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Concrete Action

Paving Potholes with Behavioral Science

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About ideas42

We are a non-profit looking for deep insights into human behavior—why people do what they do—and using that knowledge in ways that help improve lives, build better systems, and drive social change. Working globally, we reinvent the practices of institutions, and create better products and policies that can be scaled for maximum impact.

We also teach others, ultimately striving to generate lasting social impact and create a future where the universal application of behavioral science powers a world with optimal health, equitable wealth, and environments and systems that are sustainable and just for all.

For more than a decade, we have been at the forefront of applying behavioral science in the real world. And as we've developed our expertise, we've helped to define an entire field. Our efforts have so far extended to 40 countries as we've partnered with governments, foundations, NGOs, private enterprises, and a wide array of public institutions—in short, anyone who wants to make a positive difference in people's lives.

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Introduction

Why work on resident requests?

Responding to constituents' needs is at the core of government's role in democratic settings. The recent proliferation of digital complaint- and request-submission platforms in governments around the world thus holds significant promise for strengthening the social contract and improving the quality of public services. However, evidence[1] shows that governments in low and middle income countries are not responding as effectively as they should be to submitted complaints and requests, even where there is robust political will[2] and concerted efforts to improve engagement with the platform.[3]

The emerging field of behavioral science may offer compelling insights and strategies to improve governments' responsiveness to resident complaints. Leveraging behavioral insights has yielded significant impact across several domains, including health,[4] education,[5] and criminal justice.[6] Across diverse domains and settings, we see that seemingly trivial features of the context can bias decisions and prevent actions that would otherwise lead to positive outcomes for individuals and societies. These features can impact all people, including those involved in the public service delivery process, such as residents, health care providers or even government officials. In fact, there is nascent evidence of biases in the decision-making of policy-makers themselves.[7] Despite all this, little empirical research has examined the potential to apply behavioral science to help government officials, particularly in low and middle income countries, perform their core duties more effectively.

What have we done so far?

In an attempt to understand some of the barriers limiting government response to resident requests, we conducted a thorough review of academic literature and news reports about government responsiveness and civic technology platforms, mainly in low and middle income countries. Our focus was primarily on civic monitoring platforms that:

1. **have an information communication technology (ICT) component** (e.g. a website and/or a phone app),
2. **have a direct link to a government,** and
3. **prompt a specific response from government officials.**

We surveyed the field by conducting interviews with representatives from government-run platforms, civil society organizations (CSOs), platform providers, and academics and through on-site observations in six cities in different low and middle income countries. Each platform varied significantly across many dimensions, from the number of requests received (ranging from more than 10,000 to less than 1,000 per year) to whether they were run by local governments, CSOs, or both. A summary table with additional information about the platforms we studied is available in the Appendix.

This preliminary investigation led us to uncover four main dimensions of responsiveness andseven important steps for a successful request-resolution process. We also identified opportunities where an applied behavioral science approach could be effective and important considerations for ensuring the success and scalability of interventions.

What is responsiveness?

Before we begin to investigate what drives *responsiveness*, we need to be clear about what we mean by it. Our research uncovered four key dimensions of responsiveness that are critical for systems and researchers to focus on: response time, accuracy, equity and satisfaction.

Response time

When residents submit requests, they expect the government to resolve them as fast as possible. Response time, or the time between the receipt of a request and its resolution, is, therefore, a significant determinant of customer satisfaction.[8] Some requests, however, must necessarily take longer to resolve than others. For example, a government might be able to fix a pothole within two weeks of receiving a request, but a request about teacher absenteeism or excessive road traffic requires a longer time frame due to more investigative work needed, difficulty in identifying and implementing a solution, etc.

Regardless of actual response time, ***governments must take responsibility to make sure residents' requests are resolved as quickly as available resources allow.*** Many governments and CSOs expressed interest in improving service delivery by reducing wait times for residents who submit requests. In fact, some have already started to implement efforts to demonstrate their commitment to speed as a standard for performance, including setting clear expectations up front.

» Some governments have laws about the time frame in which officials need to respond to each type of resident request. Some also rely on local CSOs to monitor the data of open requests that should have been resolved by a particular time frame and report the failure to promptly resolve these issues to the Mayor's office. Policies and systems like these can help foster trust between government and residents.

Too much focus on response time, however, can lead to closing unresolved requests for the sake of closing them, rather than *actually resolving* them, to keep average response time low. Focusing on speed can also lead to sacrificing response accuracy (see subsection below) and service quality.[9] Thus, accountability measures are necessary to mitigate unintended consequences caused by prioritizing timeliness.

Response accuracy

Resolving resident requests quickly is not enough. ***Governments also need to address requests appropriately and provide high-quality service.***

» There are many strategies to ensure that requests are appropriately resolved, such as (1) sending teams to appraise and report on the work (sometimes with "before" and "after" photos), (2) encouraging local residents to review the work through polls or progress photos, and (3) allowing requesters to re-open requests that have not been addressed appropriately.

Although governments tend to be aware of the importance of responding to requests accurately, quality can often be sacrificed when governments prioritize other measures of responsiveness (e.g. solving as many requests as quickly as possible). We encountered cases in which governments unintentionally created counterproductive incentives by establishing quotas for requests to be resolved during a specific time period. This led government officials to sacrifice response quality, or to close requests that were not actually resolved to make sure they achieved their goals. Public servants may face barriers to reaching their targets, and if these barriers are not addressed, loss of confidence and motivation can ensue, which leads to lower quality of service.[10]

In order to avoid situations like these, government officials' performance metrics should include response accuracy as well as response time. Resolving a request fast is not valuable if the request has not been resolved accurately. Conversely, taking a long time to resolve a request accurately will not lead to resident satisfaction.

Response equity

Response equity is another important, but often overlooked, dimension of responsiveness. Response equity implies impartially addressing requests across demographics (e.g. social economic status, race, and gender). In other words, ***governments should have a response system in place that doesn't disproportionately privilege one group of people over another,*** especially in ways that exacerbate existing patterns of inequality.

Governments and CSOs have invested heavily in online platforms, but these could be exacerbating inequity.[11] Despite their wide availability, not all individuals have access to technology[12] and many community members, like women or underrepresented minorities, still participate at disproportionately low rates in some areas.[13] Prioritization of requests is also an important driver of equity. However, when systems for prioritizing requests exist, they are often based on urgency, pressure by media outlets, or request popularity (e.g. when multiple residents vote on a particular request). While there is nothing inherently wrong with these prioritization methods, they could also intensify inequity. Urgency can be subjective, for example, and biases that government officials may not even be aware of[14] can lead to some requests being perceived as more urgent than others. Despite these potential issues, our research revealed that the majority of platforms do not explicitly consider equity when addressing requests.

» One example of how governments might start tackling inequity issues is by employing automated prioritization algorithms that don't unfairly benefit any particular group. Alternatively, platforms that collect demographic information could make that information inaccessible to officials who are responsible for prioritizing requests or use that data to track imbalances in request prioritization to measure progress towards response equity, while keeping requests anonymous to protect residents' identities.

It is imperative for governments and CSOs to be cognizant of the limitations of technology and find ways to address and overcome the biases surrounding complaint submission and resolution. They must take accessibility issues into account and ensure that equity is a priority.

Response satisfaction

Responding to resident requests is not just about fixing particular problems. ***Another important element of responsiveness is residents' satisfaction with the resolution of their particular request and with the overall request submission process.*** Our research uncovered that governments are starting to understand the importance of making residents "feel heard" and satisfied. In fact, officials reported that, in some cases, residents preferred feeling heard over seeing their specific requests resolved. And this feeling, along with satisfaction with the specific problem resolution, is important to fostering residents' trust in their government.

» Some ways in which governments are trying to increase satisfaction include (1) setting expectations about the time frame in which a request will be resolved, (2) informing residents immediately if a request does not fall within the government's responsibilities and directing them to useful resources, (3) measuring satisfaction through feedback surveys that are sent after the request is resolved, and (4) encouraging government officials to build relationships with residents to foster empathy through "proximity" policies.

Preliminary research suggests that many of the initiatives being implemented by governments to improve residents' satisfaction may be paying off. Even simple automated messages to residents thanking them for their submission or informing them that their request has been addressed could improve satisfaction.[15] Messages that emphasize how a government is responding to residents' demands can also be effective at nudging the public to vote[16] and at increasing residents' engagement with their government.[17] Increased resident engagement, in turn, may also lead to higher response levels by the government, especially if the government feels close to its residents.[18]

What types of solutions could improve governments' responsiveness?

Traditional approaches

Various approaches have been explored to improve government responsiveness, including providing explicit incentives, training to develop skills, and increasing departmental capacity.

Explicit incentives can be financial (e.g. performance bonuses), political (e.g. being faced with reelection), or in the form of accountability measures (e.g. publishing request statistics). These incentives are meant to motivate public officials and hold them accountable for achieving higher levels of service delivery. ***Explicit incentives may be effective in the short-run, but can be unsustainable and hard to scale.***[19]

Developing government employees' skills is another common approach. In the context of civic monitoring platforms, necessary skills include communicating effectively with residents, interacting with ICT platforms, and executing and solving residents' requests effectively. Although having skilled employees is crucial, ***skills development can be costly and may not be sufficient to increase government responsiveness.***[20]

Increasing departmental capacity by providing or improving access to technology (e.g. computers, internet, and ICT platforms) and hiring more staff, can also play an important role in increasing government responsiveness.[21] These resources provide government officials with the tools necessary to respond to resident requests efficiently, but ***capacity increases too are likely not enough to ensure adequate responses to resident requests.***[22]

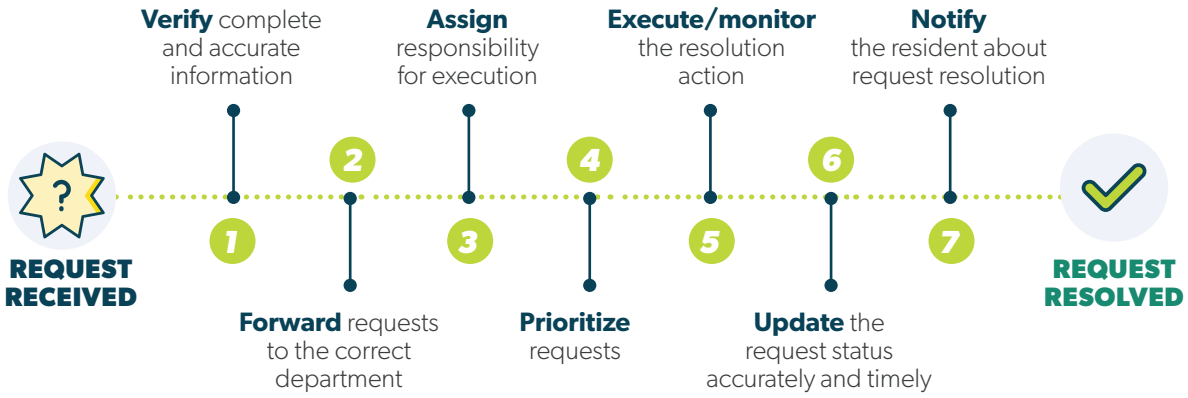
The need for behavioral solutions

Given the difficulty, expense, and/or limited effectiveness of standard approaches to increase government responsiveness, identifying and testing alternative and complementary approaches should be a research priority. Behavioral science provides a useful framework to think about such potential solutions. Research shows that ***understanding the cognitive processes and "situational" influences on human decision-making can help us identify or design interventions that can change behavior, often at minimal or no cost.***[23]

Behavioral science emphasizes the importance of the *context* in which individuals make decisions, and an emerging body of evidence shows how context can also determine group-level decision-making. These insights suggest that government officials often act the way they do because of the ways in which the environment around them—from office routine to features of the software they use—affects their ability to manage their mental bandwidth, make difficult choices, and translate intentions into actions. However, to better understand how the context might impact public servants' responsiveness, it is important to identify the actions required for an effective request-resolution process.

What actions go into an effective "response"?

Responding to resident requests involves a chain of decisions and actions that public officials must take. These decisions and actions vary across countries and even across departments within each city. However, ***there are a series of steps that are generalizable to nearly all of the platforms that we investigated.*** This section describes these steps, raises potential challenges that officials may face and presents examples of behavioral interventions that could address those challenges. The seven steps are summarized below:



Step 1: Verify and prompt residents for complete and accurate information

Residents can typically submit requests through a variety of channels, including mailings, emails, webpages, call centers, in-person sites, mobile apps, and social media. Many of these channels require a direct interaction with residents. Calls, in particular make up a significant portion of the requests that platforms receive. In São Paulo and Buenos Aires, for example, around 60% of requests are submitted over the phone, even though both cities also have websites and mobile apps for residents to submit requests. In these cases, the first step is to capture a complete and accurate description of the request.

Our investigation highlighted the importance of this action in the request-resolution process, since so many requests come through two-way communication channels (such as phone and in person) and progress in future steps relies on the quality of the information collected upfront.

Existing practices

- Call center operators use tools, such as scripts, that prompt them to ask questions and obtain more detailed information from the resident submitting a request.
- Call center supervisors evaluate operators by listening to calls and watching operators' screens as they input requests into the system.

Potential challenges

- Supervisors often evaluate operators on the level of rapport or the amount of time spent on a call, but hardly ever on the *content* of the call. This means supervisors may not focus on ensuring that the information collected is complete and accurate. Additionally, not having quality of content as a performance indicator could preclude operators from prioritizing obtaining a thorough report.
- Operators are not necessarily specialized in a particular type of request or complaint. They may be trained on all municipal services and get assigned different types of calls based on the day and shift. As a result, operators may lack expertise on any given type of request and must quickly adapt to each new service assignment.
- Call operator duties often go beyond registering requests. This varies by platform, but duties can include clarifying information for government officials about certain requests, placing calls to follow up on request progress, scheduling appointments for residents, or answering questions about government services. Constant shifts in attention may hinder performance on each of these tasks.[24]
- Call centers can be loud, crowded environments. This increases the likelihood of becoming distracted by other conversations, which could interfere with the tasks at hand.[25]

Potential Behavioral Solution

People tend to develop ***mental models***, which are structures that they use to process and understand the world. They make people's thinking more efficient, but can sometimes steer them in the wrong direction.[26] Mental models can be challenging to change or reset as they are influenced by a number of cognitive processes. However, if the cause of the mental model can be ascertained, educational workshops can be an effective intervention.

For example, call center operators may operate with the mental model that being efficient on the phone is more important than getting detailed information, due to their performance indicators. As a result, a potential intervention could be to hold a workshop that highlights the consequences of ambiguous information, such as government officials spending extra time calling residents for more information or calling the operators to clarify information

about multiple requests. Providing case studies of real-life examples could help adjust the mental model and thereby improve the operators' process to verify complete and accurate information.

Step 2: Forward requests to the correct department

Once a request is received, it needs to be forwarded to the appropriate municipal department. Forwarding to the right department is crucial for the timely and effective resolution of requests. If a request is sent to the wrong department, further redirecting can lead to resolution delays or an inability to track requests.

Existing practices

- Platforms with more advanced back ends are capable of automatically forwarding all requests to the appropriate departments.
- Platforms that require manual forwarding achieve this in different ways: higher level officials may route requests to lower level officials or teams may hire agents who assign requests directly to the technicians responsible for execution.
- Some platforms use both automatic and manual forwarding. Residents are given the option of (1) submitting a request through a "general" category, which is manually sorted and forwarded to the right department, or (2) submitting requests to a specific category (e.g. potholes), which are then automatically forwarded to the respective department.

Potential challenges

- Manual forwarding creates additional work, such as analyzing each request and deciding which department to forward it to, and increases the room for error.
- Manual forwarding can be subjective if the information provided by the resident is vague or if departments have unclear or overlapping roles. Additionally, officials can be overwhelmed by the large number of departments,[27] leading them to categorize requests incorrectly or to spend long periods of time categorizing and redirecting requests.
- With both manual and automatic forwarding, it can be challenging to figure out which requests go to which departments due to nuanced municipal laws. In some cities, potholes in bus lanes and those in car lanes are handled by different departments, so additional investigating must be done to determine exactly where the pothole is located before the request can should be forwarded.
- Platforms that forward requests automatically must be extra mindful of the request intake process. The success of automation relies on sufficient and correct information being inputted by the resident, call operator, or in-person staff.

Potential Behavioral Solution

People are disproportionately less likely to follow through on intended actions when they encounter seemingly minor obstacles, or ***hassles***. Helping individuals navigate these small obstacles, or removing them altogether, can have profound effects on behavior.[28]

In the context of civic monitoring platforms, the software interface that government officials interact with may be hard to use. For example, if the forwarding button is hard to find or the list of departments to forward to is too extensive, government officials may be derailed by these hassles and end up not forwarding requests to the appropriate department. Re-designing the platform interface to make it simpler and more user friendly could increase the likelihood of correct forwarding and, eventually, improve responsiveness.

Step 3: Assign responsibility for execution

Once a request is received by the appropriate department, an official or manager must assign the request to the person who will be responsible for addressing it. This step creates a sense of ownership for officials, which can motivate them to resolve requests more efficiently and effectively.[29]

Existing practices

- This step often varies across local departments. Officials can either assign issues to themselves or assign requests to workers or engineers in the field. In some cases, requests are automatically sent to contractors. Outsourcing the actual resolution of requests might reduce the workload for officials, but it also adds the extra step of verifying that the contractor or field team completed the work adequately.
- In some cases, this step is decentralized: agents have assignments based on geography or type of request, and only assume responsibility for those that fall under their jurisdiction.
- Several platforms have attempted to bypass this step by merging the assigning and forwarding steps. In this case, agents assign and forward requests directly to the individuals who will be responsible for addressing them.

Potential challenges

- In places where officials assign the requests to themselves, several issues may arise:
  - If multiple officials have similar roles, each may fail to claim responsibility because they believe others will take ownership for solving a particular request. This can lead to a large number of requests remaining unassigned, and therefore unresolved.

- Officials may have misperceptions about their own roles or abilities, believing that certain requests are below their level of expertise or beyond their capabilities.
- Officials may be tempted to assign the "easiest" issues to themselves, especially when they have many other duties or are particularly busy.
- If all public officials have visibility over requests that their team members are assigned to, they may be encouraged to assign more requests to themselves (if their numbers are lower than their peers) or discouraged from doing so (if their numbers are higher).

Potential Behavioral Solution

Non-financial incentives cost little or no money, yet carry significant weight. They can inspire and engage people in ways that money is not capable of doing. In fact, improved performance is more positively correlated with non-financial incentives (e.g. gamification[30]) than with financial ones.[31]

Resolving requests can involve what may be perceived as mundane tasks, one of which is assigning responsibility. Gamification of this step, in which bureaucrats compete with their coworkers for small rewards based on how many requests they assign to themselves, for example, could be a promising way to make this task more exciting and motivate officials to assign tasks more consistently and accurately.

Step 4: Prioritize requests

Depending on the platform, this may happen before or after step 3 (assign responsibility for execution). Prioritization is a key step in streamlining the resolution process, given the high volume of requests that platforms receive. This step is also important in ensuring that requests are addressed in an equitable way.

Existing practices

- Prioritization varies significantly across platforms and departments. Some departments might prioritize based on the number of requests by geographical area. For instance, neighborhoods with many potholes may get prioritized over areas with a few potholes. Other departments prioritize arbitrarily on a first-come, first-served basis.
- Several platforms don't have a system to prioritize requests and admit that "most departments have a long way to go in terms of prioritizing."
- Some platforms have more innovative ways to prioritize, such as having residents "like" existing requests on the platform or on social media and prioritizing those with the most "likes" or votes.

Potential challenges

- Deciding which requests to tackle first can take up a significant amount of time, reducing time and energy available for actually responding to the request. This may encourage staff to take shortcuts, such as defaulting to the first or newest requests on the list, which may not necessarily be the most pressing issues.
- Platforms that arbitrarily prioritize requests may jeopardize response equity. Officials may address requests that are in their best interest to address or they may be unintentionally selective due to implicit biases or familiarity with the location and/or with the resident submitting the request.
- There may also be external influences affecting decisions at this step: the media can direct attention to particular requests, other officials can call in favors, or individuals of higher ranks (such as the mayor) can ask that certain requests get prioritized over others. These disruptions undermine any standard prioritization methods that may be in place.
- While a system of "likes" is innovative, it presents its own challenge because it may be biased in the favor of individuals who have internet access or a stronger social media presence.

Potential Behavioral Solution

People tend to develop ***unconscious or implicit biases***, in which they create social stereotypes about a thing, person, or group, outside of their conscious awareness. Anonymity helps prevent unconscious biases.[32]

Government officials may have unconscious misperceptions about certain neighborhoods, which can lead to deprioritizing requests from neighborhoods with less affluent or influential residents. If this is the case, making neighborhood data anonymous, specifically for lower level officials who are determining the priority of requests, could avoid this problem.

Step 5: Execute and monitor the action necessary to resolve the issue

The execution step is at the heart of the request-resolution process because it is where a request actually gets resolved. All platforms have a version of this step, but there is a tremendous amount of variability, even within local departments.

Existing practices

- In some cases, government officials are responsible for addressing the issue themselves.
- Some departments manually or automatically forward issues to contractors who resolve the issue.
- Some execution strategies vary by time of day. For example, particular departments in some cities require public officials to forward requests received between 8:00 AM and 8:00 PM to field workers, but personally travel to the field to address issues received after 8:00 PM.
- In places where the fix is executed by a contractor, this step becomes a monitoring step. Officials must evaluate the work (e.g. review "before" and "after" pictures or send an inspector to the field), decide whether the fix was satisfactory, and either send the request back to the contractors (if it wasn't resolved satisfactorily) or mark it as resolved in the system.

Potential challenges

- Lack of personnel is a key challenge. Some departments have very few employees and multiple responsibilities, making it difficult for them to spend time in the field resolving requests.
- Lack of integration of systems used by government officials can lead to miscommunication between departments, duplication, loss of information, and, ultimately, an inability to resolve a request appropriately. For example, if multiple departments have copies of the same request, it can be difficult to determine whose responsibility it is and how they should resolve it.
- There are cases in which departments must work together in order to resolve an issue. This prolongs the response time by adding extra steps, such as reaching out to other departments, coming up with a solution, and coordinating times to address the issue together.

Potential Behavioral Solution

People value obtaining ***social recognition*** as a result of displaying certain characteristics, reaching certain achievements, or engaging in certain activities. For instance, public scorecards[33] and certificates of excellence[34] have both been shown to improve employees' performance.

Government officials who resolve requests, may be motivated by how they think their constituents view them. Making request-resolution reports public—e.g. publishing resolution rates in local media and highlighting the successes of certain departments—may influence public officials to improve execution and monitoring of the actions necessary to resolve requests.

Step 6: Update the status accurately and at the right times

Each platform sorts requests into a number of different request status categories that range from a version of "Acknowledged" to a version of "Resolved". Updating the status of a request throughout the process is necessary to minimize internal miscommunication and to keep the resident updated on progress towards resolution. Errors in this step can make it challenging to keep track of requests, identify steps in which requests may be getting stuck, communicate back to the requester, and quantify the true resolution rate.

Existing practices

- Many platforms require officials to update the status of requests at multiple steps along the resolution process. Despite this similarity, each platform has their own set of statuses and ways of expressing similar statuses. For example, depending on the platform, the last step can be labeled "Fixed," "Resolved," or "Finalized," all of which have slightly different connotations.
- Some platforms have nuanced statuses in order to facilitate request tracking. For example, some platforms make a distinction between "Closed" (outside of jurisdiction) and "Resolved" (issue was addressed), so that officials don't mark requests as "Resolved" when they are simply out of jurisdiction and haven't been resolved.

Potential challenges

- Public officials might not be aware of the benefits of updating the status of a request in a timely and accurate manner. For this reason, officials may not prioritize this step, failing to update statuses at the right time or marking requests with the wrong status.
- Some platforms had issues with compliance. Government officials who have been in their job role for a long time often have an established method of addressing requests. This method may not involve technology or updating statuses and officials are resistant to changing their ways, given individuals' bias towards the status quo.
- Many platforms struggle with erroneous status updates, such as closing requests that have not been resolved. For example, officials may receive a request that does not fall under their jurisdiction, and, instead of using the platform to redirect it to the correct department, they mark it as "Resolved" and redirect it by phone or email. Alternatively, an official may address an issue, but fail to update its status.

- In places where performance is evaluated based on resolution rate, closing as many requests as possible may become a higher priority than other factors, like quality of service. This priority shift can incentivize officials to close unresolved requests.
- Outdated resources, such as older computers or slower internet, can impede access to the online platform and, therefore, the ability to update requests' statuses. Field workers may also lack smartphones or tablets, preventing them from being able to update statuses on the go. Waiting until they return to the office to perform this step increases the likelihood of forgetting or deferring this action.

Potential Behavioral Solution

People tend to behave based on ***social norms***, or as they perceive peers around them to behave, which may be consciously or unconsciously transmitted. Explicit social comparison or benchmarking interventions have proven to be effective in leveraging this tendency in order to encourage positive behaviors.[35]

Government officials may not be updating the status of requests because they don't see their coworkers doing it, even though the coworkers may in fact be doing so. Making this behavior salient—perhaps through a personal scorecard displaying the number of requests each employee resolves (and actually marks as "Resolved") per month compared to the rest of the team—may lead to improved status update behavior.

Step 7: Notify resident of response

Keeping residents informed requires a mechanism to notify them of the government's progress in the request-resolution process. Having access to this kind of information bolsters residents' confidence that the government will be responsive.[36]

Existing practices

- Most platforms automatically notify residents when the request has been received.
- Some platforms automatically notify residents when requests are resolved. Users usually receive a notification through the channel they used to submit their request (i.e. mobile app or email).
- In some cases, platforms notify residents every time the status of their request changes. The ability to monitor the status of a request is a useful feature both internally and externally. It allows government officials to identify areas which may be slowing down the progress, keeps residents informed, and allows residents to feel heard.

- Some platforms even explain their actions to residents. For example, in some cities, officials can reject a request and contact the resident about why it is not the government's responsibility to fix that particular request. Officials we spoke with felt that this communication was crucial for resident satisfaction because it made them feel heard by the government, even if the request wasn't resolved.

Potential challenges

- This feature is particularly dependent on the success of step 6 (updating the status of requests). Even if notifications are automated, residents will not get notified if the status does not get updated to "Resolved" or "Finalized." As a result, if officials fail to update statuses, then the government cannot realize the benefits of the notification system.
- Residents who submit requests anonymously or who do not provide their contact information will not get notified about the resolution of their request.

Potential Behavioral Solution

People often experience ***time inconsistency***, where they place a disproportionately high weight on the present. This leads people to feel more willing to undertake tasks in the future than their actual willingness to do these tasks when the moment arrives. This phenomenon can lead to procrastination and overconfidence in what people anticipate doing in the future, which can significantly impact people's personal[37] and professional[38] lives.

We've already discussed how communicating with residents about the response resolution process is important for request satisfaction. However, officials may not see the action of notifying residents that their request was resolved as a necessary or urgent task, which could lead to procrastination. Incorporating deadlines[39] or helping government officials create implementation plans[40] can encourage them to overcome the tendency to procrastinate notifying residents about their request's resolution.

Considerations for applied behavioral design to improve responsiveness

Civic monitoring platforms vary tremendously by context. However, there are a few key platform characteristics that are important to consider when thinking about designing and testing behavioral interventions.

For the sake of simplicity, let's categorize the types of requests submitted as either *pothole* requests or *policy* requests. *Pothole* requests refer to requests about concrete, usually tangible, problems with the physical environment including light fixtures, water leaks, graffiti and, naturally, potholes. *Policy* requests tend to be about more general, longer-term policy issues including corruption, immigration, and sexual assault. Currently, *pothole* requests are the most commonly submitted requests and take less time to resolve than *policy* requests. Due to the dearth of research on the role of behavioral science in responsiveness, focusing on *pothole* requests is a good starting point. ***The frequency of pothole requests and the shorter response time required to resolve them provides a better testing environment for innovative behavioral interventions.*** Moreover, evidence of successful strategies to increase government responsiveness to *pothole* requests may inform future research addressing the handling of *policy* requests, particularly given the availability of rich tracking data on *pothole* requests in many localities.

The kinds of channels used to receive, monitor and resolve requests also present clear tradeoffs. ICT channels are cheaper,[41] scalable and allow for location tracking, but come with the risk of excluding some residents.[42] Phone and in-person intake of requests, on the other hand, provide human interaction, which residents appreciate, but tend to be much costlier.[43] Regardless of the types of channels used to monitor requests, it is crucial for these to be integrated into one platform, allowing governments to have all the information in one place. Finally, ***platforms that use ICT provide a better testing environment for light-touch, low-cost behavioral interventions, but should be used in combination with other forms of intake for equity purposes.***

This investigation highlights a compelling opportunity for applied behavioral science to improve governance outcomes. Future work on this topic should focus on ***(1) generating empirical evidence*** for the use of behavioral science-based solutions to improve the effectiveness of government responsiveness to resident-submitted requests, and ***(2) laying the groundwork for scaling*** these solutions in low and middle income countries.

While this work focuses specifically on government responsiveness to resident requests, improving government responsiveness could also lead to other positive long-term outcomes, including improved service provision, higher resident engagement, and increased trust in government. We hope that this work will encourage researchers and practitioners to investigate further the intersection of governance and applied behavioral science in order to pave the way to innovative methods to tackle other pernicious governance issues, such as corruption, lack of transparency, and poor public financial management.

Appendix

The table below provides a snapshot of the platforms we researched. The platforms below are categorized by the volume of individual requests from residents at *high* (more than 10,000 per year), *medium* (between 1,000-10,000 per year) or *low* (less than 1,000 per year) rates. Additionally, they are all managed or used by local governments, CSOs, or, in a few cases, a combination of both ("Hybrid").

Platform	Channel	Ownership	Request Rate
ACCESA / Por Mi Barrio (Costa Rica)	Phone In person Website Mobile app	CSO	↓ Low
Atención Ciudadana/ Ciudapp (Guadalajara, Mexico)	Phone Website Mobile app Facebook	Government	↑ High
BA147 (Buenos Aires, Argentina)	Phone In Person Website Mobile app Facebook Chatbot Twitter	Government	↑ High
Bogotá Te Escucha (Bogotá, Colombia)	Phone In person Website	Government	↑ High
Boston 311 / Citizens Connect (Boston, USA)	Phone Website Mobile app	Government	↑ High
City Connect (Cape Town, South Africa)	Personal phone Free phone lines In person Website Facebook Twitter Whatsapp	Government	↑ High
Colab (Brazil)	Phone Mobile app Facebook	CSO	– ↑ Medium - High *(depending on the city)*
DATA / Por Mi Barrio (Montevideo, Uruguay)	Phone Website Mobile app	CSO	↑ High

PuraSeva/mSeva (India)	Phone In person Website Mobile App	CSO	↑ High
ichangemycity (India)	Website Mobile App	CSO	↑ High
Lapor (Indonesia)	Text Website Mobile app Twitter	Government	↑ High
Las Condes / Vecino activo (Santiago, Chile)	Phone In person Website Mobile app	Government	– Medium
ndreqe (Kosovo)	Website	CSO	↓ Low
New Delhi Municipal Council (New Delhi, India)	Phone Website Mobile app Email WhatsApp	Government	↑ High
My San Jose (San Jose, USA)	Phone Website Mobile app	Government	↑ High
Presidential Hotline (South Africa)	Phone	Government	
SP156 (São Paulo, Brazil)	Phone In person Website Mobile app	Government	↑ High
Swachhata (India)	Mobile app	Hybrid	↑ High
U-Report (Uganda, Zimbabwe, Mozambique, among others)	Phone Facebook WhatsApp Viber	Hybrid	*Varies by country*
Veeduria Distrital (Bogotá)	Website Dashboard	CSO	

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