

# R-SEARCH

RAPID RE-SEARCH ENABLING THE DESIGN OF AGILE AND CREATIVE RESPONSES TO PROBLEMS

BETH SIMONE **NOVECK** 

ΛNZSOG



### WHAT IS R-SEARCH?

The R-Search rapid research approach encompasses two central components that, when leveraged, can enable researchers to develop, iterate and implement evidence-based solutions to public problems:

- ▶ Getting smart quickly on a topic by:
  - developing a clear and detailed understanding of the problem and solution area;
  - identifying actors at play in the problem and solution space; and
  - understanding the larger context in which the problem and potential solutions exist.
- Staying in the know regarding new developments in the problem and solution space.





#### WHAT IS R-SEARCH?

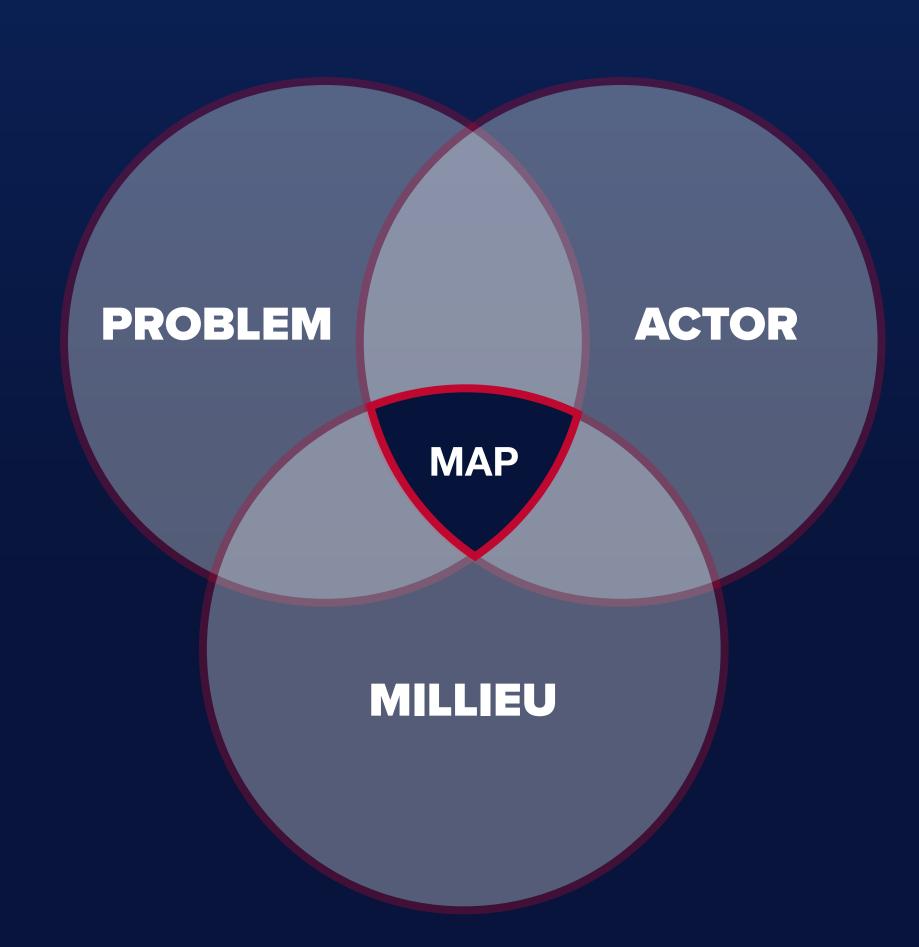
- Seemingly intractable problems require agile and creative responses;
- Meaningful and agile creativity can only arise when there is a rapid understanding of the topic at hand;
- ▶ R-Search enables the development of a MAP (a topic's Milieu, relevant Actors and existing Problem space) of issues, scholarship, actions and opinions surrounding a topic to allow for the design of responses that are more informed and targeted;
- R-Search allows for the development of a baseline against which progress can be measured;
- R-Search enables the completion of a project canvas to guide development, implementation and assessment;
- R-Search provides for knowledge-building to inform rapid prototyping.







# MILLIEU, ACTORS, PROBLEM



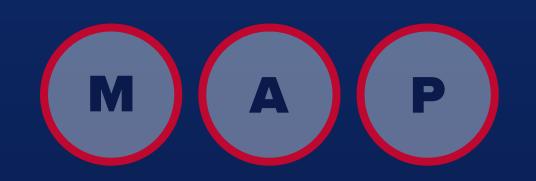
The MAP approach allows you to quickly get smart about your problem and solution space, and the environment you want to impact.

- Milieu: A problem does not exist in a vacuum.

  Mapping the problem and solution space requires a clear understanding of the ecosystem in which a problem exists.
- Actors: A critical component of gaining an understanding of a topic area involves developing knowledge on those working on that topic, as well as the communities affected by it.
- **Problem**: Gaining a firm grasp on the problem and solution space requires an exploration of the literature, evidence and narratives existing in the space







### **ELEMENTS**

**Objectives** Why research Milieu, Actors and Problem?

Guiding Questions What questions to answer in order to ensure a level of comprehensiveness?

What approaches to use that help uncover answers to Guiding Questions rapidly?

What sources, software and platforms are available that enable the carrying out of methodologies in the interest of answering Guiding Questions rapidly?

How to capture and share findings quickly? — a place to share findings and establish an audience, such as a blog, Tumblr, Medium or wiki is essential.

Inspirational examples of research deliverables



Tools

**Deliverables** 

Examples



Gaining a rapid, yet firm, grasp on the problem and solution space requires an exploration of the existing evidence, responses and narratives.

# **Objectives:**

- ▶ To establish a deeper understanding of the scale and scope of the problem quickly and how it is being portrayed and backed-up by evidence;
- To create a convincing and compelling case (why is it important?);
- To establish legitimacy and credibility ("done your homework");
- To effectively package and communicate issues and ideas;
- To become aware of the existing solutions space.







# **CASE STUDY**

Why Understanding the Problem Matters — Pew Health Impact Assessment for improving health policy decision-making









## **Guiding Questions:**

- ▶ What is the current evidence/counter evidence of the scale and scope of the problem, and how divergent is the evidence?
- ▶ What types of evidence exist i.e.,research-based, experience-based, statistics? And how convincing
  - i.e., accurate, trustworthy, applicable is the existing evidence?
- What are the key and dominant narratives?
- What are the untested assumptions and/or metrics of success?
- What is the current response and solution space?







# Methodologies:

- ▶ Web R-Search preliminary scanning of news and literature on the topic.
- ▶ **Journal and Database R-Search** diving deeper into the academic/ grey literature to gain understanding of the categories of theories surrounding the topic.
- ▶ Social Media Scanning and Canvassing using, for example, Twitter hashtags to follow updates on the problem and identify people to reach out to for more information.
- ▶ **Outreach** reaching out to and learning from peers or any identified expert (understood broadly and encompassing professional and lived experience) in the field.
- ▶ **Crowdsourcing** putting out less targeted calls for help and information through, for example, Q&A sites.







#### Tools:

- ▶ Google Search/Scholar/News/Trends/Ngram add &tbs=ida:1&gl=us to a Google search URL to access a list of in-depth articles on the topic (also check out Google Ask page + List of other Search Engines)
- ▶ Research and Library Databases For instance: Social Science Research Network (SSRN), Policyarchive, Congressional Research Service (Open CRS), Docuticker, OECD et al.
- ▶ Tag search: Twitter Hashtags (Check out Hasthtags.org)
- ▶ **Q&A Sites** (e.g., AskMetafilter, Quora, Stackexchange, Yahoo Answers)
- ▶ Case-studies (HBR; SSIReview) and Reviews (Webbies)







#### **Deliverables:**

- Problem Mindmap graphical articulation of scope and scale of the problem, and the issues at play.
- ▶ **Findings and Source Review/Slide Deck** categorization and description of the current thinking and writing on the topic, especially within academia/grey literature (Prezi; Wikipedia, Tumblr, et al page).
- Annotated Bibliography/Readings collection of key sources related to the problem containing brief descriptions of each source (Zotero).
- ▶ **Problem Index** collection of relevant statistics on the problem (Harpers Index)
- Response and Ideas Portfolio or Directory Collection of identified or developed approaches (GitHub)







#### **EXAMPLE DELIVERABLES**



What are the root causes at play? What systems failures are causing or exacerbating the problem?





Deep-rooted changes affecting consumers and the food industry are combining with several systemic failures to adversely impact nutrition, health and livelihoods.

System Failures: Underlying constraints that exacerbate the vulnerability of low-income populations

#### **Market Distortions**

Heavy subsidies, commodity incentives and relatively high margins on processed foods have driven the private sector to focus on the production of unhealthy foods, and to place little monetary value of consumer health.

#### Political System

Policy has historically focused on the enduring issue of hunger, and few tools have developed to address dietary quality. Governments have not promoted healthy food markets, creating a barrier to comprehensive strategy.

#### **Health Services**

The health systems of developing countries, built to primarily address infectious diseases, is straining to tackle the growing and expensive burden of non-communicable diseases.

#### Nutrition Programs

Little funding to research and measure the multidimensional drivers and implications of the food transition and to identify cost-effective interventions that are feasible in different settings.

Root Causes: Main drivers that directly contribute to the overconsumption of unhealthy foods

#### Supply Chain Infrastructure

Under-developed infrastructure of local supply chain actors limits availability and quality of healthy products. Packaged food supply chains tend to be first to formal markets, only later followed by more complex fresh food chains.

#### The Revolution In Food Retailing Misaligne

Supermarkets and modern retail are

#### Economies of Scale in Food Production

Technology- and volume-driven efficiencies in the supply chain reduce marginal cost, and ultimately prices, of highly-processed food products (v. healthier options).

#### Misaligned Commercial Incentives

Profit-maximizing businesses are

#### Globalization and Market Growth

The opening of markets in the developing world, along with the saturation of existing markets, is driving food and beverage companies to accelerate the influx and accessibility of highly-processed foods.

#### Consumer Preferences

Deep-seated tastes from human







### **ACTORS**

Gaining an understanding of a topic area involves developing knowledge on the actors focused on that topic, as well as the constituency they represent versus the communities affected by it.

# **Objectives:**

- ▶ To establish a deeper understanding of the actors involved in studying, expanding and acting on the problem's solution space;
- To map the set of individuals, organizations and networks that are active in the space and may have significant power to influence any response or innovation (and want to partner with);
- ▶ To develop a scalable understanding of the links between key players in the field and their level of legitimacy and authority.





# **CASE STUDY**

Why Understanding the Actors Matters – MindLab improving service delivery for work-injured youth









### **ACTORS**

## **Guiding Questions:**

- ▶ Who are the experts e.g., think tanks, academics and others working in the space?
- ▶ What policymaking bodies/intermediaries (e.g., governmental agencies, committees, working groups) are responsible for governing the space? What are their priorities? What are their positions? How open are they toward innovation?
- ▶ What NGOs (including industry) and advocacy groups are focused on the problem area? Who are their constituency and main funders? What are their legitimacy and reputation?
- Who makes up the affected user base?
- ▶ Who are the most important and influential actors, across realms, working in the space? How are they linked? How does their work differ? What roles do they play?







# **ACTORS**

# Methodologies:

- ▶ Academic Citation Tracking, Grey Literature R-Search identifying key players based on citations in the field and analysis of relevant literature not controlled by commercial publishers.
- ▶ Scanning of Partnerships, Funding Streams and Conference Speaker Lists (Network Analysis) learning how different actors in the space are linked and collaborate and who the influential thought leaders are.
- ▶ **Constituency Mapping** building an understanding of the needs, preferences and opinions of the affected citizen community.
- ▶ Social Media Scanning and Canvassing using, for example, Twitter hashtags to follow updates on the problem and identify people to reach out to for more information.
- ▶ **Outreach** conducting, for example, interviews and delphi surveys to map and broaden understanding of the circle of influence.







#### Tools:

- Google Scholar/News
- Citation and Reputation Trackers (e.g., Web of Science, Linkedin Graph)
- Individual and Conference Directories (e.g., The Leadership Library, Who's Who?, NNDB Mapper, Council on Foundations Database, Laynrd, Linktank)
- Social Media Followers (Twitter/Linkedin), Hashtags and Lists + Graph Tools for visualizing network
- Q&A Sites, Community- and Topic-Specific Online Sites (e.g., subreddits, local community message boards)







# **ACTORS**

#### **Deliverables:**

- ▶ **Stakeholder Mindmap** graphical articulation of the key players in the space and how they interact (circle of influence)
- ▶ Biographies and Relationship Map or Photographic Slide Deck pictures, descriptions and categorizations of the key players in the space and how their work is similar or differs from other key figures.
- List of Key Figures and Organizations to Follow (Twitter List) a collection of the most important people and organizations in the space which can later be used for disseminating outputs.
- ▶ User Profiles detailed information on the people affected by the problem.
- Expert Networks connecting and matching key experts with particular needs in a systemic manner.

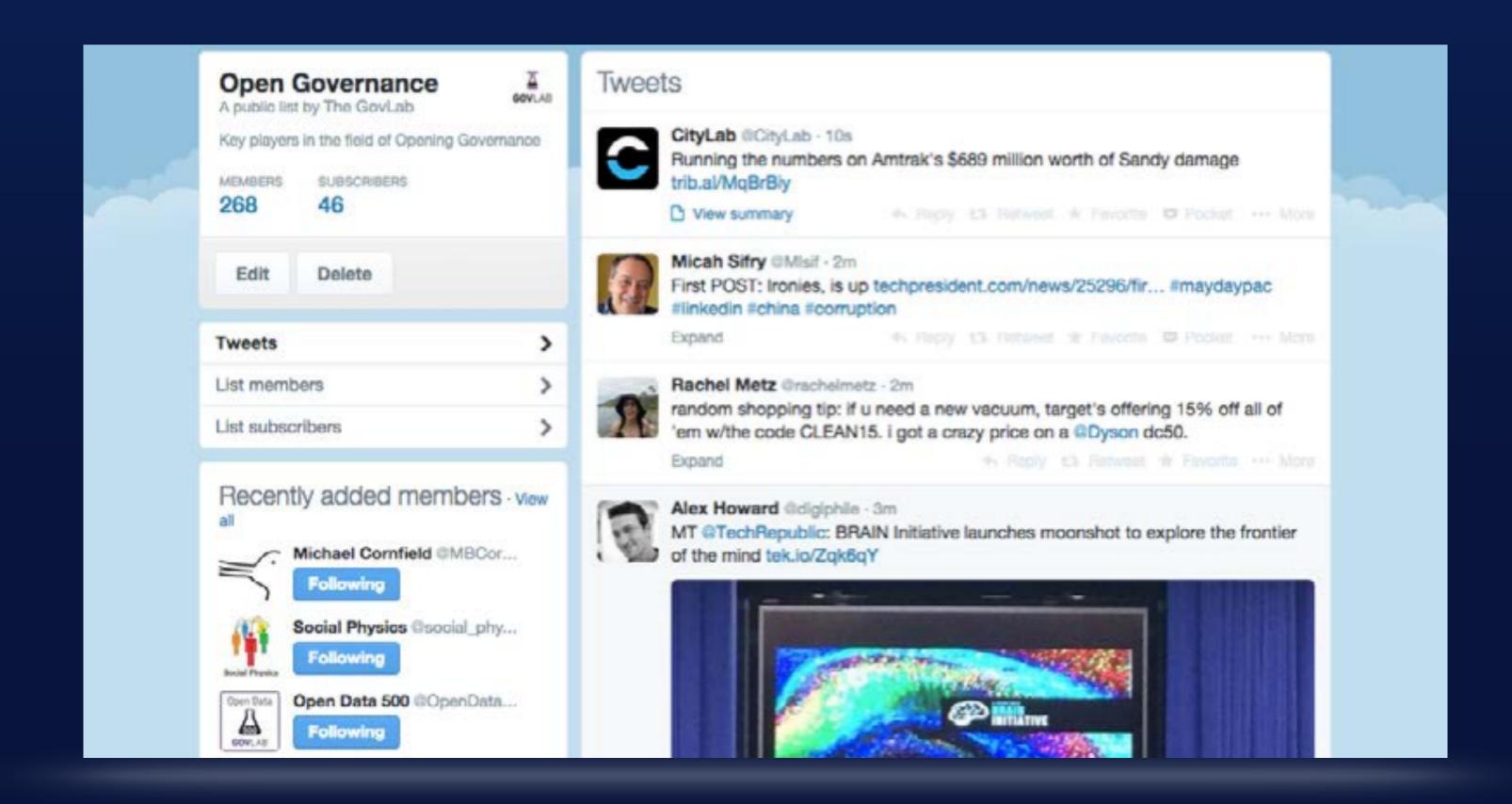






# **ACTORS**

#### **EXAMPLE DELIVERABLES**









### **MILIEU**

A problem does not exist in a vacuum. Mapping the problem and solution space requires a clear understanding of the external environment in which a problem exists.

# **Objectives:**

- To establish a deeper understanding of the wider environment and context in which a problem exists;
- To identify the diverse external factors affecting a problem and potential solutions;
- ▶ To gain the ability to approach a problem with insight into the many potential levers of and barriers to change.
- To identify societal trends that may impact responses.





# **CASE STUDY**

Why Understanding the Milieu Matters – Peer to Patent opening and improving the patent process











### **MILIEU**

# **Guiding Questions:**

- Is the problem similar to others faced in different environments/contexts?
- What are the current key trends in the space and do they point to any potential tipping points or forces that can be used to promote particular responses?
- ▶ What are the political (incl. legal and policy processes) and social (incl. technical and economic and cultural) trends and issues related to the problem?
- What are important forthcoming decision points, events and releases?
- How is the problem related with other challenges (if at all) and how high is it ranked in perceived priority?







### **MILIEU**

# Methodologies:

- ▶ Trend and Force Field Analysis collecting information on the environment from over a period of time in the interest of identifying patterns and trends and examining the helping forces and hindering forces around the problem and solution space.
- ▶ Analysis of Scenarios and Forecasts review and comparison of future studies in the field.
- ▶ Review of Relevant News Articles, Op-Eds and Calendars gaining an understanding of current and forthcoming activities in the field that may provide potential for change.
- ▶ Social Media Scanning and Canvassing using, for example, Twitter hashtags to follow updates on the problem and identify people to reach out to for more information or conduct sentiment analysis
- ▶ Value, Delphi and General Surveys and Focus Groups valuable yet less rapid primary research methods to identify trends and assess public opinion







#### Tools:

- News and Legal Databases (e.g., Google News, WestLaw, LexisNexis)
- Ethnographic Values and Opinions Surveys (e.g., Pew Research Center,
- World Values Survey)
- Data and Statistics Portals (e.g., data.gov, FedStats, Census)
- Consulting and Research Agency Reports McKinsey, Gartner, Deloitte
- Sentiment Analysis Tools (e.g., Twitter, Skyttle)
- ▶ Forecasting and Future Studies (e.g., OECD, Institute of the Future)







### **MILIEU**

#### **Deliverables:**

- ▶ Ecosystem Mindmaps and Infographics graphical articulation of the key players in the space and how they interact (including WordClouds; InfoCharts)
- ▶ Trends, Challenges and Recommendations Paper articulation of the shifts in the space, major barriers to change and targeted ideas for addressing those barriers.
- ▶ **Primers and Case-studies** explanatory writing on the large-scale issues at play and deep-dive writing on specific examples.
- ▶ **Policy Analysis Paper –** in-depth analysis of the legal and policy ecosystem affecting the problem and solution space.
- ▶ Foresight Report based on an understanding of the current problem and solution space, a description of what changes and developments can be expected in the near future.







# **MILIEU**

#### **EXAMPLE DELIVERABLES**

#### High-Level User / Usage Trends\*

- Internet Users
  - <10% Y/Y growth & slowing...fastest growth in more difficult to monetize developing markets like India / Indonesia / Nigeria
- Smartphone Subscribers
  - +20% strong growth though slowing...fastest growth in underpenetrated markets like China / India / Brazil / Indonesia
- Tablets
  - +52% early stage rapid unit growth
- Mobile Data Traffic
  - +81% accelerating growth...video = strong driver

KPCB \*Details on Internet Users & Smartphone Subscrib

Mary Meeker's Internet Trends Report





# MONITORING AND STAYING IN THE KNOW

### **Objectives:**

Staying in the know – after getting up to speed on a topic and operationalizing a project design, it is important to position yourself to stay in the know as new developments occur, allowing for agile adjustment of response.

#### **Questions:**

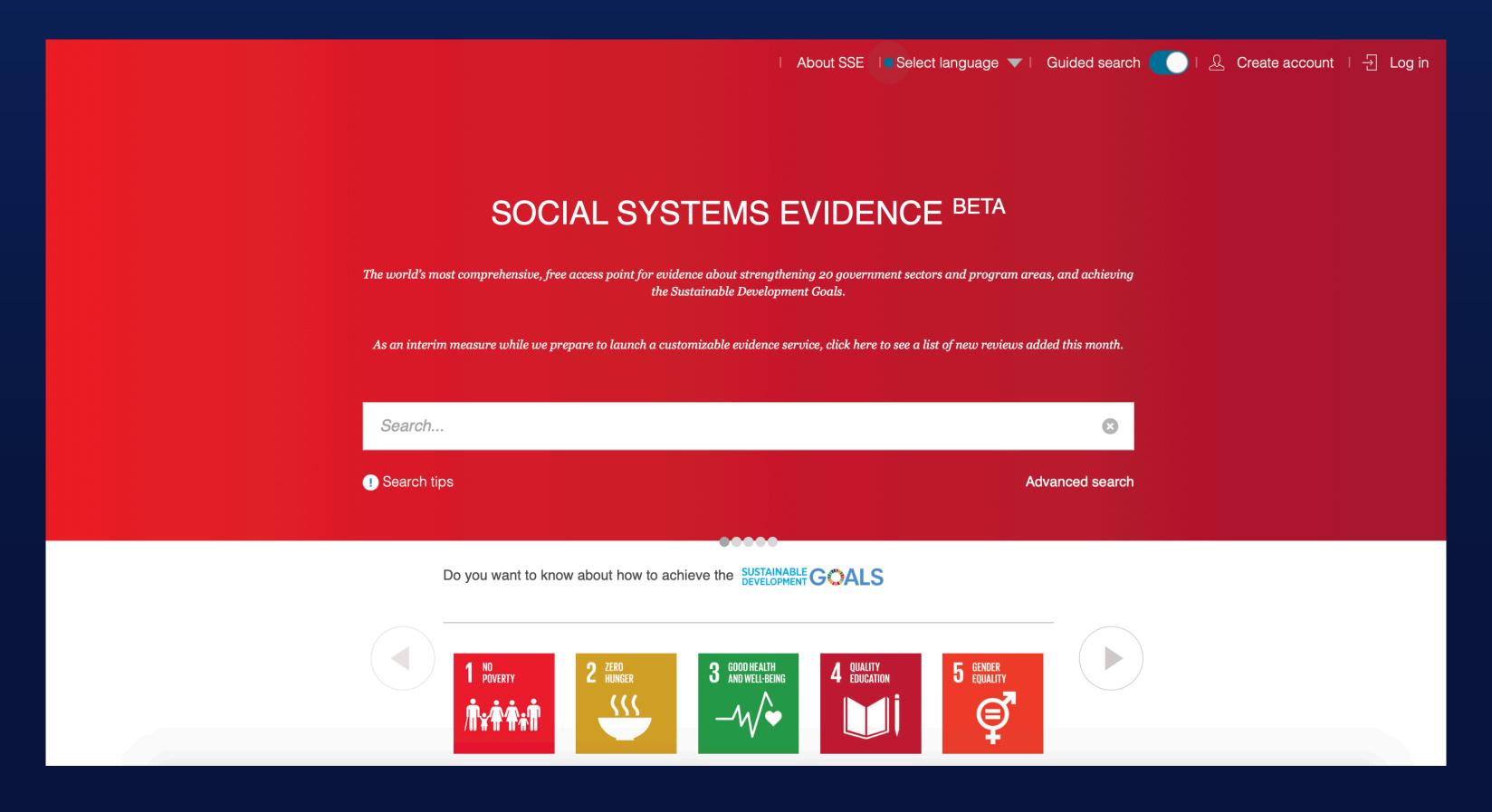
- How has the problem space changed in the time since the project design was implemented?
- What new actors have entered the space?
- Have new solutions been suggested or
- attempted?
- ► Have there been any recent legal, political, social or cultural changes in the problem or solution space?
- Are there opportunities for collaborations
- or discussions with others in the space that could allow for meaningful project iteration?





# MONITORING AND STAYING IN THE KNOW

#### **SOCIAL SYSTEMS EVIDENCE**



www.socialsystemsevidence.org





# QUESTIONS

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- Who are the experts e.g.. think tanks, academics and others working in the space?
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   What are their priorities? What are their positions?
   How open are they toward innovation?
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- Who makes up the affected user base?
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- What is the current evidence/counter evidence of the scale and scope of the problem, and how divergent is the evidence?
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- What are the key and dominant narratives and assumptions?
- What are the untested assumptions and/or metrics of success?
- What is the current response and solution space?





# **METHODOLOGIES**

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- Trend and Force Field Analysis Analysis
   of Scenarios and Forecasts
- Review of Relevant News Articles, Op-Eds and Calendars
- Social Media Scanning and Canvassing
- Value and Delphi Surveys (Expert networking)

- Academic Citation Tracking, Grey Literature R-Search
- Scanning of Partnerships, Funding
   Streams and Conference Speaker Lists
   (Network Analysis)
- Constituency Mapping
- Social Media Scanning and Canvassing Outreach (e.g., interviews, delphi surveys)

- Web R-Search
- Journal and Database R-Search
- Social Media Scanning and Canvassing
   Outreach (e.g., emails to experts)
   Crowdsourcing (e.g., Q&A sites)





# **TOOLS**



- News and Legal Databases (e.g., Google News, WestLaw, LexisNexis)
- Ethnographic Values and Opinions Surveys (e.g., Pew Research Center, World Values Survey)
- Data and Statistics Portals (e.g., data.gov, FedStats, Census)
- Consulting and Research Agency Reports (e.g., McKinsey, Gartner, Deloitte)
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- Forecasting and Future Studies (e.g., OECD, Institute of the Future



- Google Scholar/News
- Citation and Reputation Trackers (e.g., Web of Science, Linkedin Graph)
- Individual and Conference Directories (e.g., The Leadership Library, Who's Who?, Council on Foundations Database, Laynrd, Linktank)
- Social Media Followers (Twitter/Linkedin),
   Hashtags and Lists + Graph Tools for
   visualizing network
- Q&A Sites, Community- and Topic-Specific
   Online Sites (e.g., subreddits, local
   community message boards)



- Google Search/Scholar/News and other graph based search
- Research and Library Databases (e.g.,
- Social Science Research Network (SSRN),
   Policyarchive, Congressional Research
   Service (Open CRS), Docuticker)
- Tag search Twitter Hashtags (Hasthtags.org)
- Q&A Sites (e.g.,AskMetafilter, Quora, Stackexchange, Yahoo Answers)
- Case-studies (HBR; SSIReview) and Reviews (Webbies)





# **DELIVERABLES**







- Ecosystem Mindmaps and Infographics
- Trends, Challenges and Recommendations Paper
- Primers and Case-studies Policy
   Analysis Paper Foresight Report

- Stakeholder Mindmap
- Biographies and Relationship Map or Photographic Slide Deck
- List of Key Figures and Organizations to Follow (Twitter List)
- User Profiles Expert Networks

- Problem Mindmap
- Findings and Source Review/Slide Deck
- Annotated Bibliography/Readings (e.g., Zotero)
- Problem Index
- Response and Ideas Portfolio or Directory





# THANK YOU



