

# IDENTIFYING CITIZENS' NEEDS BY COMBINING AI AND CI

Toward Augmented Collective Intelligence (?)

Stefaan G. Verhulst  
The Governance Lab, New York University

# INNOVATION IN GOVERNANCE



→ TOWARD AUGMENTED COLLECTIVE INTELLIGENCE

# AUGMENTED COLLECTIVE INTELLIGENCE

Introduction

Case Studies

Key Takeaways

Proposed  
Methodology

Moving  
Forward

AI & SOCIETY (2018) 33:293–297  
<https://doi.org/10.1007/s00146-018-0830-z>

CURMUDGEON CORNER



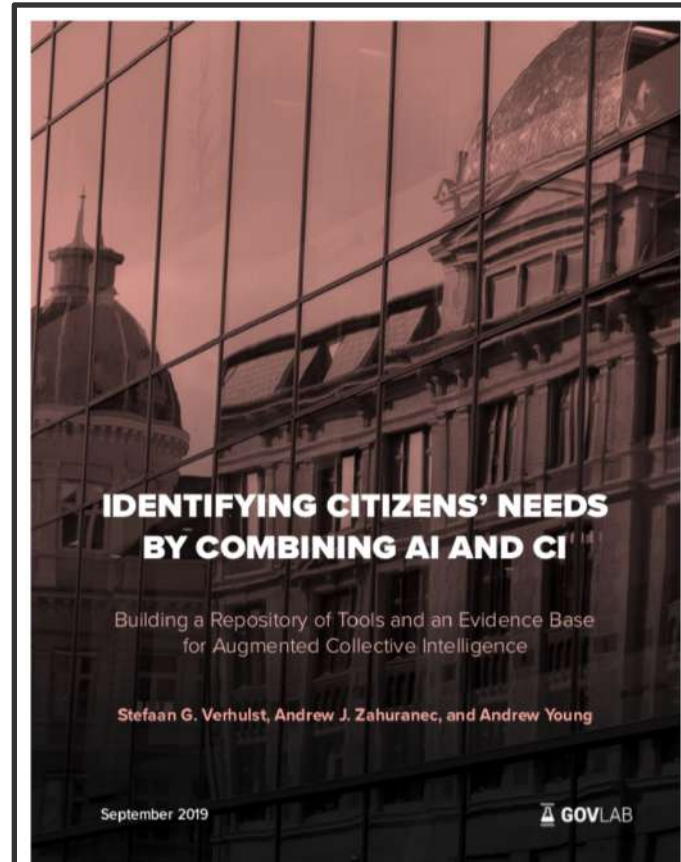
**Where and when AI and CI meet: exploring the intersection of artificial and collective intelligence towards the goal of innovating how we govern**

Stefaan G. Verhulst<sup>1</sup>

Published online: 21 February 2018  
© Springer-Verlag London Ltd., part of Springer Nature 2018

**1 Where and when AI and CI meet**

**2 Data and connected people**



# AUGMENTED COLLECTIVE INTELLIGENCE

- ▶ **Improving Cognitive Insights:** Spurring brainstorming and the creation of new policies through AI-analyzed discussion forums and threaded conversations;
- ▶ **Enhancing Outreach and Experience:** Improving how citizens engage with their governments by allowing citizens to log their views. An algorithm then collects these sentiments, analyzes content, and sends them to the proper authority;
- ▶ **Agile Analysis of Input:** Using AI to make sense of large datasets provided by large groups of human actors; and
- ▶ **Streamlining Service Delivery:** Scaling the capabilities of public authorities with AI minimizing transaction costs and improving accuracy and timeliness

Introduction

Case Studies

Key Takeaways

Proposed  
Methodology

Moving  
Forward

# IMPROVING COGNITIVE INSIGHTS

Remesh and GovLab , Using Artificial Intelligence to Facilitate Deliberation

THE DATA ASSEMBLY

## PUBLIC DELIBERATION ON THE RE-USE OF DATA

The Data Assembly is an initiative from **The GovLab** with support from the **Henry Luce Foundation** to solicit diverse, actionable public input on data re-use for crisis response in the United States.

[DOWNLOAD THE NYC COVID-19 REPORT](#) [DOWNLOAD THE NYC COVID-19 BRIEFING](#)

Introduction

Case Studies

Key Takeaways

Proposed Methodology

Moving Forward

# ENHANCING OUTREACH/EXPERIENCE

**Insights**, Using Artificial Intelligence and Collective Intelligence to Understand Citizen Needs and Expectations

The image displays two screenshots related to the tell-us.usa.gov platform. The left screenshot shows the website's interface for a survey titled "Improve Passport Experience". The page features a navigation bar with "USA.gov" and "TELL-US.USA.GOV" logos, and a header with "Completed" status. The main content area includes a "WELCOME" message from Lailani Martinez, a "HOW DOES IT WORK?" section with icons for "Answers are collected", "Ideas are highlighted", "Insights are refined", and "Decisions are made", and a central survey question: "The U.S. Department of State wants to improve your experience of applying for or renewing a U.S. passport. How can we improve the application process to make it simpler and easier?". A "VIEW DECISIONS" button is visible. The right screenshot shows an email notification from USA.gov titled "Dave, you've made an impact!". The email thanks the user for their input and lists their contributions under "You said", "We learned", and "We decided". It also includes a "VIEW ALL DECISIONS" button and a thank-you message from Carl Siegmund.

Figure 1: Screenshot of [tell-us.usa.gov](https://tell-us.usa.gov)

Figure 4: Example of an email sent to users

Introduction

Case Studies

Key Takeaways

Proposed Methodology

Moving Forward



# STREAMLINING SERVICE DELIVERY

**Camden Resident Index**, Using AI to Analyze Data and Personalize and Scale Public Service Delivery

FIELDS	HB	CRM	HSD	ER	ADULTS	GOLDEN
Full Name	Fred Bloggs	Freddie Bloggs	Frederick Blogges	Fred Bloggs	Fried Bloggs	Fred Bloggs
DOB	10-1-1965	01-01-1900	10-1-1965		10-1-1965	10-1-1965
Gender	M	M	M		M	M
Address	10 The Grange Camden NW1 0AA	Flat A 10 The Grange Camden NW1 0AA	10 The Grange Camden NW1 0AA	Flat A 10 The Grange Camden NW1 0AA	10 Grange Camden NW1 0AA	Flat A 10 The Grange Camden NW1 0AA
Home Tel		0231-967-7866	0205-937-996			0205-937-996
Mobile	07988674707	077134563				07988674707
Email		fbloggs@v.com	bloggy@bt.com			fbloggs@v.com
Income Support	Y					Y
Customer Care Ind					Do not visit address alone	Do not visit address alone

Figure 8: Visualization of the matching process from "Data Scores as Governance"

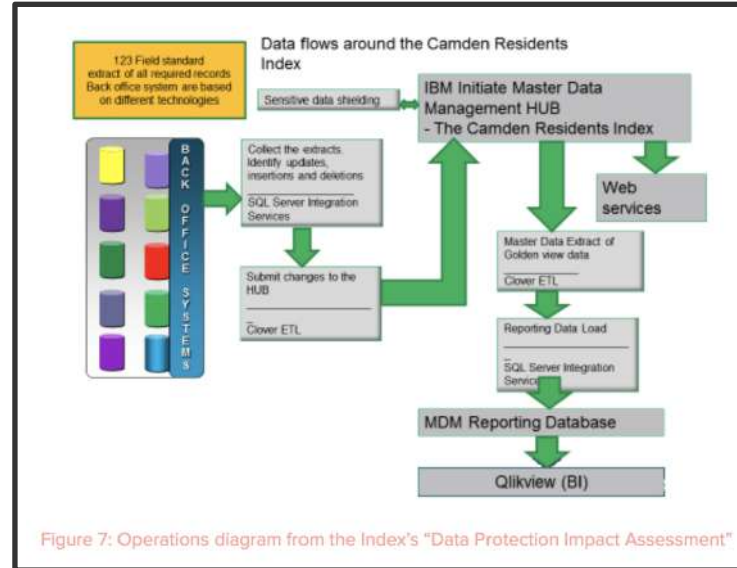


Figure 7: Operations diagram from the Index's "Data Protection Impact Assessment"

Introduction

Case Studies

Key Takeaways

Proposed Methodology

Moving Forward

# AGILE ANALYSIS OF INPUT



Opinion Group: 1 2 Majority Opinion



Anonymous

我覺得應該審核人員。乘客保障。駕駛權益都要兼顧，最重要還是安全第一

92% Agreed

Introduction

Case Studies

Key Takeaways

Proposed Methodology

Moving Forward



# KEY TAKEAWAYS

- ▶ **The Field Remains Nascent:**
  - ▶ Difficulties in attracting an audience to a project and making the insights useful and understandable are common.
- ▶ **Need to Put Greater Emphasis on Pre- and Post-Launch Activities:**
  - ▶ Anticipate Risks and Bias
  - ▶ Focus on Incentives and Capacity
  - ▶ Have a Post-Analysis strategy
- ▶ **Need for Methodologies to Make Efforts More Systematic and Responsible:**
  - ▶ Moving away from “gadget mentality” to business processes

Introduction

Case Studies

Key Takeaways

Proposed  
Methodology

Moving  
Forward

# TOWARD A ACI METHODOLOGY

## 1. Define the Universe of Analysis



After assessing its time, resources, and capabilities, the host organization identifies which subset of the population it wants to study;

## 2. Define Pathways to Outreach



Host determines how best to reach selected group, either directly (in-person, marketing) or indirectly (via intermediaries). Robust outreach may be necessary;

## 3. Source Insights



Host solicits input of the selected group. Inputs can be collected via prompts and questionnaires or from regular behavior (e.g. walking or exercise data)

## 4. Conduct Data Analysis According to Previously Set Parameters



Supervised by human operators who can do quality control and ensure responsible usage, AI analyzes the generated content for specific insights; and

## 5. Develop Premises for Further Research or Actionable Intelligence



The host organization synthesizes insights into a report for high-level decision makers.

Introduction

Case Studies

Key Takeaways

Proposed Methodology

Moving Forward

# MOVING FORWARD

- An Observatory of Emerging Practices
- Ranking of Tools and Practices

	<b>Affordability</b>	<b>Utility</b>	<b>Maturity</b>	<b>Ease of Use</b>	<b>Deployability</b>	<b>Risk Mitigation</b>	<b>Customizability</b>
<b>Assembl</b>	4	4	4	2	4	5	4
<b>Popvox</b>	3	3	3	4	1	2	2
<b>Insights</b>	3	5	5	4	4	5	3
<b>Carrot Insights</b>	1	1	4	5	3	5	1
<b>Camden Resident Index</b>	2	1	5	3	3	4	4

- Community of Practice and Expertise

# THANK YOU

Stefaan G. Verhulst  
The Governance Lab, New York University

[stefaan@thegovlab.org](mailto:stefaan@thegovlab.org)