

The background of the slide is a photograph of an aquarium. Several goldfish are visible, swimming in the water. On the right side, there is a vertical blue tube, likely part of the tank's filtration system. The water is slightly murky, and the overall lighting is dim.

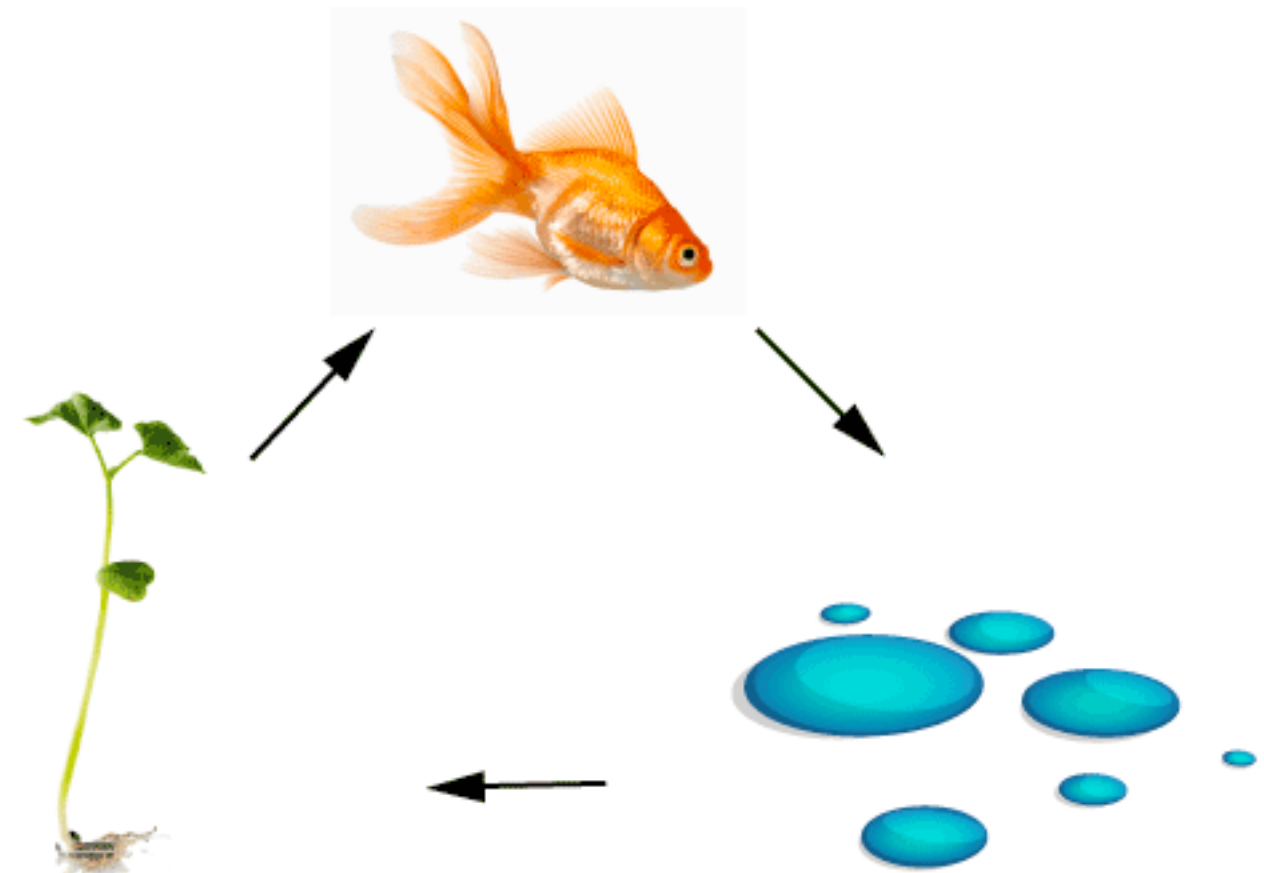
Users, Tiers, Markets

Chris Piuggi

Progress to date



Monday, October 10, 2011



“New York has 14,000 acres of unused rooftop space... if all of these unshaded rooftops installed greenhouses, the resulting produce could feed as many as 20 million people in the New York metropolitan area.”

~Laurie Schoeman, director of New York Sun Works

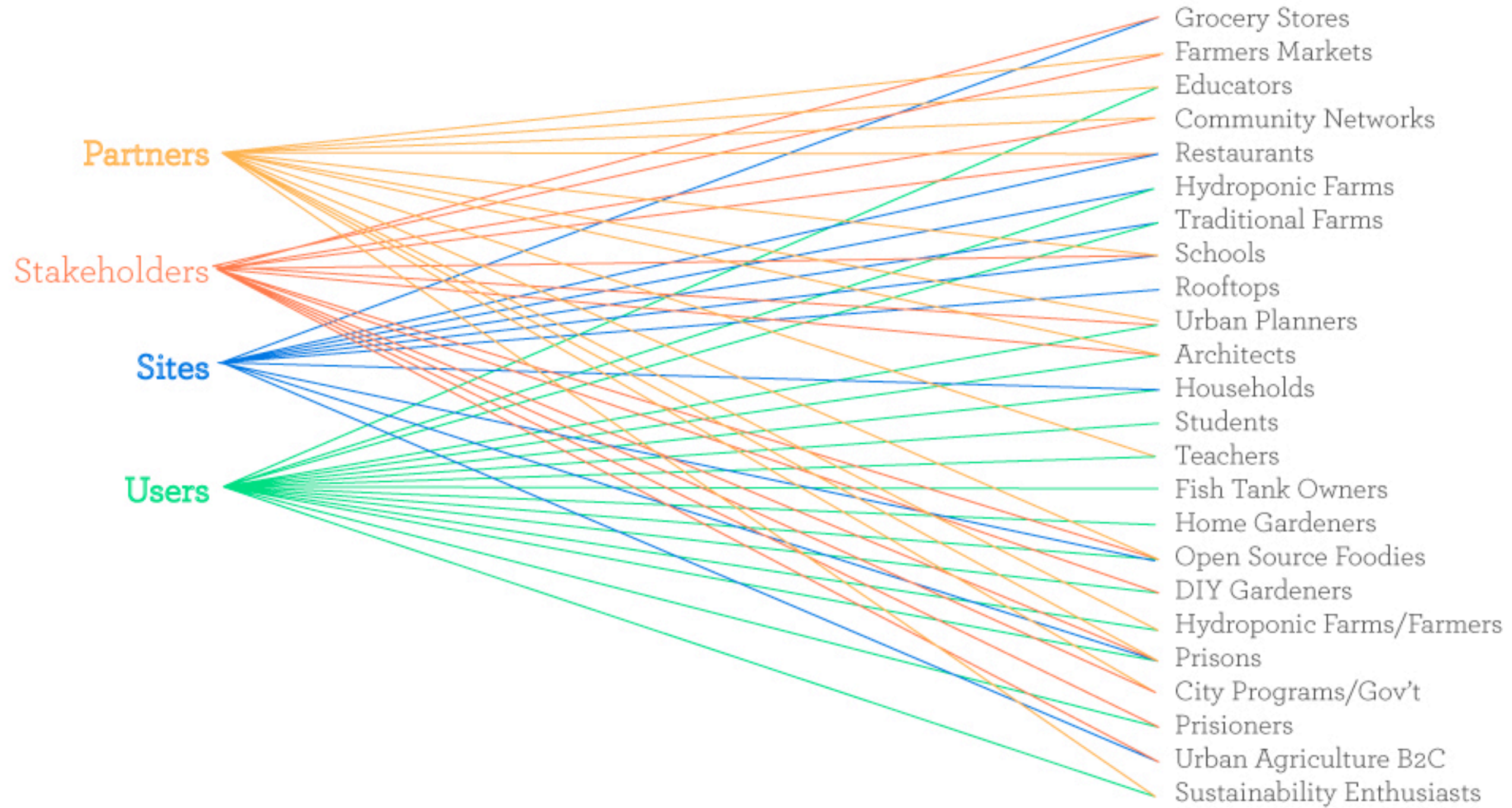
Glenn Rifkin, “Cash Crops Under Glass and Up on the Roof,”
New York Times, May 18, 2011, <http://www.newyorktimes.com/>

Who will use this system, how do we communicate to them and what do they need?

Display the path of food from your last meal, using 5 images.





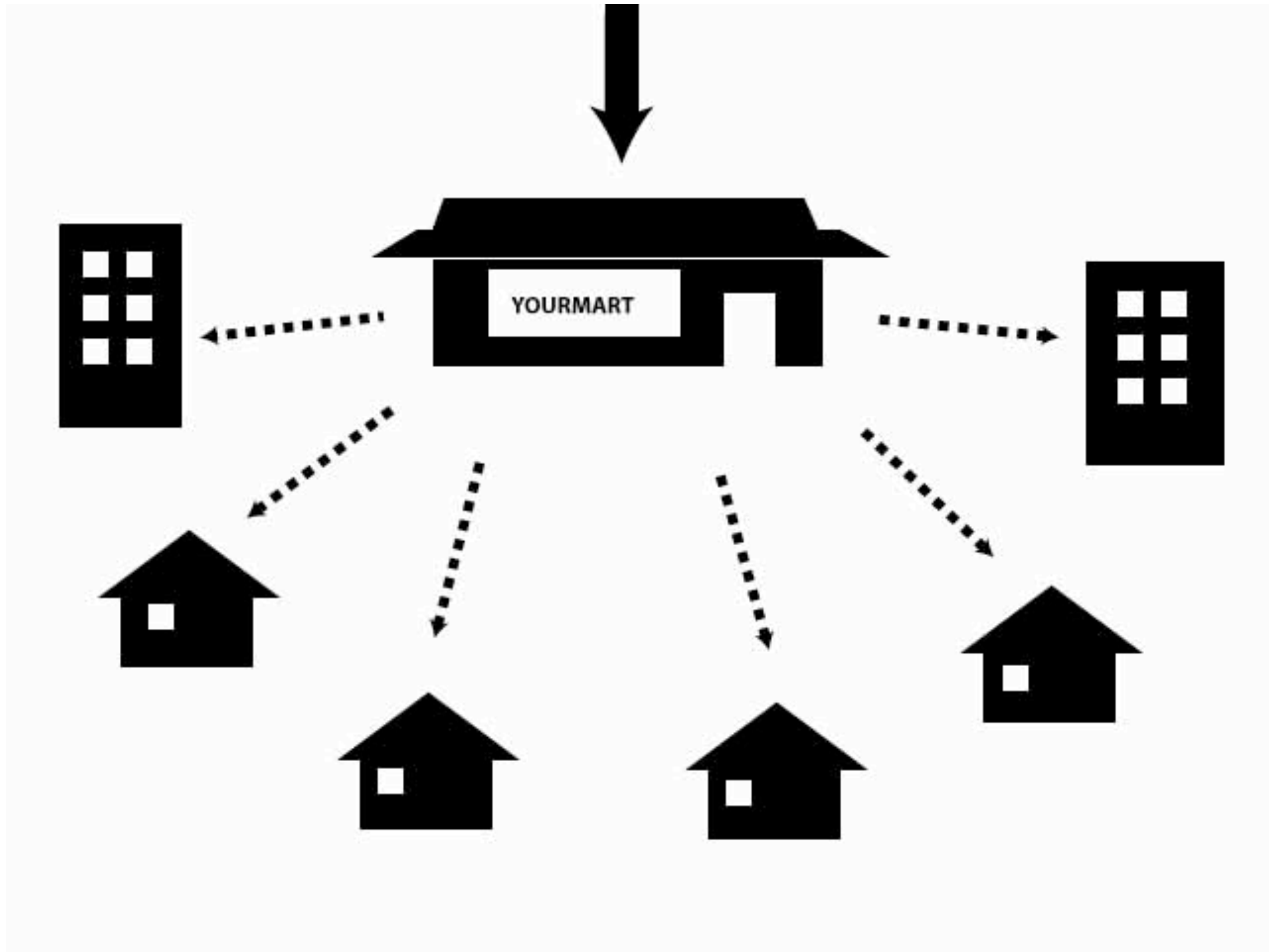


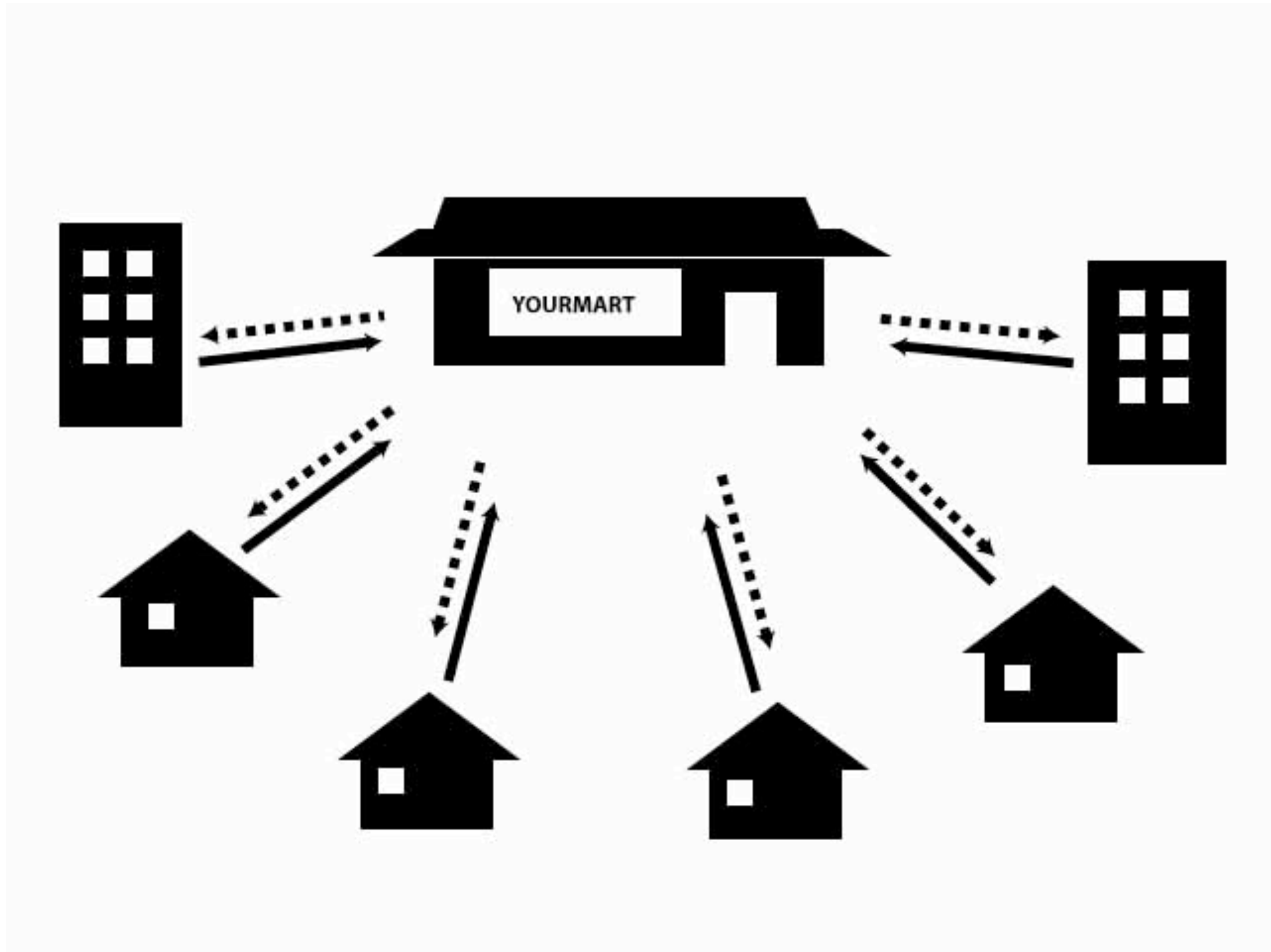
Stakeholders

Tier 1	
groups integral to systems application	Community Networks Urban Planning Firms Architecture Firms Local Gov'ts
Tier 2	
education about system and technology	Schools Prisons
Tier 3	
doers, makers and sharers	Gardening Communities DIY Communities Fish Keeping Communities Hydro Farms/Farmers Urban Agriculture B2C Technology Communities
Tier 4	
distribution infrastructure	Grocery Stores Farmers Markets Restaurants

Partners

Tier 1	
groups integral to systems application	Community Members Community Group Leaders Urban Planners Architects Gov't Officials
Tier 2	
education about system and technology	Teachers Administrators Wardens
Tier 3	
doers, makers, shakers, eaters & talkers	Food & Tech bloggers Rooftop co-ops Engineers Hobbyist communities
Tier 4	
consumer business decision makers	Food buyers Market Organizers Market Sellers Chefs Restaurant Owners





Sites

Tier 1

locations integral to
systems application

Rooftops
Households
Apts
Businesses

Tier 2

education about system
and technology

Schools
Classrooms
Prisons
Universities
Hacker spaces
Workshops

Tier 3

Platforms for
sharing

Blogs
Message Boards
Youtube
Instructables
Newspapers

Tier 4

distribution
sites

Farmers Markets
Grocery Stores
Restaurants
Grocery Delivery

Users

Tier 1

people integral to
systems application

Apt Buildings
Families
Communities
Individuals

Tier 2

educators
& learners

Students
Teachers
Prisoners
biologists
bloggers

Tier 3

growers, eaters,
& sharers

Sustainability Enthusiasts
Foodies
Hobbyists

Tier 4

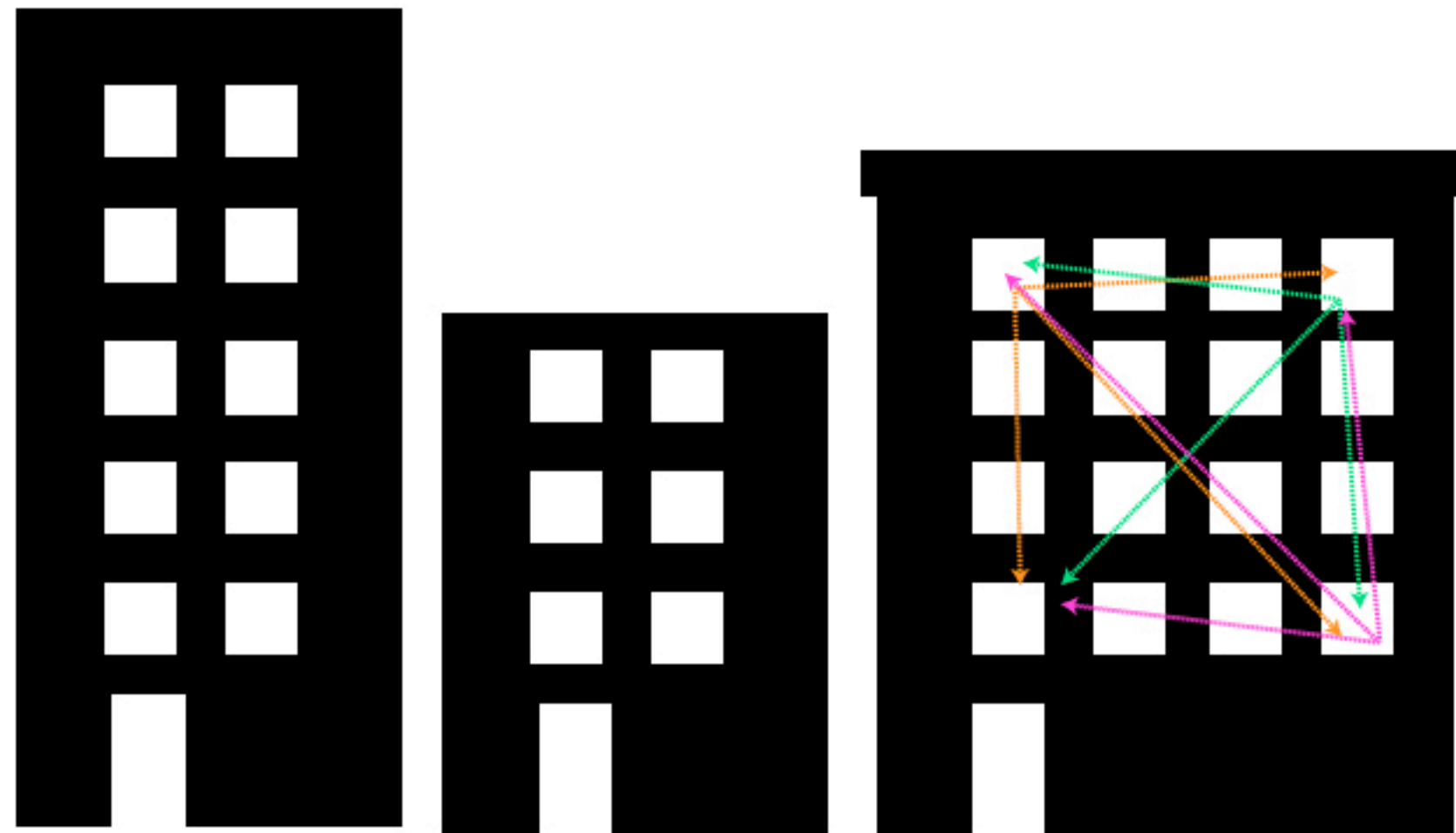
distribution
members

Farmers
Restaurants

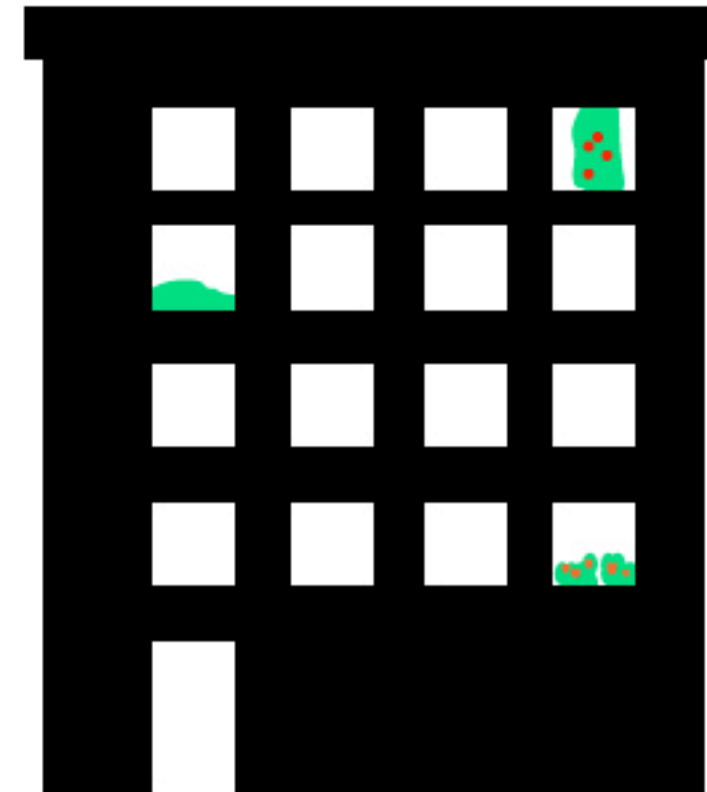
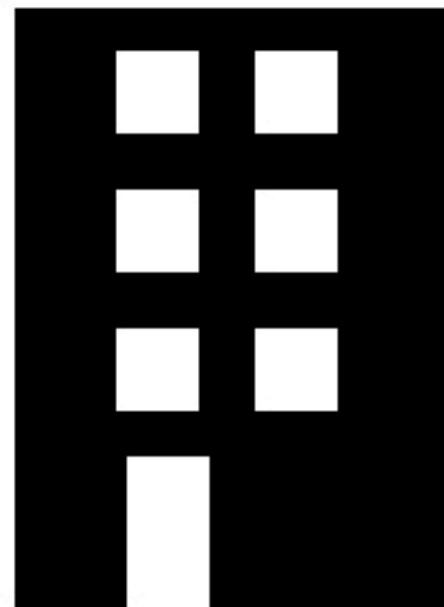
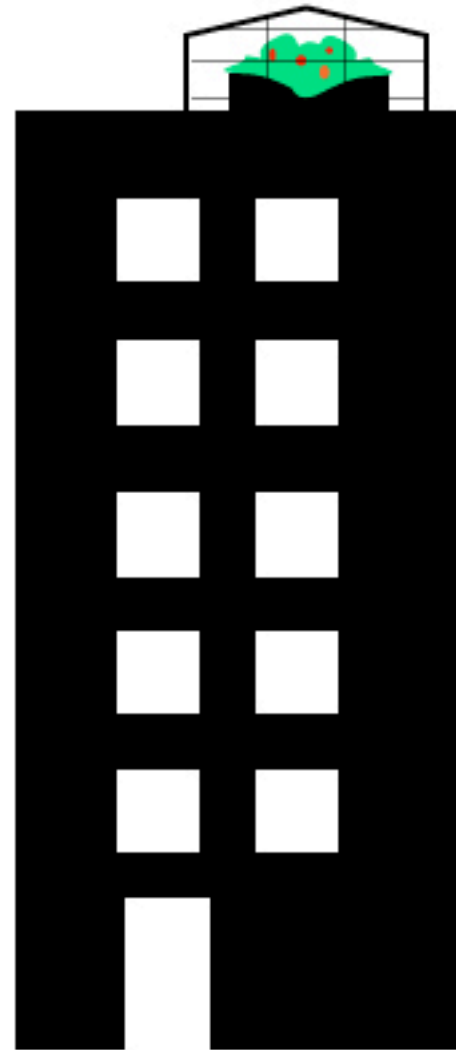
Users

Tier 1	
people integral to systems application	Apt Buildings Families Communities Individuals
Tier 2	
educators & learners	Students Teachers Prisoners Biologists Bloggers
Tier 3	
growers, eaters, & sharers	Sustainability Enthusiasts Foodies Hobbyists
Tier 4	
distribution members	Farmers Restaurants





Large Scale
Rooftop System



Small Scale
Apt System



Farm Fountain

Strengths

- Ecosystem and recycle based aquaponics system
- Vertical Hydro
- open-source

Weaknesses

- Lacking community
- Documentation
- Scale



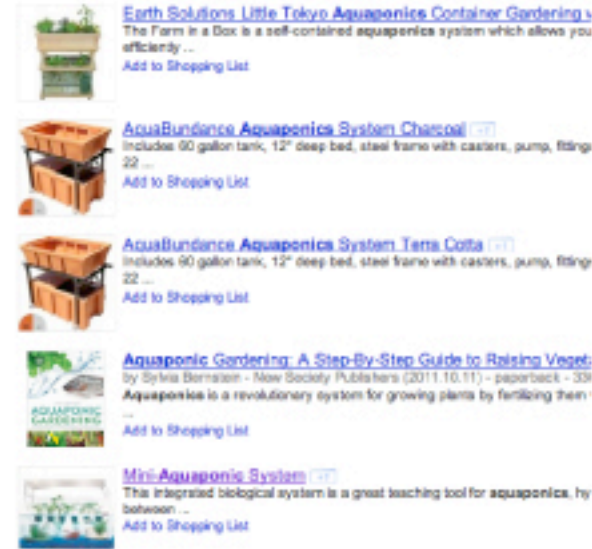
Window Farms

Strengths

- Scale
- Community
- Vertical Hydro
- Cost
- Documentation
- open-source

Weaknesses

- maintenance



Asst'd Kits

Strengths

- Simplicity

Weaknesses

- Costs



Barrel-ponics

Strengths

- High production
- Open-source

Weaknesses

- Lacking community
- Scale

BitPonics

Strengths

- Data collection
- control
- open-source

Weaknesses

- Lacking community

Everything

Images

Maps

Videos

News

Shopping

Blogs

Books

More

Show only

- ☐ In stock nearby
- ☐ Google Checkout
- ☐ Free shipping
- ☐ New items

Any category

Home & Garden

Any price

- Up to \$150
- \$150 – \$400
- \$400 – \$800
- Over \$800

\$ to\$

Go

Any brand

Earth Solutions

Any store

Amazon.com

Your location: Jersey City, NJ 07302 - [Change](#)Sort by: Relevance

Ads

[Home Aquaponics System | aquaponics.wakeup-world.com](#)[aquaponics.wakeup-world.com](#)

Organic, Cheap & Easy to Create.10x The Plants in 1/10th of the space

[Aquaponic Supplies - Fish food, Aerators, Net Pots, More](#)[www.westernpond.com](#)

Sustainable food production at home

[Earth Solutions Little Tokyo Aquaponics Container Gardening without A](#)The Farm in a Box is a self-contained **aquaponics** system which allows you to grow organic fish and organic vegetables conveniently and efficiently ...[Add to Shopping List](#)**\$295**

from 2 stores

[Compare prices](#)[AquaBundance Aquaponics System Charcoal](#)

Includes 60 gallon tank, 12" deep bed, steel frame with casters, pump, fittings, 150 liters of hydroton, timer, and DVD. 19" deep, 43" long by 22 ...

[Add to Shopping List](#)**\$1,296**

from 2 stores

[Compare prices](#)[AquaBundance Aquaponics System Terra Cotta](#)

Includes 60 gallon tank, 12" deep bed, steel frame with casters, pump, fittings, 150 liters of hydroton, timer, and DVD. 19" deep, 43" long by 22 ...

[Add to Shopping List](#)**\$1,296**

from 2 stores

[Compare prices](#)[Aquaponic Gardening: A Step-By-Step Guide to Raising Vegetables ...](#)

by Sylvia Bernstein - New Society Publishers (2011.10.11) - paperback - 336 pages

Aquaponics is a revolutionary system for growing plants by fertilizing them with the waste water from fish in a sustainable closed system. A ...[Add to Shopping List](#)**\$18**

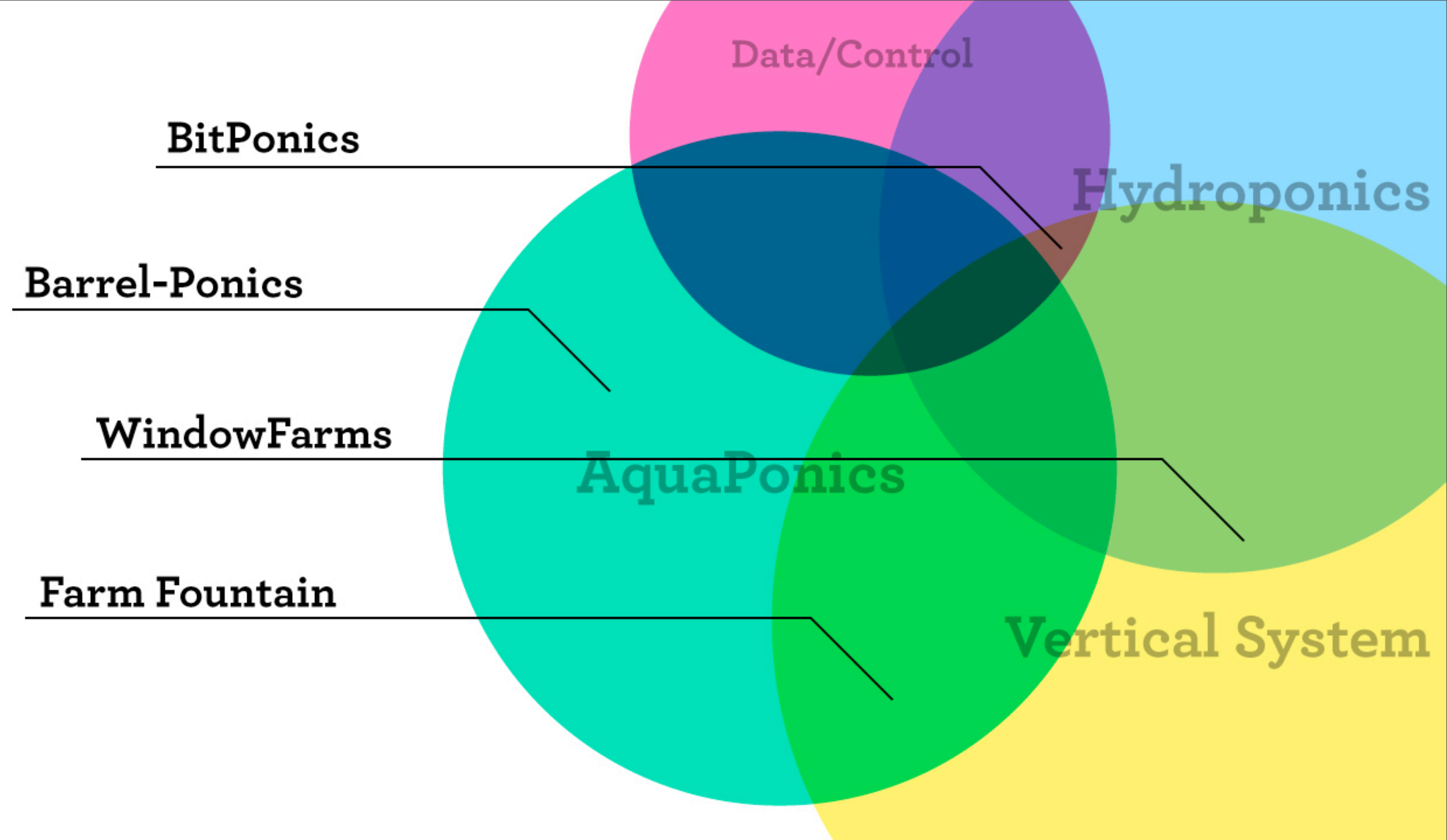
from 9 stores

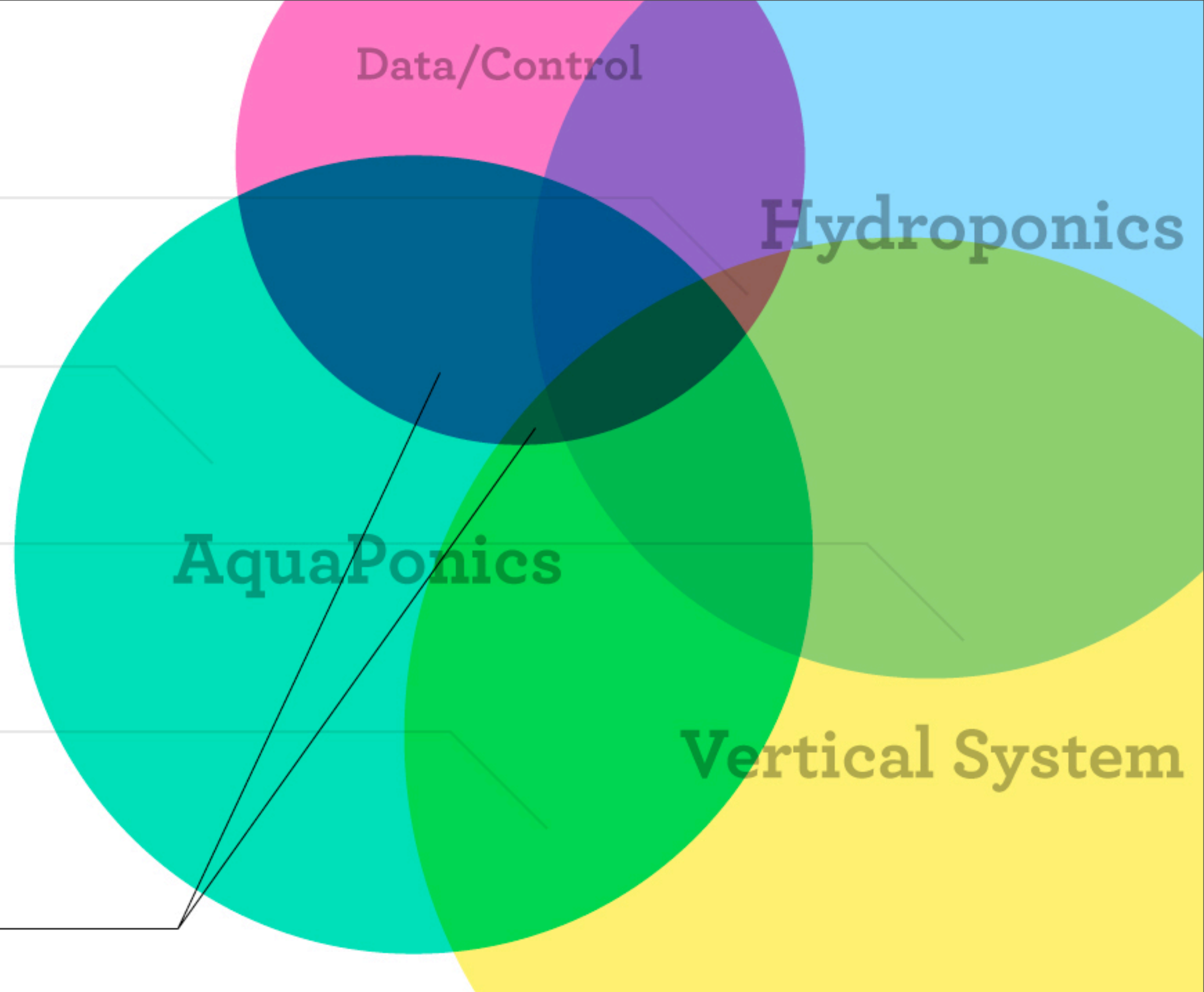
1 nearby store

[Compare prices](#)[Mini-Aquaponic System](#)This integrated biological system is a great teaching tool for **aquaponics**, hydroponics, and aquatic ecosystems. View the relationships between ...[Add to Shopping List](#)**\$468.00**

\$478.00 with est. tax & shipping

Sargent-Welch[Aquaponics System on the fish tank for organic grow](#)**\$189.00**





Data/Control

BitPonics

Hydroponics

Barrel-Ponics

WindowFarms

AquaPonics

Farm Fountain

Vertical System

Me.

Next Steps

10 gallon system

elementary school deployment

40 gallon system

apartment deployment

Larger System

rooftop deployment

Contacting Stakeholders

WindowFarms

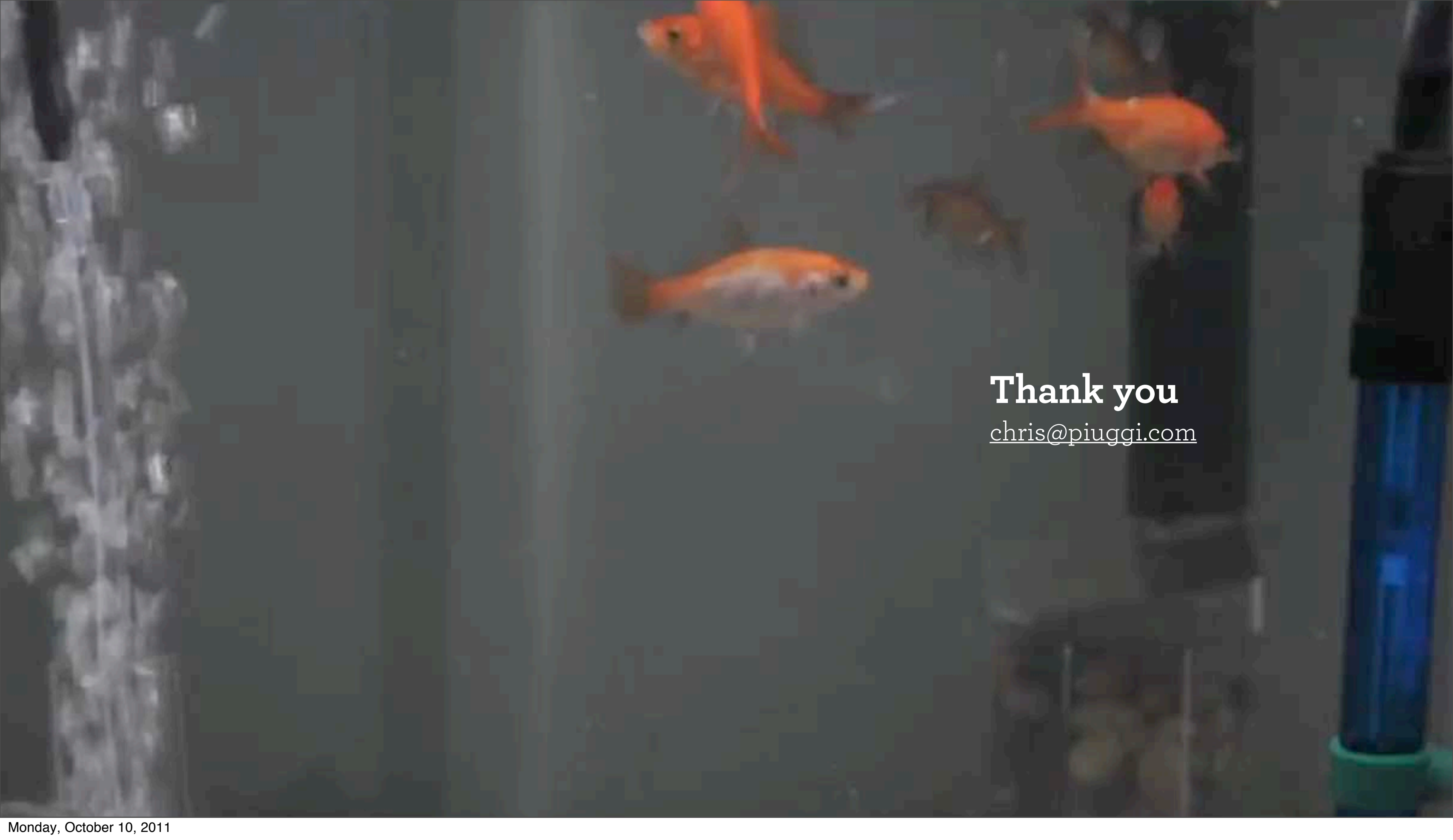
Farm Fountain

New York Sun Works

HackManhattan

Community Centers

Urban Planners



Thank you
chris@piuggi.com