

# Fab Lab Sustainability Study

## *Overview*

A primary goal of labs in the FabLab community is to become financially self-sustaining to insure the longevity and growth of both individual labs as well as the community as a whole. As a result, we have launched an initiative to analyze and document those labs that have had significant success in becoming sustainable. Our goals is to discover the secret sauce and traits that drive towards sustainability for the benefit of the community and for all labs to leverage. This document is a blueprint for collecting and analyzing information about each such lab.

## *Guiding Principals*

### **Anticipate multiple, different models**

We expect that multiple, and different, successful models will emerge world-wide. For instance, examples of successful models may be:

- Grass-roots, community based
- Strong ties to, or imbedded in an educational institution
- Corporate / industry focused
- Inventor / prototype focused
- Learning-center / teaching focused

Therefore, our analysis should not seek to channel all successful traits into one over-arching model, but rather, to discover and explore multiple avenues and refine our thinking into a concrete set of well-defined sustainable models.

### **Multiple phases**

A lab on the path to sustainability was likely very dynamic, and experienced growth thru multiple phases. We expect the success factors at each phase were different and therefore, the analysis should be structured to find and document the multiple 'phases' along the road to sustainability.

### **Document both success as well as 'lessons learned'**

Labs wishing to become sustainable need to know what to avoid just as much as they need to learn what works. We should document both success and failure – lessons learned.

### **Both narrative and numbers**

Neither a pure narrative or a simple distillation of numbers is enough to capture a lab's emerging growth and learn from the experience – we need both. Numbers will include both financial figures as well as traffic and other measures of efficacy.

### **Source material**

We expect it will be highly instructive for labs to see exhibits of material produced by the successful labs. For instance, actual proposals submitted, project plans, and financial statements used by the successful sustainable will be highly instructive for new, emerging labs. To the extent that labs are

willing to share material, we expect to form a library of these materials for the benefit of the community.

#### **Tools to collect and analyze this information**

- Use the “business model canvas” that circulated at Fab 6
- Hacker spaces “design patterns”

#### **Comments**

India: For us, sustainability really means existing within the structure of an educational institution. Additional ‘private’ revenue from sources such as workshops and lab rental would be great, but is unlikely to get to 100% sustainability in the short term.

### *Proposed Process*

#### **Round 1 – Introduction and High-level framing**

Identify:

- (Narrative) How the lab began
  - Key personnel
  - Mission
  - Seed funding
  - Initial round of hardware and software
  - Stakeholders
  - Success & lessons learned from early proposals & pitches
- (Narrative & lists) Discrete phases the lab went thru, and for each phase:
  - Funding sources
  - Expense categories
  - Key personnel and time devoted
  - Customer base
  - Lab schedule
  - Utilization rates – profile, count and duration of users
  - Hardware & software inventory (high-level)
  - Success & lessons learned from proposals & pitches
  - Who were you spending time with – community leaders, educational institutions, vendors, etc. ?
  - Helpful external resources
  - “Critical life events”
  - What took the lab to the next phase ?
  - Key drivers of success and setbacks
  - Anecdotes along the way
  - Experience with entrepreneurship / innovation of new products
- Analysis of current

- Business models
  - Educational
  - Entrepreneurship
  - Community
  - Service Provider
- Financials
  - Revenue by type and source
  - Grants
    - Terms / conditions
    - Soft needs & expectations of grantors
  - Fixed costs
  - Variable costs
- Intellectual property
- Business development
  - Processes, methods & people
  - How are projects won
  - What is lacking / Challenges
- Slate of projects & initiatives, including size
- (Exhibits and analysis) Dissect each phase
  - Financial details
  - Review proposals
  - Inventory of hardware and software
  - Money raised from sources, and financing used
  - Analysis of value proposition to customers and funders
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