

# MICROLINKS



## Tools for Measuring System Health

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Speakers: Eric Derks, *Canopy Lab*  
Mike Field, *DAI*  
Tim Sparkman, *MarketShare Associates*

Moderator: Kristin O'Planick, *USAID*

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# Tim Sparkman, MarketShare Associates



**Tim Sparkman** is a development economist, entrepreneur and systems thinker. He is currently a Senior Consultant with MarketShare Associates, a boutique consulting firm that provides systems-focused research, results measurement and economic empowerment support to a wide variety of donors and other clients, including USAID under LEO. He has about 10 years of development experience, including five years of program design and management experience in East Africa. He also works on innovative approaches to market system analysis and impact evaluation for systems-focused programs.

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# Eric Derks, The Canopy Lab



**Eric Derks** has come to systems thinking through practice, and failure, with nearly 20 years' experience intervening in market systems and organizational development. During this time, he has designed, led, and advised large and small-scale projects alike and learned a great deal about systems thinking as it relates to project strategy, activities, operations and knowledge management. He is currently the co-director of The Canopy Lab, an organization dedicated to the practical application and promotion of systems approaches.

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# Michael Field, DAI



**Michael Field** has over 20 years of designing, assessing, implementing and training on leading edge private sector development and enabling environment approaches. Through his work, Mr. Field has played a key role in setting learning and research agendas in the field of systems approaches. He is currently leading USAID's Agricultural Value Chain project in Bangladesh. Other recent experience includes designing, advising and training staff in Kenya, Nigeria, and Zimbabwe on applying systems concepts to private sector and enabling environment challenges. Mr. Field continues to provide guidance on improved practice on systems approaches via his role on the advisory board of BEAM Exchange and contributions to USAID's learning investment, LEO.

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# Why try to monitor ‘System Health’?

## Key Themes:

We need more meaningful and rapidly accessed information about changes in system dynamics

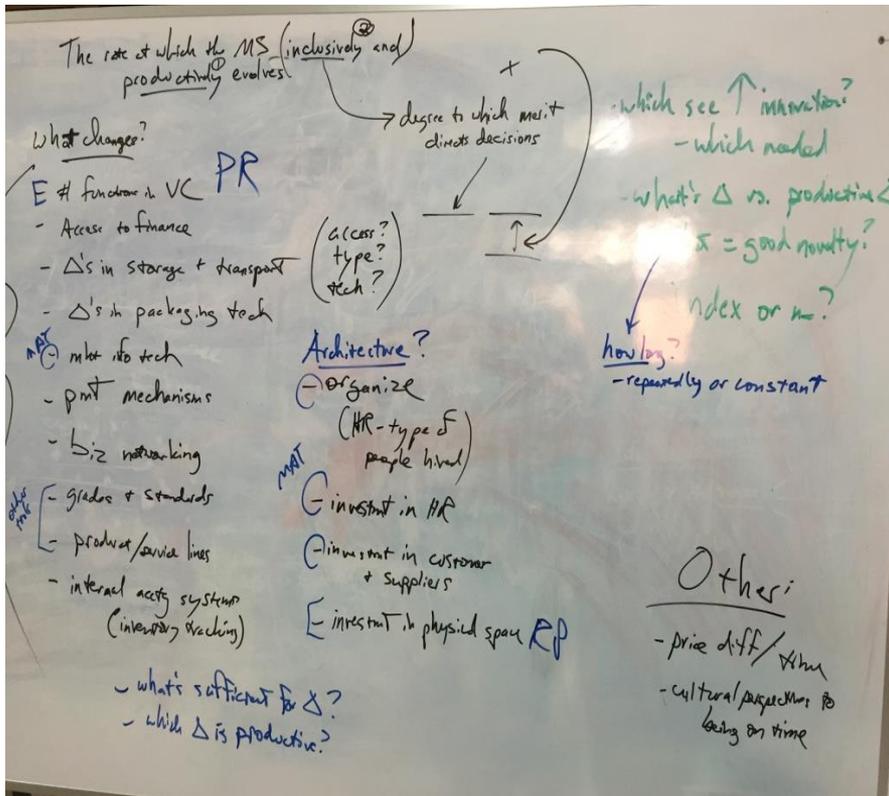
Research and thinking about norms and flows gives insight into system dynamics

We wanted to build and test a suite of tools for quickly “taking the pulse” of systems, using AVC as the testing ground

These tools would set sentinel indicators to inform AVC when market dynamics shifted



# What constitutes “System Health”?



## Norms

Patterns of behavior that appear consistently over time

We looked at Relational and Strategic biases:

- Extractive vs. Solution-seeking
- Patronage vs. Interest-based

## Flows

The substance of interactions between agents in a system (energy, information and materials)

We looked at sources of information, the uses of financial flows, and delays in the movement of financial flows

# Tool 1: Commercial Relationship Churn

## Rationale

- To understand the degree to which firms in a given market system maintain long-term business relationships vs. cycling through suppliers and buyers
- Speaks to underlying norms around commercial interaction
- Questions asked about buyers and sellers, separately, examining continuity of relationships over 3, 6 and 12 months



# Tool 2: Maintenance vs. Growth

## Rationale

- To understand the degree to which money flows in a market system adequately nourish the agents in the system
- Speaks to underlying norms around the use of resources
- Draws from an ecological notion of regenerative flows

## Questions

- On average, what percentage of your overall revenue do you spend to maintain your operational capacity?
- On average, what percentage of your working capital is provided by a trading partner?
- In the past 6 months, what have you done to improve your operational capacity?
- On average, what percentage of your overall revenue do you spend to improve your operational capacity?

# Tool 3: Delays in Financial Flows

## Rationale

- Examining the presence and duration of delays in the movement of money around a market system
- Pertains only to monitoring flows – no necessary relation to institutional biases
- Gives an idea of the current state of delays in the system, and permits observation of changes in the length and prevalence of delays

## Questions

- What percentage of your suppliers do you pay upon delivery?
- What percentage of your suppliers do you pay in advance? On average, how many days in advance?
- What percentage of your suppliers do you pay after delivery? On average, how many days after delivery?
- What percentage of your buyers pay you upon delivery?
- What percentage of your buyers pay you in advance? On average, how many days in advance?
- What percentage of your buyers pay you after delivery? On average, how many days after delivery?

# Tool 4: Information Flows

## Rationale

- Seeks to understand sources of various types of information, and perceived utility
- Originally wanted a map of information relationships – not practical for “quick and dirty”
- Probably changes less frequently than flow and norm info in the other tools, could be a diagnostic with annual follow-up

## Questions

- What are your sources for market price information? How would you generally rate the usefulness of market price information from each source?
- What are your sources for information on grades and standards and other product requirements? How would you rate the usefulness of information on grades and standards and other requirements from each source?
- What are your sources for information on new market opportunities? How would you rate the usefulness of information on new market opportunities from each source?
- What are your sources for information on new ways to improve your business performance? How would you rate the usefulness of information on new ways to improve your business performance from each source?

# Tool 5: Stresses and Concerns

## Rationale

- Seeks emotional responses to a range of business practice and relationship questions
- Could hint at systemic changes that might show up in other tools
- Clarifies and corroborates information from the other tools
- As such, not useful as a standalone diagnostic



# Tool 6: Changes in Business Models

## Rationale

- Measure the pace of tinkering among firms in a market system – productive or not
- Speaks to norms: solution-seeking vs. extractive management
- Originally tried to understand rates of biz startup and closure – not practical
- Examines 13 aspects of business models in four groups: product, process, marketing and organizational innovations
- Developed an index to rank and compare scores



# TOP TAKE - AWAYS

**What might be applied to other programs and contexts?**

**What are the indispensable lessons to share with others?**

1

## Quick and Simple

We field-tested the tools. The entire suite can be conducted by a skilled enumerator within 30 minutes.

2

## Rooted in Theory

There's a burning need to improve our systemic understanding, but quite a bit of literature available if we choose to use it

3

## Benchmarking

Benchmarking is extremely complicated – systems are not comparable in many senses. However, we do have some idea of what we think indicates an inclusive, developing system. But let's not get carried away with developing scores and using them as targets

4

## Please Improve on the Tools

This is a stab at accomplishing the very difficult task of building better system health monitoring tools – necessarily imperfect. We welcome others to apply and improve them (just tell us how it went)

# MORE THAN MICRO

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**Contact:** michael\_field@dai.com, eric@thecanopylab.com,  
tim@marketshareassociates.com,  
koplanick@usaid.gov

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