

FabLab in East Asia Countries

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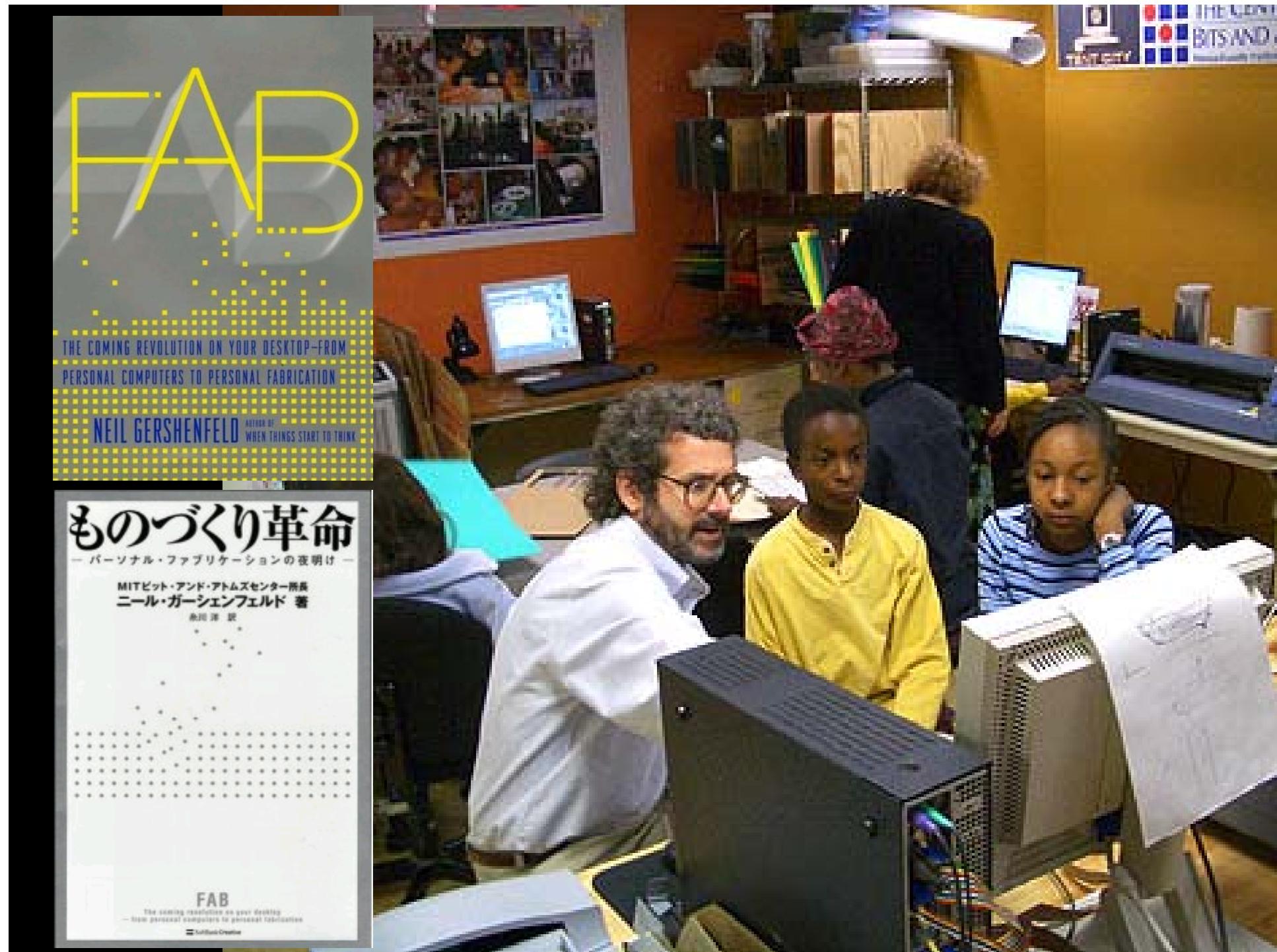
1. General Summary- What is **FabLab**?
2. What is **Fab Lab Japan**?
3. What is **the future of FabLabs in East Asia**?

Q:

**What is
FabLab ?**

A photograph showing a group of people in a workshop or laboratory setting. Several individuals are gathered around a workbench, focused on a task. One man in a black t-shirt and apron is looking directly at the camera. The background features green walls with various tools and equipment hanging on them. A large wooden cabinet with glass doors is visible, containing various items. The overall atmosphere is one of a collaborative workspace.

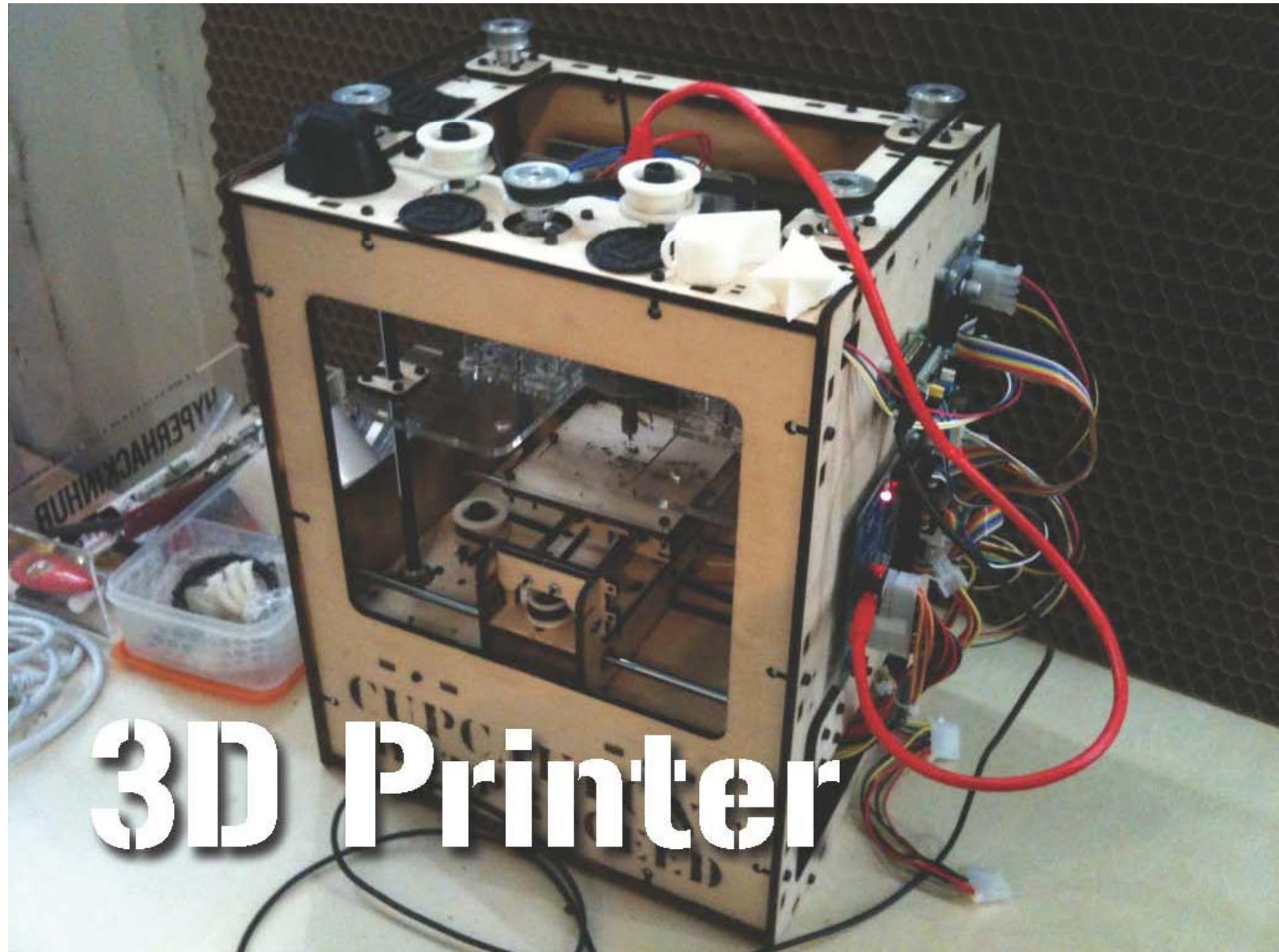
FabLab is Open Workshop Space



Q:

**What can we
use?**

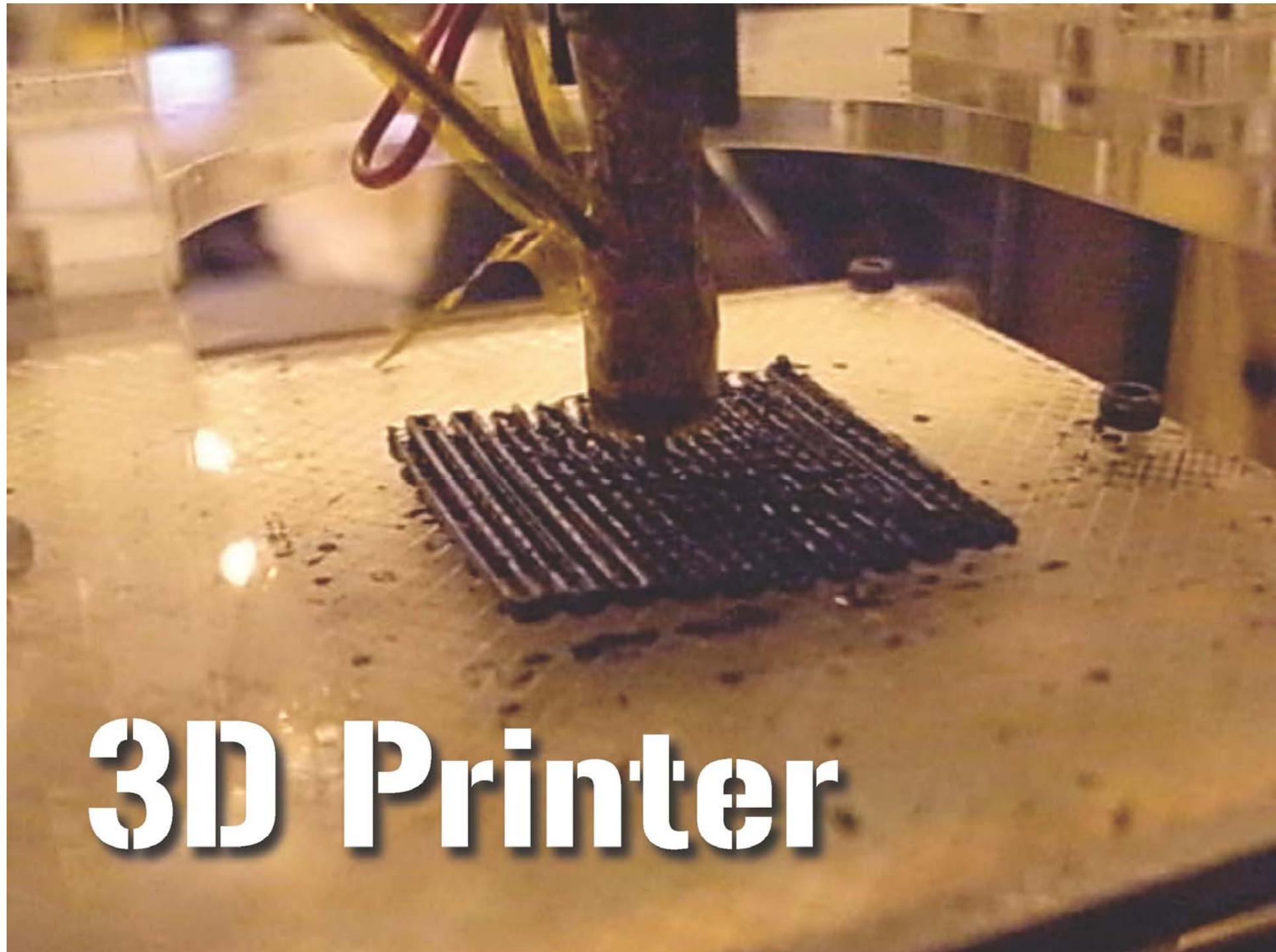
**You can use
various digital
fabricators**



3D Printer



3D Printer



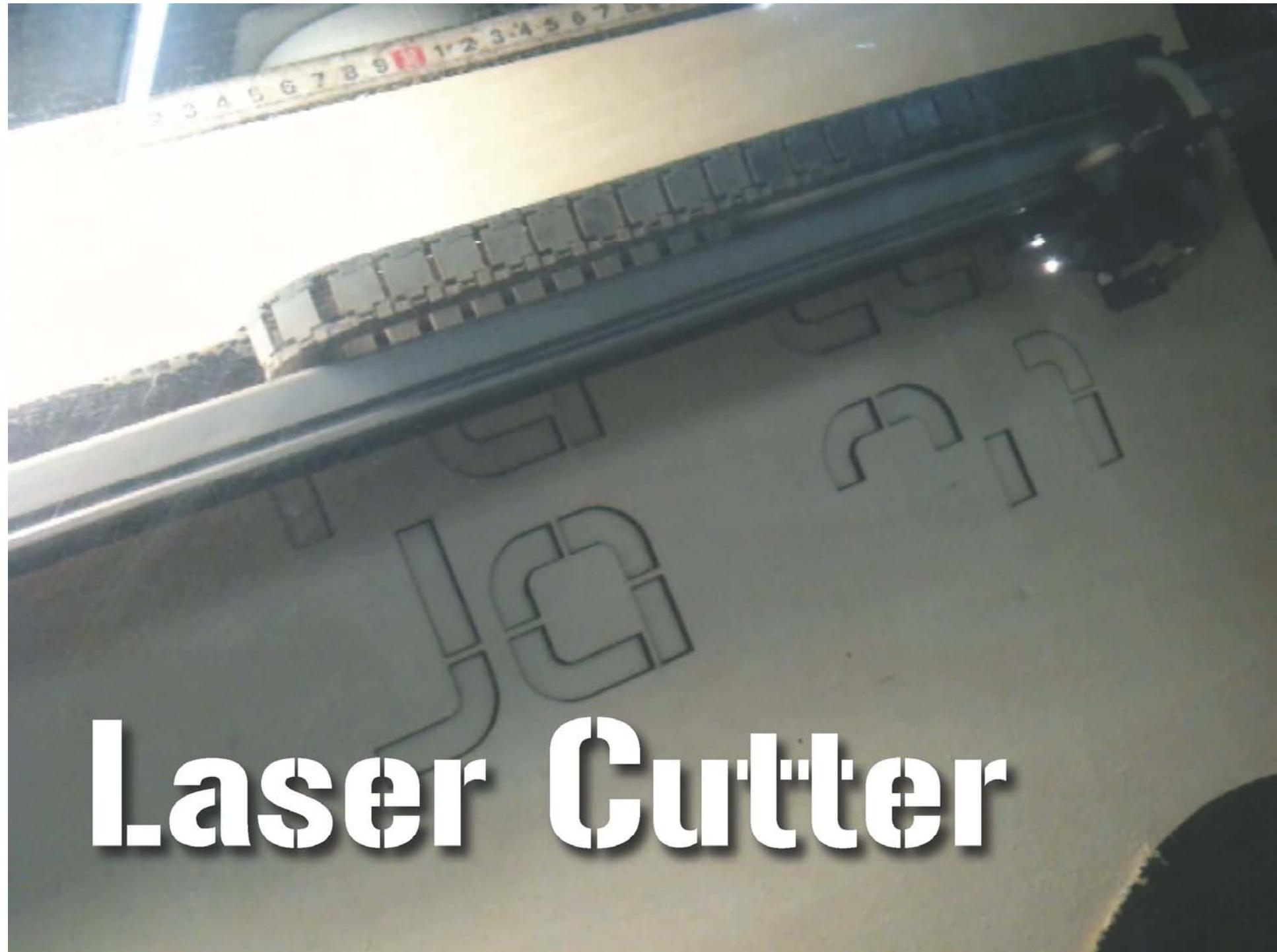
3D Printer



Laser Cutter



Laser Cutter



Laser Cutter

CNC Milling Machine



CNC Milling Machine



Paper/Vinyl Cutter



Paper/Vinyl Cutter



Paper/Vinyl Cutter





Digital Sewing Machine



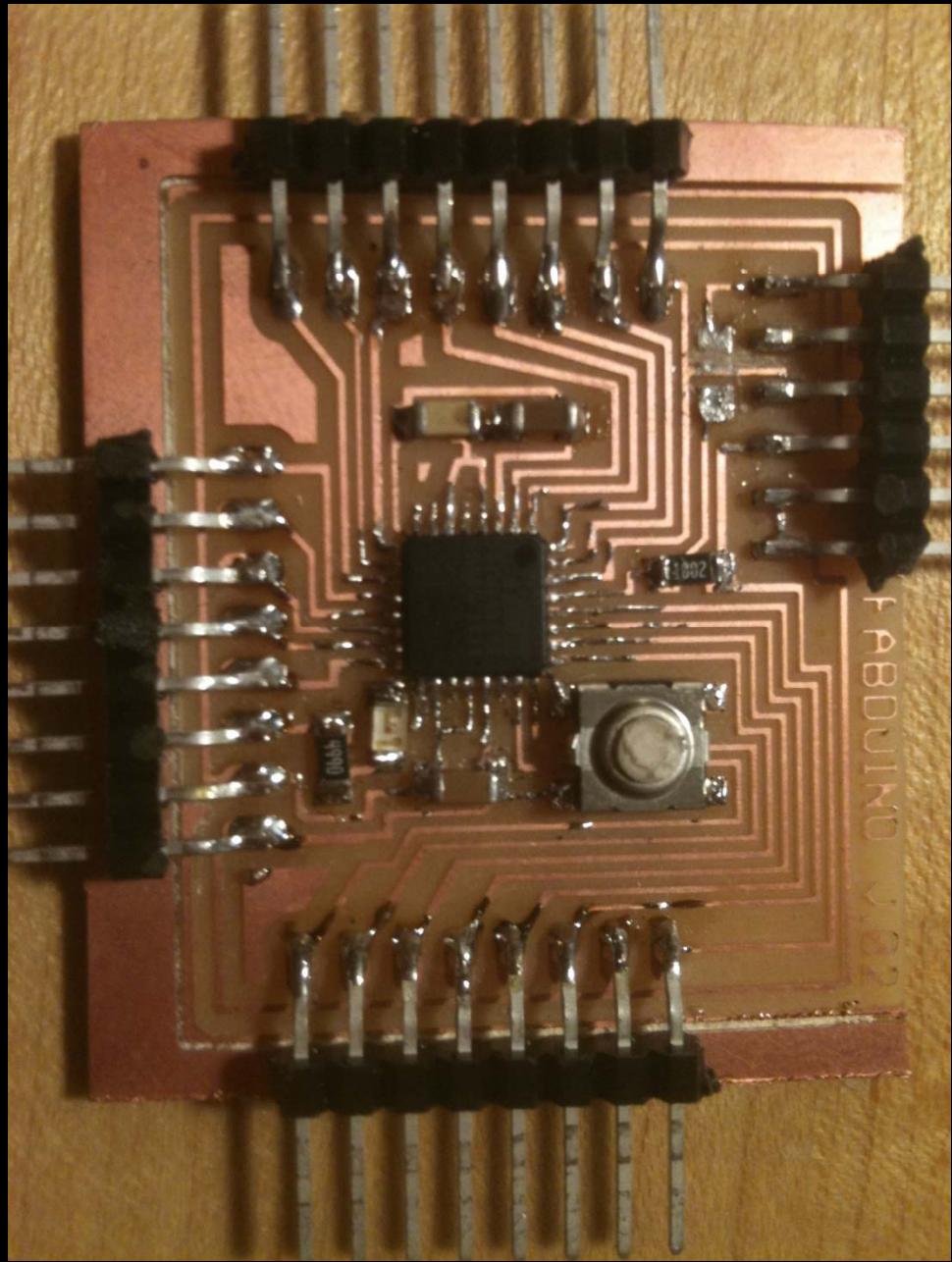
Digital Sewing Machine

Digital Sewing Machine



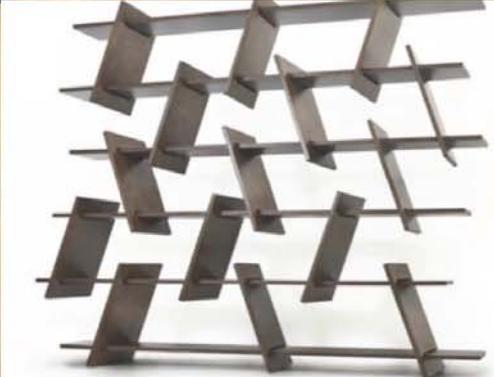
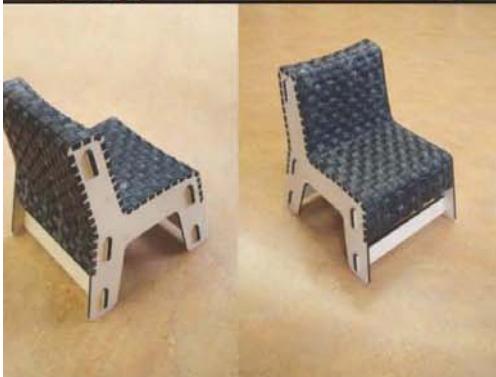


Milling Machine for electronic Circuits



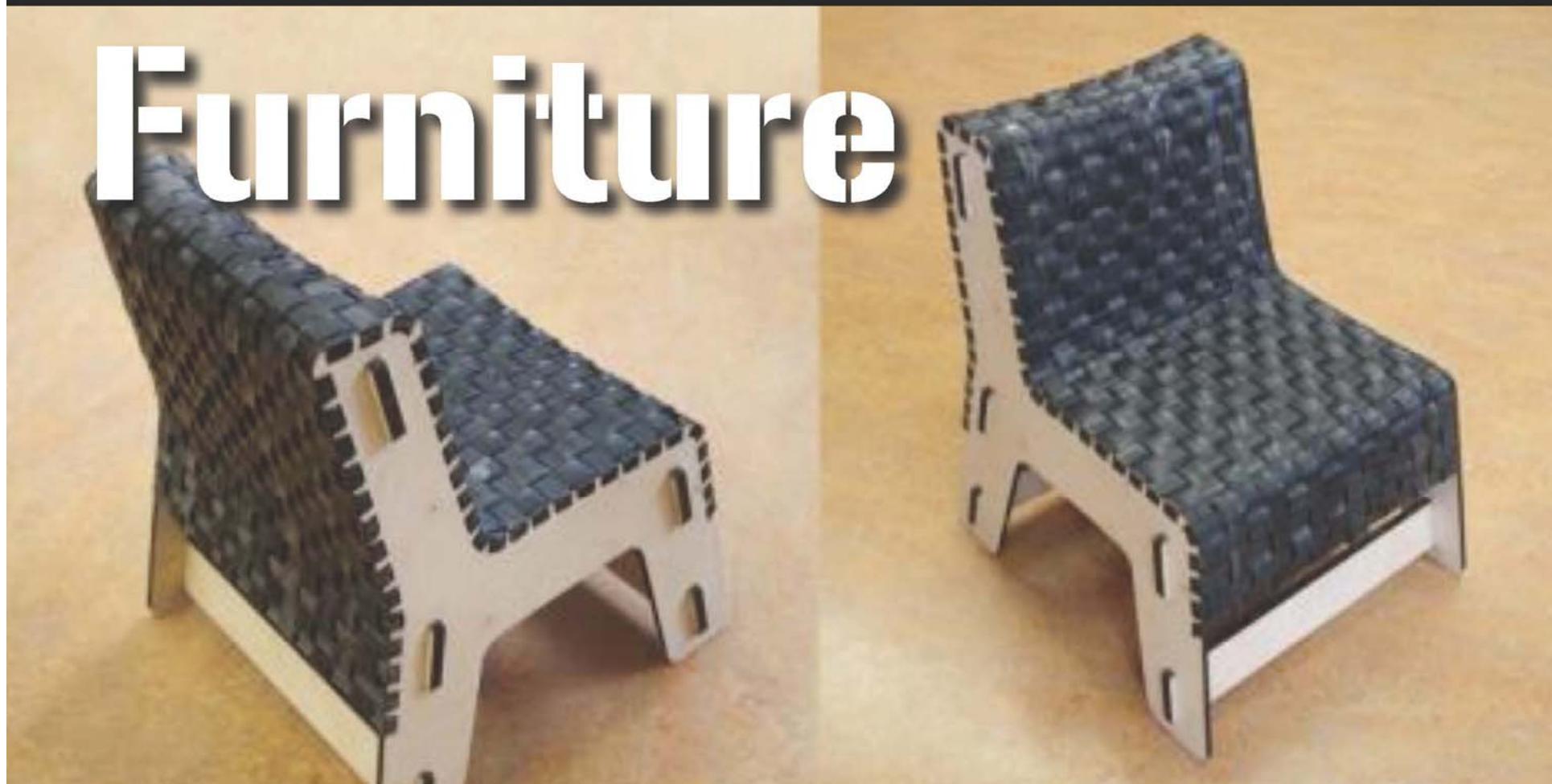
Q:

**What can we
make?**



**You can make
(almost)
Everything!**

Make your own Furniture



Make your own clothes



Make your own Instruments



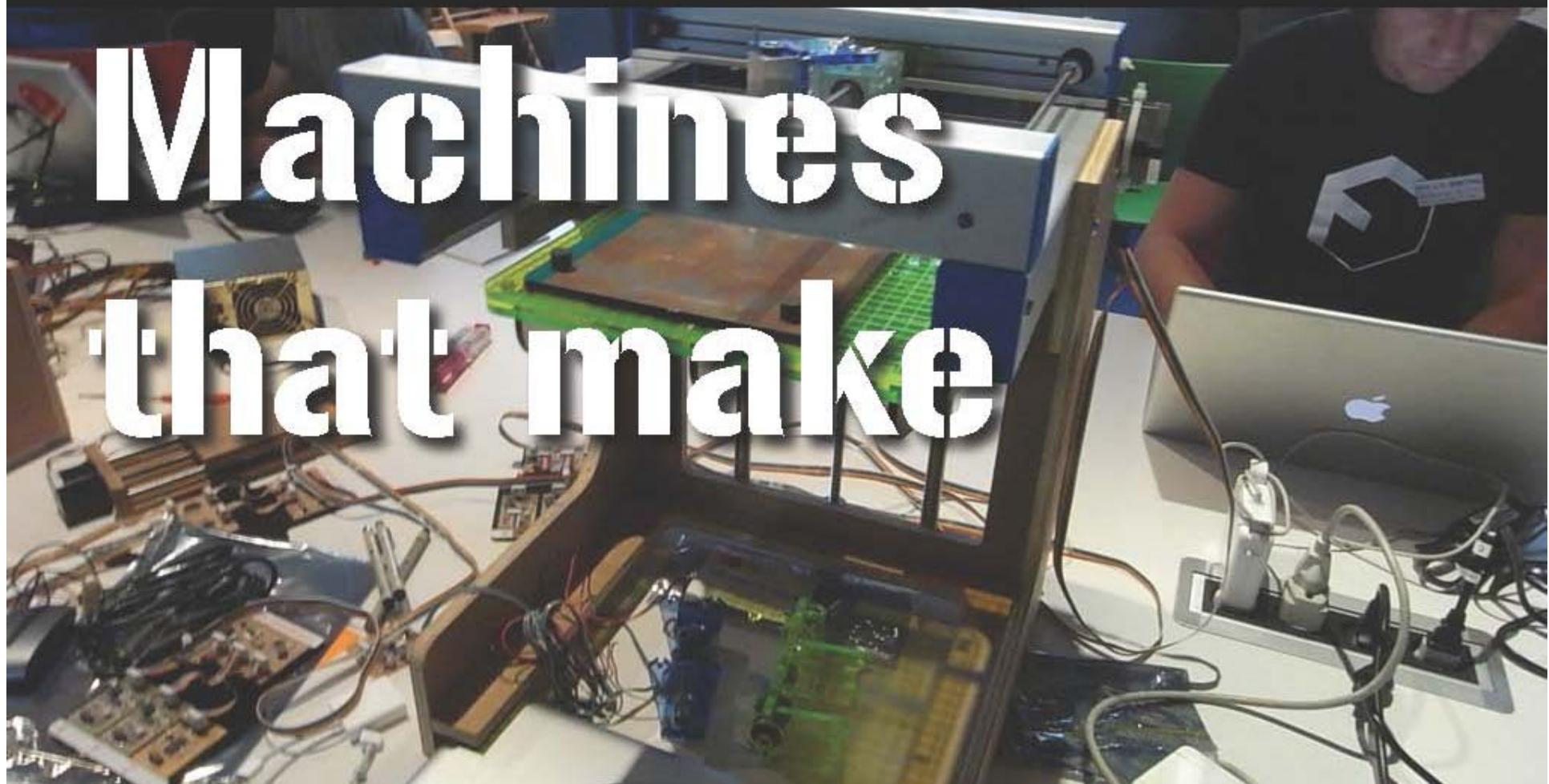
Make your own Boat



Make your own House



Make your own Machines that make





**For Everyone
To Make Almost Anything
With Digital Fabrication tools**

FabLab is a community Center



**Do It
Yourself**

Do it with Others



**FabLab is
Global
Fabrication
Network**





40 fablabs
16 countries

Hiroya Tanaka, Dr (Eng)

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(I-Design Program)

Architectural Design/ Interaction Design

I got one-year sabbatical (from 2010.04 to 2011.03)
to set up a new fablab in Japan.

Fab5 in India

Annual Conference in 2009





Vigyan Ashram Fab Lab
Pabal, District: Pune
India











The Fab Charter



What: fab labs are a global network of local labs, enabling innovation by providing access for individuals to tools for digital fabrication.

When: you can use the fab lab to make almost anything (that doesn't hurt anyone), you must learn to do it yourself, and you must share use of the equipment with other users and users.

Education: working in the fab lab is based on doing projects and learning from peers; you're expected to contribute to documentation and instruction.

Responsibility: you're responsible for:

- safety: knowing how to work without hurting people or machines
- cleaning up: leaving the fab cleaner than you found it.
- operations: working with maintaining, repairing, and repairing on fab supplies, and resources

Business: ideas and processes developed in fab labs must remain available for individual use, although intellectual property can be protected however you choose.

Answers: commercial activities can be incubated in fab labs but must not conflict with open access; they should grow beyond ratify within the fab, and they are expected to benefit the inventors, fab members that contribute to their success.







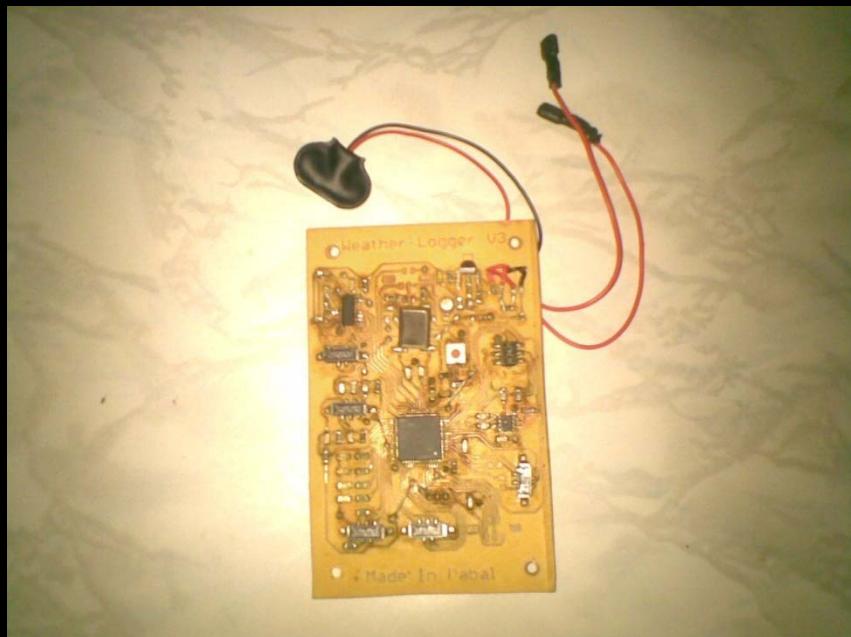








Weather Data Logger



Need:

Recording of weather data such as temperature and humidity; for pest control and crop advice to semi-literate farmers.

The Problem:

Automated data loggers currently available cost more than \$ 4000

The Goal: To Build the same within INR 4000 (\$ 100)

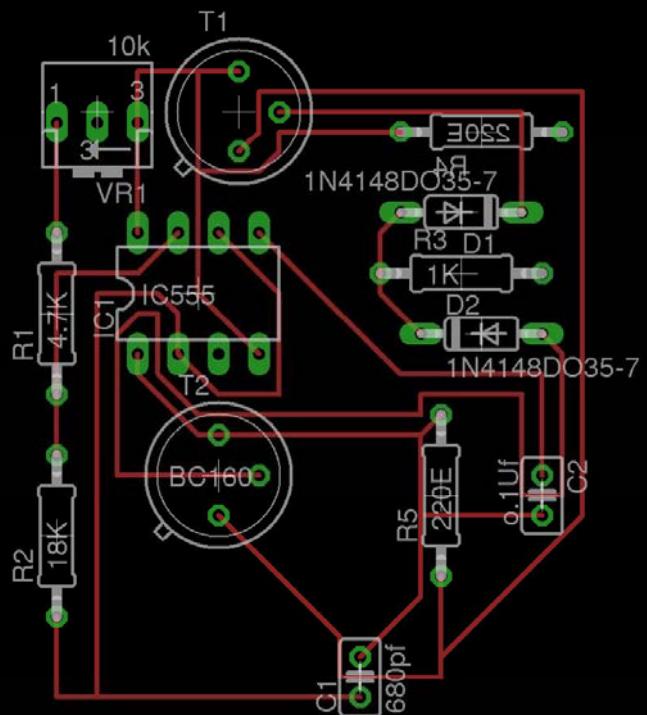
Ultrasonic Dog Repellant

Problem:

Farmers have begun to use
plastic lining for their farm tanks,
to minimize water losses.

These bodies of water attract stray animals,
especially during the dry season

Dogs dig under the fencing to try and
reach the water



A simple device that will be mounted on the tank fence
Emits ultrasonic waves at frequencies that dogs find very disturbing

Trials are on to determine the right frequencies

Pedal Power generator

Human power solution for lighting homes of remote communities, nomadic people.

Replaced lead acid battery with ultra capacitor.

We are planning to commercialize this product



LED lights



Educational Aids

Students have tried to understand their physics curriculum better by building small toys to demonstrate simple physics concepts

We aim to take the idea further by building a kit to assist rural school-teachers



FabFi



FabFi



<http://fabfi.fablab.af/>





Workshops!



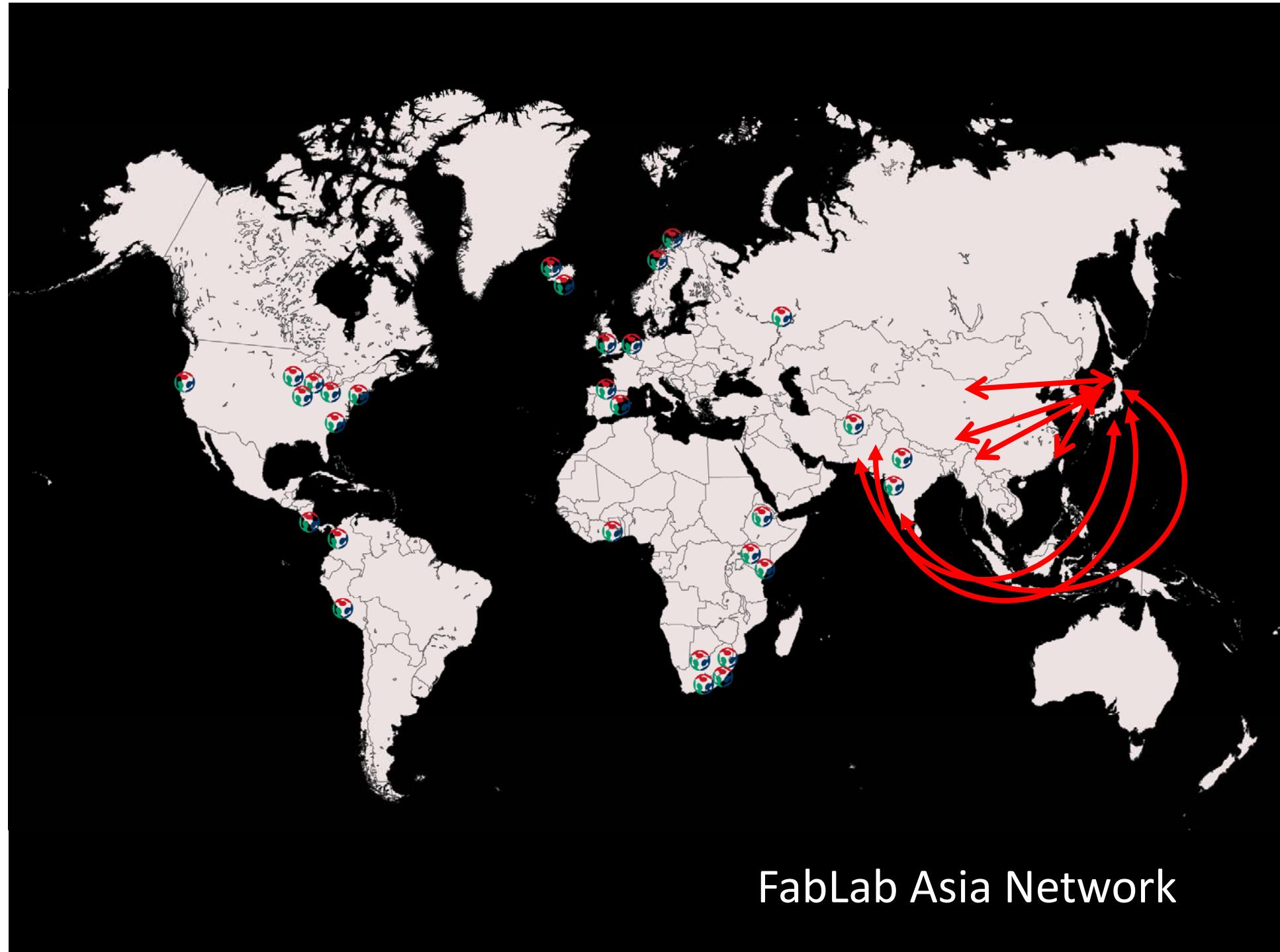
Mobile “Container” FabLab

Tokyo Designers Week
2010

FabLab Japan (Kamakura)









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