INFO 283 Final: "I-Paid-A-Bribe"

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Introduction

In Amartya Sen's "What is Development About?" he introduces a brief overview of his Development as Freedom framework, in which he ground his piece with the claim that "development is the basic recognition that freedom is both the primary objective of development and its principal means," in which he highlights the notion that freedom is the essential means of an evaluation of development, as well as the notion that such can only be achieved through the incorporation of a free people. He further underlines this argument with a variety of examples within categories of political liberties, economic opportunities, social facilities, and the enabling conditions of good health, basic education, and the encouragement and cultivation of initiatives [Sen, 2001]. With this framework, Sen weaves together the ways in which state action can be repressive or supportive of this overarching discourse of "freedom."

Despite the framework's high acclaim and impact, it is not without pushback. Jonathan Makuwira, in his piece "Development? Freedom? Whose Development and Freedom?", develops an argument that is heavily grounded in the notion of fear in relation to definitions of freedom: He poses an example, in which the people of Malawi, despite living in a new democratic government that transition from a three decade-long dictatorship, still continue to live in fear [Makuwira, 2006]. Daniel O'Hearn, on the other hand, pushes back instead on Sen's seeming ignorance of the effects of global capitalism, including, "problems of unequal trade... disadvantageous international divisions of labor, the exercise of global power and the behavior of International Financial Institutions," [O'Hearn, 2011].

Regardless, it has not stopped works in development from moving towards this idea of "freedom" through utilizing a variety of information technologies. With the more widespread use of the Internet and access to it, a relatively new concept in the field

has emerged titled "digital materiality": a term that is used to conceptualize the material properties of digital artifacts. As a way of understanding this concept, one can leverage idea of crowdsourcing [Morizio, 2014]:

"These artefacts, such as software programs, are challenging our traditional assumptions of what is "materiality". Crowdsourcing or the aggregation of publicly-reported data for a variety of purposes – from tracking instances of violence within a geographic area, to coordinating information for aid agencies working in humanitarian emergency situations – is an example technology that transcends the line of a purely physical or digital object"

In an attempt to ground this idea in a specific intervention, I narrate the impact of "I-Paid-A-Bribe" (IPAB): an Indian anti-corruption initiative, started by non-profit Janaagraha Centre for Citizenship and Democracy (JCCD), that seeks to crowd-source "the collective energy of citizens" in a bottom-up approach [I-Paid-A-Bribe, 2019; Janaagraha, 2019; Ryvkin et. al, 2017]. The project does so by allowing for citizens to anonymously report — to the project's website, ipaidabribe.com — cases of retail corruption and bribes, providing for a visual snapshot of bribes occurring in all cities across India [I-Paid-A-Bribe, 2019]. As such, as declared by its co-founder, T.R. Raghunandan, "[the project's] focus is on the reform of systems, not on corrupt individuals, because [they believe that] if systems are streamlined, corrupt individuals will fade away," [Ramanna & Tahilyani, 2014].

The primary goal of the IPAB case can be understood from the site's about page, in which they tell users that their, "reports will, perhaps for the first time, provide a snapshot of bribes occurring across your city. [IPAB] will use them to argue for improving governance systems and procedures, tightening law enforcement and regulation and thereby reduce the scope for corruption in obtaining services from the government" [I-Paid-A-Bribe, 2019]. In its essence, IPAB's establishes its goal in addressing the "supply and demand" of bribery: "supply" referring to its goal of disseminating information and education about corruption to citizens; "demand" referring to its goal of advocating for reform and calling for action by the government [Ramanna & Tahilyani, 2014].

A secondary goal of IPAB is to scale globally. On JCCD's site, they've described clear action in doing so, having "partnered with 30 other countries to create replica IPAB sites and begin an international Crowdsourcing Against Corruption Coalition," [Janaagraha, 2019.] These foreign partners are expected to bear all responsibility for

regulatory issues such as local laws on libel and anonymous reporting of corruption, and are hosts of their own interfaces [Ramanna & Tahilyani, 2014]. Regardless, despite the coalition's loose foundations, IPAB has shown clear interest in expansion of the platform's concept.

In this piece, I make the case that the IPAB concept is an ICTD intervention that digitally materializes cases of retail corruption — one whose infrastructure is deeply grounded in in its sociocultural context, allowing for its initial success as an amplifier of anti-corruption consciousness in India. However, I posit that India's IPAB has yet to effectively challenge systematic corruption as a result of decreased engagement with anti-corruption reform in general, as well as a difficulty scaling to contexts outside IPAB's home base of Bangalore.

In addition, in regards to global scaling, I posit that IPAB's model cannot work in every global context unless newly constructed around movement already occurring in each of these areas. From this, I pose a critique of Sen's Development as Freedom framework, in which I argue the framework focuses too much on the liberties repressed by the state, and fails to acknowledge the lack of coordinated activity resulting from fragmented attitudes and social relations. I hope that, through this piece, I can challenge the assumption that political contexts wholly constitute the means for successful development — especially digital — intervention.

Case Description

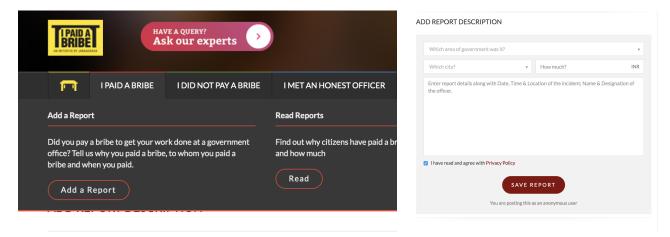
This section provides a general overview of the IPAB project, with a specific focus on the infrastructure based in its country of origin, India. While the project has expanded to other countries, it is imperative to understand how the concept is grounded in India's cultural and spatial context.

Design of the System & Interface

IPAB's intervention is situated on it's website, ipaidbribe.com. As such, it is through the site that users can These, along with a the option to input a report details, are on the form to submit a case. In addition to submitting a report of a bribe, there are also options to submit cases in which users refused to pay a bribe (under the "I Did Not Pay a Bribe" tab) or when they met with an honest officer (under the "I Met an Honest Officer" tab). The option to report cases that weren't just that of "I Paid a Bribe" was an idea that was present at early iterations of the site, in which Swati

Ramanathan — co-founder and initial designer of the site — wanted the site to, "celebrate the citizen champions who resisted any instances of graft, as well as to celebrate the government "good guys" who did their job and did not ask for a thing" [Ramanna & Tahilyani, 2014].

In the case for reporting a bribe, the the form narrows down and categorizes the case by city, amount of money, and area of government (i.e. marriage certificate, passport delivery, etc.).



Tabs to submit different reports.

Form for reporting.

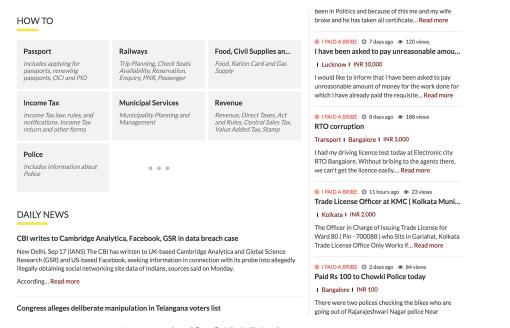
In regards to the design of the system itself, IPAB first collects the data from the reports, then analyzes the data the crowdsourced data and presented a snapshot of bribe trends. Data was also used to identify problem areas in public-service delivery, such as institutions engages in corrupt practices. As such, the platform seeks to engage as alert system: one that can inform users about illegal practices, where they are, when they're happening, and how to go about avoiding such practices [Ramanna & Tahilyani, 2014].

The interface, thus, translates this system to a design that both highlights the key point of the concept (reporting cases and information dissemination) and serves as a portal for news and knowledge. On the site's homepage, the top tabs — bolded through a variety of colors — give access to action (reporting bribes, refusals of bribes, interactions with honest officers). Below that, the site presents a large, interactive information visualization of a map of India, in which users can click through various cities to see the number of reports, amount of money bribed, etc. in that area.



Top of the IPAB homepage.

Throughout the rest of the homepage, however, the site seems to also act as a news portal and educational resource. On the right and bottom of the page are a variety of reports as well as the latest news. Below the map, is a set of CTA's that act as links to education resources for how to do a variety of activities related to passport, revenue, railways, etc.



Lower half of IPAB's homepage.

In this way, through an integration of a data visualization that illustrates bribery system-wise, as well news and education resources that present global and local information, IPAB highlights the ways in which they are focusing on, "reform of systems, not on corrupt individuals" [Ramanna & Tahilyani, 2014].

Lastly, in the top-right corner, the site provides a list of languages available, as well as a variety of other locations around the world in which IPAB is available (or preparing to be available) for use. When a new location is clicked, a new window opens up with a completely new URL and user interface. It is unclear whether this indicates a direct or indirect connection to the original IPAB initiative. Regardless, the inclusion of this tab provides a clear indication of intent to scale within the project.

Business Model

In a question under the site's "FAQ" section asking "Have you met with any difficulties in both legal procedures and fund to maintain the website?", the site answers the funding portion of the question with, "On funding, as with any other non-profit, we raise our money for our annual budgets, get in-kind contribution. The key is to put targets and measurements for the impact you wish, and then show you can deliver" [IPAB, 2019].

IPAB is funded by it's founding organization, JCCD. JCCD, as a non-profit, in turn is funded by both institutional and individual donors, such as the ICICI Foundation, a nonprofit focused on inclusive growth that was founded by the ICICI Group, one of India's leading financial service providers. Some of the funding by donors to JCCD as specifically intended as funding for IPAB.

Human Resources

As mentioned above, IPAB's initiative is institutionally supported by JCCD, who is then supported by its donors — of which include big names such as Google, Dell, etc. JCCD is also a member of the NewCities Foundation, a global non-profit organization that is, "committed to shaping a better urban future," [NewCities, 2019].

In regards to its People, IPAB was started JCCD founders Ramesh and Swati Ramanathan, after conversations with JCCD board member Sridar Iyengar. As mentioned before, Swati Ramanathan, with design background, created the initial interface and the way it would communicate IPAB's message through it.

The initiative was also coordinated by T.R. Raghunandan and Subrahmanyam Ivatury. Raghunandan, a former senior civil servant with extensive experience in decentralization and local governance had used to work in the Karnataka state government. Ivatury, on the other hand, had over 27 years in the IT industry domestically and globally, and would coordinate online programs at IPAB. With the Ramanathan's civil and urban justice experience from JCCD, Raghunandan's experience with local governance, and Ivatury experience with IT, together they provided the foundation for the online reform platform that is IPAB.

Lastly — and most importantly — is IPAB's explicit use of citizens and the government to enact social change. Citizens are, literally, human resources that they work with in order to run their model. Then, in collaboration with the government, IPAB utilizes their information in order to work collaboratively with the government, playing the role as a facilitator between the voices of the people and the officials of government [Ang, 2017]. This is made clear in their mission: "to work with citizens and the government to improve the quality of life in Indian cities and towns" [I-Paid-A-Bribe, 2019].

Theory of Development

ISAB's theory of development primarily follows that of Sen's Development of Freedom. As mentioned in this piece's introduction, Sen assertion the notion of freedom as the grounds for which to evaluate development is grounded in an understanding of freedom as both a means and ends of development. In his pivotal book *Development as Freedom*, Sen specifically establishes his framework around five types of freedoms: political freedoms, economic facilities, social opportunities, transparency guarantees, and protective security.

Here, I focus on the last two facets of this framework — transparency and protective security. Sen describes the two freedoms as the following [Sen, 1999]:

Transparency guarantees deal with the need for openness that people can expect: the freedom to deal with one another under guarantees of disclosure and lucidity. When that trust is seriously violated, the lives of many people—both direct parties and third parties—may be adversely affected by the lack of

openness. Transparency guarantees (including the right to disclosure) can thus be an important category of instrumental freedom. These guarantees have a clear instrumental role in preventing corruption, financial irresponsibility, and underhand dealings (39-40).

...economic development has other dimensions, including economic security. Quite often economic insecurity can relate to the lack of democratic rights and liberties. Indeed the working of democracy and of political rights can even help to prevent famines and other economic disasters. Authoritarian rulers, who are themselves rarely affected by famines (or other economic calamities) tend to lack the incentive to take timely preventative measures. Democratic governments, in contrast, have to win election and face public criticism, and have strong incentives to undertake measures to avert famines and other such catastrophes (16).

These definitions of these freedoms lock directly with IPAB's mission. Raghunandan makes this connection in the following [Ramanna & Tahilyani, 2014]:

The moment you are forced to be transparent, then immediately customers begin to look at what you are doing more critically and to demand certain services. For example, if the police were transparent and put down all the details of passport verification, then immediately you would be able to find out who is jumping the queue, and therefore the demand for bribes could be controlled. Transparency is essentially an instrument of accountability, and it triggers bribe-resistant behavior in people (8).

In Raghunandan's statement there is direct allusion to both of these freedoms: Through utilizing IPAB's information platform, citizens are granted a new sense of transparency with which to call for and publicly criticize the government. In that way, the public can persuade the government to establish protective security policies against corruption — all of this done with IPAB acting as the facilitator.

From this lens, one can connect IPAB's mission, in its essence, as a facilitator in Sen's notion of "freedom". But IPAB also aligns itself with Toyama's amplification theory of development, especially as it relates to the Toyama's claim that, "technology projects in global development are most successful when they amplify already successful development efforts or positively inclined intent, rather than seek

to fix, provide, or substitute for broken or missing institutional elements" [Toyama, 2011].

This idea makes more sense when the advent of IPAB is placed within India's historical context, in which IPAB's launch in August 2010 coincided with the revelation of numerous corruption scams in India, and increased frustration by the public as a result. This frustration with corruption in India was wide-spread and highly publicized by a series of hunger strikes and other mass demonstrations lead by Anna Hazare and Indians Against Corruption (IAC). Provided considerable momentum, this public sentiment materialized in IPAB's high levels of interaction after only six months following its launch, with over a 250,000 hits and 5,000 bribery reports [Ramanna & Tahilyani, 2014]. In this way, IPAB, as a technology, simply amplified India's development and intent, rather than acting as object of change in it of itself [Toyama, 2011].

Existing Evaluations

Referring back to IPAB's primary "supply & demand" goal and secondary "global scaling" goal, this section will outline three different evaluations of IPAB. In these outlines, I provide an overview of each evaluation's methodology, as well as sense of what insights each evaluation did — or did not — extract in regards to IPAB's primary and/or secondary goals.

Ramanna & Tahilyani, 2014

In Karthik Ramanna and Rachina Tahilyani's "I Paid a Bribe (Dot) Com", the authors lay out historical and political understanding of India during IPAB's launch in order to evaluate the effectiveness of IPAB as it fits its cultural and historical context. The authors' evaluation of IPAB's effectiveness is grounded in: one, a narrative of IPAB's interaction with citizens and the government over time; and two, a quantitative analysis of the site's audience reach over time. Overall, they found that while IPAB gained heavy traction early on as a result of the increased frustration and public outcry over corruption at the time — and even acted upon their results through a few successful initiatives with the government — but showed decreased engagement that followed a decline in active social justice movement. Engagement was as high as 4,000 reports a day at the time of IPAB's launch, but continued to fluctuate and show a slow overall decline in reports. In addition, a fragmented

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Exhibit 1d Bribe Reports on IPAB

Source: Company documents.

This evaluation, however, fails to provide insight of quantifiable evidence of increased or decreased bribery cases in general. The paper also does not answer the question of scale.

Ryvin et. al, 2017

As opposed to Ramanna and Tahilyani's narrative-like evaluation that references cultural and historical contexts, Ryvin et.al utilizes a laboratory experiment set-up to test only the effectiveness of IPAB's concept; not the case as a whole. In their paper "I paid a bribe: An experiment on information sharing and extortionary corruption" the authors create their own IPAB system in what they call the "extortionary briber game", which works as the following:

There are 7 citizens and 7 officials in each session. Each public official receives a lump-sum wage of 130 experimental currency units (ECU) and is in charge of an office that provides licenses to private citizens. The official license fee is 20 ECU; however, as in real life, this fee is not pocketed by the official. At the beginning of each round of the experiment, public officials simultaneously and independently decide whether to demand a bribe for the provision of the license on top of the

official fee, and the size of the bribe, if any. Those officials who decide to demand a bribe can demand any amount between 1 and 50 ECU...

In this framework, the authors looked to create a game that could mimic the IPAB concept. Through this game, the study revealed that IPAB's interface that allows for the posting of reports is insufficient to significantly and systematically lower the occurrence and the size of harassment bribes, citing that there was no systematically lower bribery as compared to the experiments control treatment (a setting where no bottom-up reporting is allowed at all). The paper also delves into recommendation, to which they cite improvement to the IPAB model could be done if: one, reports included specific locations of offices where bribes are done; and two, if reports on the platform are restricted to only service recipients. Respectively, these two recommendations would help in providing awareness of specific institutional corruption, and allow for less lying that can be done on the platform.

However, though this paper critiques the IPAB framework in a controlled setting, it fails to acknowledge the importance of the cultural, social, and political contexts with which an IPAB concept may be situated. These factors are imperative to an understanding of how any ICTD would fair in a development setting. In addition, the evaluation also fails to critique the "demand" side of the project's goals, in which only the "supply" side — the posting of reports on the interface — is critiqued.

Ang, 2014

While the above evaluations explicitly attempt to evaluate IPAB in accordance to its "supply and demand" model (or just one facet of it), Ang's evaluation of IPAB is grounded in an investigation of the concept's ability to scale. In a comparison between India's IPAB and its Chinese-equivalents, Ang outlines the latter's inability to maintain an IPAB-like system, and counters assumptions that attribute such to China's authoritarian government system. Ang's measure of "success" is not related to an understanding of corruption levels in the two countries, per se, but is focused more on a comparison of the survival lengths and qualitative patterns of participation between the two sites. As such, Ang makes a point to focus not on the suppy/demand of bribery model, but instead focuses on an ICTD's ability to scale and create engagement in different global contexts.

While IPAB in India is still running today and received generally high acclaim through a variety of endorsements, as well as direct involvement with government,

China's IPAB had been introduced and then shut down in the course of six months. China's IPAB sites went through, what Ang calls, 5 stages: emergence, proliferation, first shutdowns, approval and relaunch, second shutdowns.

Emergence	Mid-June	IPAB websites emerged in China. News reports of the websites
	2011	immediately followed, including official media like Xinhua
		and China Daily. Most of the websites were inspired by the
		Indian IPAB website. A few were pre-existing forums that
		added sections on bribery/corruption exposure.
Proliferation	Mid to late	Over 50 websites were reported to have followed, but most
	June 2011	were small in scale and lesser known.
First	Late June	Most small forums were shut down. Four bigger ones that later
Shutdown	2011	gained official approvals survived but were unstable.
Approval	Late June to	First approval dates back to 6/24/11 and was granted to
	mid July	woxinghuile. Another three were subsequently granted official
	2011	approval.
Decline	Mid July	Websites that still survived saw a drastic decline of posts and
	2011 onwards	visits. Majority of posts on websites still available were
		concentrated in mid-June.
Final	Early Aug	Official approvals were revoked without explicit reasons.
Shutdown	2011	Almost all websites are inaccessible both in and outside China.
		News articles about the websites also seemed to stop around
		this time. No new reports can be found after mid-August.

NOTE: "Decline" seen above is not considered a stage, per se.

In Ang's argument, she cites that while the conventional perspective would assume direct suppression by Chinese government as the reason for China IPAB's failure, direct restraint by the government was actually generally vacillated and fragmented. In reality, there was a mix of direct and indirect restraint, the indirect restraint being a debilitation of organizational roots of online activism. This includes prolonged restrictions on free associations and restricted establishment of autonomous NGOs, both leading internal organizational problems and narrow goal-setting in Chinese IPAB sites. As a result, these sites lose credibility in the public eye and user enthusiasm wanes, making authorities view the sites as lacking "order and legitimacy." In addition, Chinese netizens showed a lack of appreciation for IPAB's original mission of tackling system driven corruption, with netizens instead focusing on the arrest of "bad agents." As Ang says — that despite the potential of new media to allow for political participation — "a weak civil society, with new media added, is still weak."

Overall — in reference to all three evaluations outlined — all of the insights gathered from these reports, in tandem, provide a good general understanding of how and why IPAB has or has not been successful, one way or another. However, none of the evaluations quantifiably engage in understanding IPAB's success (or lack thereof) in eliminating corruption cases within in a specific historical-cultural context. As such, in the next section, I provide a critique of the IPAB project itself based on current evaluations, and then provide recommendations for new studies based on what I see is missing.

Critique of the Project

In this section, I lay out my critique of IPAB through an evaluation of its primary and secondary goals: access to "supply" of bribery, facilitating "demand" of bribery, and the potential to scale. Afterwords, I conclude by re-visiting and critiquing Sen's Development as Freedom as an effective framework, grounding this analysis in insights from the IPAB case.

"Supply" of Bribery

As noted in previous sections, the dissemination of corruption-related information and education constitutes what can be called the "supply" side of IPAB's primary goal. This specific goal can be grounded in an understanding of "adoption": How has IPAB been successfully, or unsuccessfully, adopted by citizens? In what ways is IPAB engagement increase or decrease associated with the sociocultural context in which its situated, or simply with the model itself?

The latter question can be broken down into two parts: one, the effect of the historical-cultural context on IPAB engagement; and two, the effect of IPAB's model on engagement. Ramanna and Tahilyani evaluation tackles the first part, in which they narrate the way the India's historical views on corruption, the anti-corruption social movement, government against bribery, and IPAB's launch all intertwined, resulting in IPAB's initial success. However, engagement on IPAB waned later on as IAC's anti-corruption movement began to die down, and anti-corruption views across India became less exuberant [Ramanna and Tahilyani, 2014]. This highlights the necessity of social momentum for IPAB to effectively garner decent adoption, as well as underlines Toyama's technological amplification theory [Toyama, 2011].

In evaluating IPAB's model itself, Ryvin et. al lab experiment setting provided a means to quantifiably analyze the success of solely IPAB's model separate from its sociocultural context, and poses a set of important problems with the model: IPAB, as is, is unable to navigate specific government buildings that enact corruption, and are unable to separate genuine and fabricated reports [Ryvin et. al, 2017]. The latter point — the inability to separate false and true reports — is of particular importance to IPAB's end goal: Without the transparency to see which claims are true, IPAB would be unable to make any trustworthy statement as to which areas of which government would need to act, and how they would do so. Without this sense of trust, I would argue that citizens would be less likely to engage.

In addition to the above criticisms, IPAB's model fails to account for lack of Internet access/use and illiteracy. In towns like rural Chhattisgarh in India (or elsewhere), there is high illiteracy and essentially no internet [Smith, 2014]. Even with the above, there may be systemic barriers or technological issues that may pose a problem in citizen's ability to use IPAB in the first place [Gitau & Marsden, 2010]. As such, if IPAB is unable to provide any insights from areas such as these, then it would not be able to leverage any engagement for policy action. Given such, it is critical that more qualitative work be done — perhaps by JCCD — to better understand rural areas without Internet-related, systemic, or social access to IPAB, in order for IPAB to reach higher levels of engagement that can scale to areas in India that may need it.

In tandem with the above work and recommendations, more qualitative evaluation should be done in order to understand *why* users do or do not engage in IPAB over time. While there is work that evaluates why users are upset or no upset by bribery itself, there is no literature or data on the actions of users of specifically IPAB. Insights from an evaluation as described can be leveraged by IPAB to better reach out and further engage citizens.

"Demand" of Bribery

The "demand" of bribery refers not to the IPAB site's engagement, but to IPAB's active advocacy for anti-corruption policy, collaboration with government entities, and facilitation of citizen voices [Ramanna and Tahilyani, 2014]. In this field, IPAB has shown to be more successful and active. An example of such is action by Bangalore's transport commissioner in cautioning 20 senior officers in locations where bribes were reported, and adopting a more automated process for issuing driving licenses. This process minimizes subjectivity in the interaction between

citizens and public officials, and thus reduces opportunity for corruption [Ramanna and Tahilyani, 2014]. Another example of such was a case regarding the government of Karnataka State, in which authorities were convinced by IPAB's statistics to start a poster campaign in certain distinct government offices to encourage the reporting of bribes that were demanded [Ramanna and Tahilyani, 2014].

While the above examples give tangible evidence of political change occurring in order to protect citizens of bribery and corruption, they are limited to action in specifically Bangalore — where IPAB's headquarters is, as well as where most of IPAB's traction is from [Ramanna and Tahilyani, 2014]. As such, it does not show decent evidence that IPAB is actively able to fulfill its role as facilitator if they have shown they have not made considerable political change in areas in India beyond Bangalore. Given such, evaluations should be done to assess IPAB's government reach outside Bangalore, but within India.

In addition to evaluations to analyze "demand" and "supply" of bribery separately, evaluation should also be done to understand the relationship between the two, and to qualitatively assess whether reports from IPAB are reaching government authorities, and to quantitatively assess whether the "supply and demand of bribery" model as a whole is effectively eliminating cases of corruption across India.

Scaling Globally

As of now, IPAB has partnered with initiatives in other countries to set up similar sites globally, but has maintain a distant connection by only providing source free of charge, but not directly involving their home base with the activities of these other initiatives. Ang's evaluation of the IPAB model's ability to scale in China, in particular, revealed the inability for aspects of China's civil society to function together; mainly as a result of the authoritarian government's ability to keep NGOs from professionalizing and citizens from learning to self-govern [Ang, 2014]. Thus — in this way — IPAB's center from India does not have the means to scale by themselves: Scaling the IPAB requires systemic and political movement and change in the countries hoping to adapt IPAB's concept to their own countries. This involves learning to self-govern and understanding of systemic structures as mentioned, but also the ability to scale to areas that do not have access to IPAB, whether it be because of social barriers, systemic barriers, or political barriers.

IPAB and Freedom

While IPAB's goal was outlined as taking the role of the facilitator between citizen voices of bribery and government action in order to systemically decrease cases of corruption across India, it's end goal, indirectly, is to provide senses of transparency and protective security to citizens. This, under the Development as Freedom framework, interlocks IPAB as an initiative towards this notion of freedom.

How, then, has IPAB fared as a facilitator for freedom? I argue that IPAB has yet to fulfill this role, to which I posit comes back to this notion of the amplification of technology: Without positive intent occurring within the sociocultural context, there will be a lack of action by both citizens and government to utilize the technology to begin with — otherwise, IPAB's effectiveness as an ICTD tool will remain stagnant, and so will it's ability to uphold this notion of "freedom".

This sentiment translates to global contexts as well. In the case of China's IPAB, positive momentum as means to be amplified by IPAB is not possible due to Chinese users' general inexperience with civic engagement, as an indirect result of Chinese authoritarian rule. Without an understanding of civic engagement and manifesting ideologies into political movement, the Chinese public cannot leverage IPAB in any useful way.

To conclude, I want to draw back to Sen's framework, and pinpoint a critique of the claim I posed at the beginning of this paper: the general notion that "political liberties and democratic rights are among the constituent components of development" [Sen, 2001]. However, Sen does not acknowledge the importance of connected social movement, that must be made necessary by strong social relations. Unfortunately, fragmented relations that come about from separations of social power are present in essentially all countries, regardless of political context. As made clear in the failure in both India's and China's IPAB services, the missing component in both projects was an educated, socially-coordinated movement to provide momentum, of which was necessary in order for IPAB's intervention for "freedom" to work at all.

Bibliography

[Ang, 2014] Ang, Y. "Authoritarian restraints on online activism revisited: Why "I-paid-A-bribe" worked in India but failed in China." *Comparative Politics* 47.1 (2014):

[Choudhary, 2014] Choudhary, S. "Giving a Voice to a Ravaged, Neglected Region." *National Geographic*, National Geographic Society, 27 Feb. 2017, news.nationalgeographic.com/news/innovators/2014/06/140617-shubhranshu-choudhary-india-maoists-citizen-journalism/.

[Gitau & Marsden, 2010] Gitau et. al. "After access: challenges facing mobile-only internet users in the developing world." *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. ACM, 2010.

[I-Paid-A-Bribe, 2010] AirJaldi. AirJaldi Website. http://www.ipaidabribe.com/

[Janaagraha, 2019] Janaagraha. Janaagraha Website. http://www.janaagraha.org/

[Makuwira, 2006] Makuwira, J. "Development? Freedom? Whose development and freedom?." *Development in Practice* 16.02 (2006): 193-200.

[Morizio, 2014] Morizio, P. "Conceptualising Digital Materiality and its Socio-Technical Implications through the Phenomenon of Crowdsourcing." *Journal of Systems Integration* 5.4 (2014): 3-8.

[O'Hearn, 2011] O'Hearn, D. "Amartya Sen's Development as Freedom: Ten Years Later." Amartya Sen's Development as Freedom: Ten Years Later | Development Education Review, www.developmenteducationreview.com/issue/issue-8/amartyasens-development-freedom-ten-years-later.

[Ramanna & Tahilyani, 2014] Ramanna et. al. "I paid a bribe (dot) com." (2012). In Harvard Bus. School Case, 112 (078)(2012).

[Ryvkin et. al] Ryvkin et. al. "I paid a bribe: An experiment on information sharing and extortionary corruption." *European Economic Review* 94 (2017): 1-22.

[Sen, 1999] Sen, A. Development as Freedom. Oxford University Press (1999).

[Sen, 2001] Sen, A. "What is Development About?" in Meier, G. and J. Stiglitz (Eds) (2001).

[Strom, 2012] Strom, S. "Web Sites Shine Light on Petty Bribery Worldwide." *The New York Times*, The New York Times, 7 Mar. 2012, www.nytimes.com/2012/03/07/business/web-sites-shine-light-on-petty-bribery-worldwide.html.

[Toyama, 2011] Toyama, K. Technology As Amplifier in International Development. In Proceedings of the 2011 iConference, iConference '11 (2011): 75-82.