Session Description: FMA, a strategic and financial advisory firm, will lead a Google Design Sprint-style workshop to evaluate the current tools available for evaluation. The session will involve collaborative design-thinking and will end with a demonstration of how lessons from machine learning, computer vision, and agent based models can be used to evaluate impact in real-time.

Session Leaders:
- Davey Gibian, Office:FMA
- Steven Zausner, Office:FMA

Topic: Design Sprint
- What is a design sprint?
  - Typically takes place over a period of 5 days
  - Philosophy: speed matters, design matters, outcomes matter
    - Meant to be a collaborative process
  - Goal: understand the problems we are facing and how better tools can help resolve them
- What is the general problem we face?
  - No technology at this point can define reality - existing technical tools for measuring social impact are meant for single use measurement – what we need are tools that can reflect our complex world
  - Small data vs. big data - we need to understand the context of data before putting our faith in it
- Why do our technology systems not keep up with the tools needed for development specialists?
  - Silos, lack of partnerships, lack of communication, lack of efficiency, context, existing tools can be one off, interoperability, donor procurement constraints, addressing problems singularly, capacity, education/training, inability to see outside of your own job, status quo, institutional inertia
  - By talking through problems this way – getting to the root of where tools/technologies/processes aren’t working the group can develop a common language
- The current tools we have are static – they don’t adapt to our needs over time (as opposed to machine learning)
- Design sprint process:
  - understand – define – diverge – decide – prototype - validate
- This process helps us get to a world we can monitor and model.
- Step one: Interviews
  - Interviews help us get to the what? How? Why?
- How is X tool helping the team? How is it failing to meet needs?
  - For example, client annual surveys:
    - Often they are not timely, not comprehensive, and there is a lack of consistency in responses
    - At the end of collecting these surveys and individual person goes through and reviews/compiles the information manually which takes a lot of time
    - What can be done to remedy the fact that paper surveys are slow and no one fills them out?
      - Machine learning, computer vision, robotics, AI, agent based models
  - Technologies that are too general and not targeted don’t actually help anyone address particular issues
    - Contingency on internal situational awareness
  - Another problem, often there are lots of different tools, they don’t speak with each other and therefore the technology isn’t able to tell us what we want to know (ie having to access several different systems to get the complete picture that there are 17 grants and 10 are doing really well while 7 aren’t working)
  - Participatory methods, such as design sprints, work well because they are flexible but they are variable in outcomes and honing in on value. Ultimately, doesn’t go far enough to understand the needs of the users.
  - Often there is a bias towards ‘new’ tools
  - Often there is a data ingestion problem

**Q&A:**

- What are some of the problems that other organizations have approached you with? When the current tools don’t keep up, can we create a rapid feedback loops on the ground in real time?
  - Digitally mapped with city of Mogadishu with geotags such as: tribal rivalries, distribution norms, fundamental analysis on what is happening on the ground so that drivers could get real-time feedback in where it was safe to drive.
  - Conducted supply chain analysis in order to take in a lot of information and analyze it very quickly to make it useful
  - Develop simple tools that use machine learning to see how organizations use data and take in the appropriate information to make decisions
    - This can be used to figure out how ecosystems interact
    - Looking at how often people interact with each other to address things like economic disparity and racial divides
  - Within machine learning – there is the ability to take in unstructured information, pdfs, word docs, photos and ingest that through a single machine that can give insights based on the trends it finds in the data – allows the ability to access big data tools – the ultimate goal is to have non-data specialists be able to use data technology
  - Machines can identify problems by removing subjectivity and offering up solutions that are often staring right in front of you
  - It’s not really the tools but the analysis that allows you to do something
  - Sprints can build pragmatic tools that you can actually action pretty quickly
Key Takeaways:

- Design sprints are a human centered design approach to resolving problems
- The purpose of a design sprint is iteratively hone into a problem
- Design sprints should focus not on what data we have available but what information we need
- Design sprint process:
  - Understand → Define → Diverge → Decide → Prototype → Validate
- Machine learning ingests unstructured information such as: pdfs, word docs, and photos etc. and can output insights based on the trends it finds in the data. Eventually, this technology will help non-data specialists tackle problems using data technology.

Additional Resources:

- Principles for Digital Development
**Designing the Impact Tools of Tomorrow, Today: Session Two**

**Session Description:** Office: FMA, a strategic and financial advisory firm, will lead a Google Design Sprint-style workshop to evaluate the current tools available for evaluation. The session will involve collaborative design-thinking and will end with a demonstration of how lessons from machine learning, computer vision, and agent based models can be used to evaluate impact in real-time.

**Panelists:**
- Davey Gibian, Office:FMA
- Steven Zausner, Office:FMA

**Topic: Designing a structured way to think about the world**

- How can we design better tools to address our complex world and complex problems?
- What the role of a sprint leader is?
  - To iterate things very quickly
  - To show the why and the how things can translate into something definitive
- Today we are going to try to solve for communication, information dissemination, and efficiency
- Putting information into a database: pictures, documents, spreadsheets
- Problem: people don’t fully understand what technology and data can do for them and how it can solve their problems
- Understand the problem -> define the problem (through storytelling – many times there isn’t the ability to visualize information) -> transformation (what is an action/conflict transformation)
- Action – conflict – transformation
- Creating a story about what is needed
  - Using a narrative to describe a problem is helpful because it’s a dynamic way of understanding a problem
- The what = the technology
- The how = the strategy of field building
- What information will be meaningful for defining a metric? What is available to us? What is not useful to us? Could we potentially be doing something that is entirely not useful (ie people don’t need it)? Is there a potential risk to cause harm? Could this technology be coopted for propaganda?
- Once you have the narrative you can start building out the tools
- Diverge: how might we?-style brainstorming
  - How might we develop an actor without surveying constantly – how might we dynamically share and update our models with the community – how might we integrate data from small businesses, the government, and other development and social change organizations – how might we integrate data from beyond a set of pre selected actors
• How do we determine if we’ve achieved our goals? How might we build towards common ground? How can we draw inferences from behavioral science? Can we game-ify how we measure these things? Can we measuring/evaluate coursework elsewhere? How might we recruit people who want to learn English/Arabic? What are the incentives for joining such a program? How can you create an incentive so significant (certificate from Harvard) to attract people? What image do we want to create for participants? That this is valuable, image of countries participating and engaging each other, how do we make this fun.

• Using predictive analytics to get to know participants

**Key Takeaways:**

• A design sprint is meant to take large problems and breaking them down into small distinct units that you can solve for

• Create a narrative around the problem in order to dynamically and fully understand it

• Discuss – ‘how might we’ scenarios to get to the root of what is needed and then creating the tool that meet those needs

• The aim of this practice is to move away from M&E for the sake of M&E and moving towards knowledge generation that benefits the organization