceived notion of support or quality
data summary

- Configuration
- Offering
- Experience

- Profit model
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preliminary observations

summary

• quality and reliability of the product is very important to customers spending their hard earned money on a lighting solution.

• significant focus on distribution channel, service, brand and customer engagement - in addition to product performance.

• local partners can be critical for distribution, sales, and service.

• consideration of useful life of the product and overall supply chain design can make or break a venture.

• entry product cost of approximately $10 (from the manufacturer) appears to be a viable economic model for future products, in some markets.
next steps

• continued interviews with other solar ventures, then branching out

• further analysis in distribution channels, product usage, etc. (from MIT CITE study, etc.)

• additional study into the multiple markets within the “bottom of the pyramid”

• more in depth study on company/organization models with an eye toward innovation in “experience”
comments & questions