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vTAIWAN

USING DIGITAL TECHNOLOGY TO WRITE DIGITAL LAWS

<https://vtaiwan.tw/>

CASE STUDY



vTAIWAN | USING DIGITAL TECHNOLOGY TO WRITE DIGITAL LAWS

Introduction

For three weeks in April 2014, students, academics, and everyday citizens piled into the Taiwanese Parliament in Taipei to protest the passage of the Cross-Strait Service Trade Agreement aimed at liberalizing trade with China. The government negotiated the Agreement behind closed doors giving rise to protests now known as the Sunflower Movement. g0v.tw -the largest civic tech community in Taiwan- which was founded to promote government transparency and the use of tools to enable citizen participation, led the protests.

The Taiwanese government responded to the demonstration by acknowledging the public's peaceful demands. Former Taiwanese Minister without Portfolio Jaclyn Tsai attended a g0v.tw hackathon in December 2014 and asked the volunteers if they could "create a platform for rational discussion and deliberation of policy issues that the entire nation could participate in."¹ If they were up to the challenge, Tsai committed that the government would participate and respond.

Shortly thereafter, the volunteers built vTaiwan, the open consultation process to bring together experts, government officials, and relevant citizens on a national scale to deliberate, reach consensus, and craft legislation.

Shortly thereafter, the volunteers built vTaiwan, the open consultation process to bring together experts, government officials, and relevant citizens on a national scale to deliberate, reach consensus, and craft legislation.² It has since transformed into a systematic online and offline process to reach consensus on large-scale issues and craft national legislation, helping lawmakers implement decisions with a greater degree of legitimacy. While this case focuses on

vTaiwan's influence on the problem identification stage, it is important to note that vTaiwan enables public participation in each step of the lawmaking process in some form.

Mechanics/Workflow

¹ Barry, Liz. "vTaiwan: Public Participation Methods On The Cyberpunk Frontier Of Democracy." Civic Hall, 2016.

² Lin, Shu-Yang. "[vTaiwan](#)", 2018.

At the time of vTaiwan's inception, instead of g0v ceding control of the program to the government, its inventors and stakeholders decided that vTaiwan should exist as a platform independent of government that runs collaboratively between civil society and the public sector. It was founded with the agreement that the government will use the opinions gathered throughout the process to shape legislation on any given issue related to the digital economy. Now, three parties are in charge of its operation:³

1. **Issue sponsors:** the government agencies which submit drafts of laws and regulations that they are proposing.
2. **Editors:** individuals affiliated with the Science & Technology Law Institute, a government-sponsored NGO, who collect and organize the drafts into a format more conducive to discussion.
3. **Administrators:** g0v's vTaiwan task force, which works together to maintain the online system and update the content.

Though vTaiwan is government-funded, because volunteers run the process, it enjoys a relatively high degree of legitimacy.

The process comprises four distinct phases: proposal, opinion, reflection and legislation. The platform's administrators, however, stress that the system is flexible and the path of an idea often deviates from the ideal type depicted in this roadmap.⁴ Some issues have taken as few as three months to settle while others have taken over a year.

³ "Opportunities and Challenges in Digital Democracy: Taiwan 2014-2016 Open Government Report." Open Culture Foundation, 2017.

⁴ Private presentation from and interview with Shu-Yang Lin, co-founder, PDIS Taiwan, March 1, 2018.
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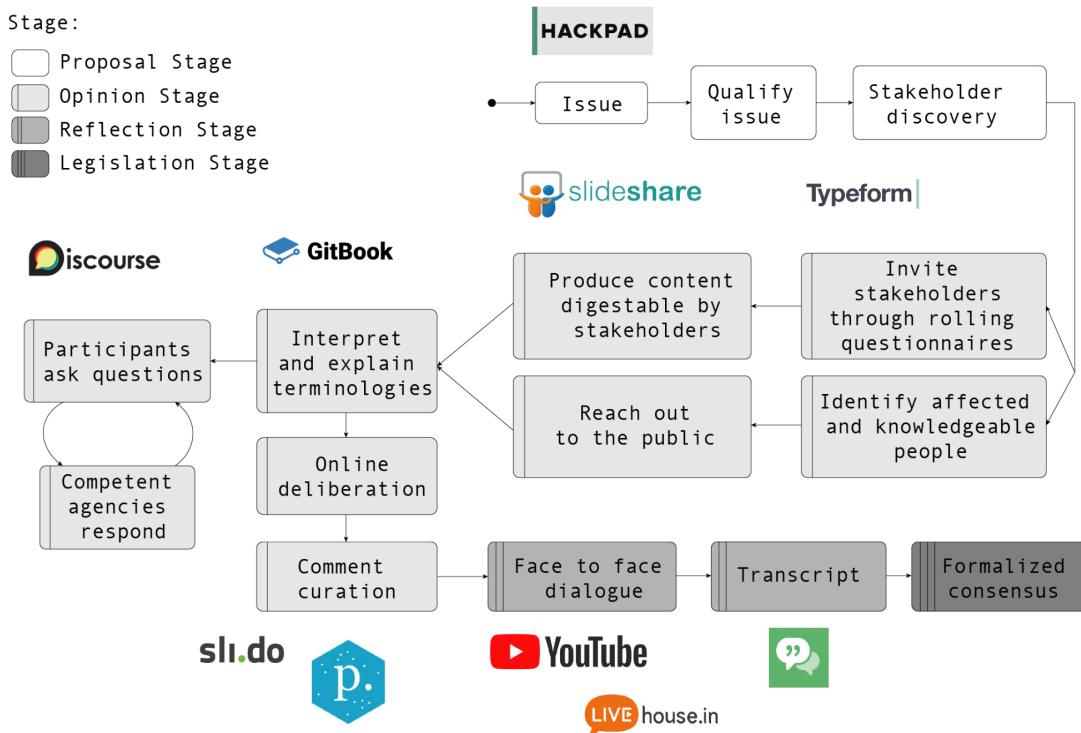


Figure 1: The vTaiwan process. Image from <https://info.vtaiwan.tw/>

The vTaiwan Process

I. Proposal Stage

A. Diverse people including programmers, developers, public servants, journalists, scholars, legal specialists and students convene both online or offline for a weekly mini-hackathon hosted by vTaiwan every Wednesday.⁵

- At these mini hackathons, contributors propose an issue of their choosing to a “competent government authority”⁶ who may choose to either accept (thereby becoming accountable for the issue) or refuse to take on the topic of the proposal. Notably, a proposed

⁵ Yu-Tang Hsiao, Shu-Yang Lin, Audrey Tang, Darshana Narayanan, Claudina Sarahe. “vTaiwan: An Empirical Study of Open Consultation Process in Taiwan.” Center for Open Science, 2018.

⁶ “Competent authority” is a term used frequently in vTaiwan’s process materials. It simply refers to the relevant government agency that is legally responsible for handling a given issue (such as the Ministry of Health and Welfare). In this study, the phrase will be used interchangeably with phrases like “relevant government agency.”

issue will not initiate the vTaiwan process without a government authority⁷ agreeing to become accountable for it and a facilitator taking charge of the issue.

2. This facilitator must be present to guide the issue through each stage of the process. He/she uses the “Focused Conversation Method” to lead discussion throughout each stage. This method is summarized below:

- a) Objective** - participants share facts and data (e.g., vTaiwan is a project)
- b) Reflective** - participants express their emotions and feelings about the objective facts (e.g., I think vTaiwan is a great project and here's why)
- c) Interpretive** - participants exchange opinions and values (e.g., vTaiwan is a project that should expand)
- d) Decisional** - participants make decisions and reach consensus (e.g., we concluded that vTaiwan expands within a month)

B. Tools - during the proposal stage, notes taken during mini hackathons are shared using a collaborative notetaking tool (Hackpad), while documents and presentations are shared using SlideShare.

C. Stakeholder Identification - The community⁸ researches and identifies relevant stakeholders. In this case study, stakeholders are defined as any person or group affected by and/or with knowledge about the given issue.

II. Opinion Stage

Public opinion regarding the issue is gathered through several methods as the issue gets further refined.

A. The vTaiwan community launches the opinion collection process and produces the description of the case in a form digestible by stakeholders and the general public. This includes publishing any documents, research and/or presentations, relevant to the proposal. If

⁷ idib.

⁸ “Community” in this context is referring to the whole of the vTaiwan community.

there is terminology that is difficult to understand, it is compiled into an open dictionary, where everyone can contribute to make things clearer.

B. “Rolling Questionnaires” - first, in an effort to keep the ball rolling and collect as many valuable opinions as possible, stakeholders within the community’s network are sent questionnaires which ask what they know about the issue and their experiences with it. Notably, stakeholders are also asked if they can recommend others with knowledge and/or experience relevant to the issue. Subsequently, other individuals are sent the same survey, often via online advertisements and Facebook. Several steps are taken to maintain privacy but also to enhance the opinion collection process and to augment the crowd that is surveyed.

1. The respondent has the option to either keep their responses confidential within the vTaiwan community⁹ or to publish their opinions publicly.

2. Either way, the respondent has the option to remain anonymous.

3. The respondent is also asked whether they would like to undergo a more in-depth interview.

4. The respondent is given the option to subscribe to email updates regarding the issue.

C. The vTaiwan community creates an online forum on which anyone, not restricted to Taiwan residents, can ask questions, comment on ideas or choose to “agree”, “disagree” or “pass” on others’ ideas, and that forum is open for a designated period of time. Each round of opinion collection lasts for at least one month, but there is no limit to the number of rounds.

D. In order to foster consensus building, however, the process then calls for using Discourse (discussion tool) and Pol.is (opinion mapping).

E. Discourse is a discussion platform which allows users to tag competent authorities who, in turn, are obliged to respond to comments within seven days.

F. Pol.is is an opinion mapping tool to help a large group build consensus by helping the group to visualize its own opinions.

⁹ idib.

- 1.** The Pol.is problem definition process with the public unfolds in multiple phases. In the first round, organizers, followed by participants, write statements about the problem. In other words, the organizers create sample problem statements to prompt discussion.
- 2.** In the second round, participants are asked to ‘Agree,’ ‘Disagree’ or ‘Pass’ on those statements or answer “Is This Statement Important to You.”
- 3.** Statements are shown to all participants based on a comment routing system that gives each statement a priority score based on the responses it has received so far. Every person who enters the conversation sees a different ordering of the statements to avoid bias. As voting progresses, the algorithm then finds the underlying structure of the conversation using unsupervised machine learning. The software analyzes the votes and visualizes them in a real-time report known as an opinion landscape.
- 4.** Through multiple rounds of the process, it becomes easier to see where there is consensus or disagreement and by whom.
- 5.** Once the opinion process is closed, all interactions are reviewed, analyzed, and curated by the vTaiwan community. They are used to publish two reports (“raw and second-hand”)¹⁰ on the results of the opinion collection stage that are viewable by the public and also submitted to the relevant government authority. The reports are used as materials to set the agenda and as a topic of discussion for the upcoming mini-hackathon and consultation meeting.

¹⁰ The “raw” report includes the meta-data, numbers, statistics, etc., produced, whereas the “second-hand” report is an interpretation of that data.

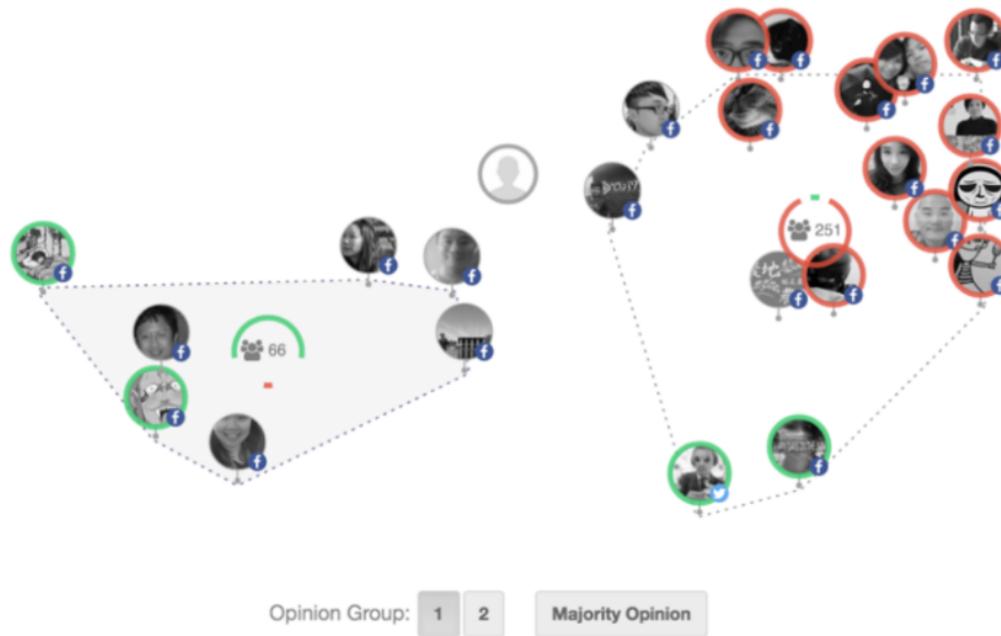


Figure 2: Example of Pol.is opinion groups being formed¹¹

III. Reflection

A shorter stage comprised of two face-to-face events to reflect on findings thus far and determine if it is time to proceed or undergo another round of opinion collection.

A. If the competent authority and the gov participants conclude that it is time to proceed, then they design an in-person consultation and:

1. Identify the proper facilitator for the meeting.
2. Define the size and scope of the issue with the competent government agency.
3. Host a pre-meeting with the facilitator and competent authority at least one week prior to the consultation meeting.
4. Create a plan for the meeting, which includes a rundown, agenda, and a list of invited guests and participants, among other logistical details.

B. Then, the in-person consultation meeting is held, which invites key stakeholders, including scholars, public servants, private sector representatives and participants who were deemed

¹¹ Berman, Paula. "Hacking Ideology: pol.is and vTaiwan." Democracy Earth, 2017.
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highly active during the earlier stages, are invited. Although an invitation is required to participate in-person, this meeting is livestreamed online via YouTube with a chatroom where anyone can contribute ideas, so that everyone can be involved even if they cannot physically attend. The facilitator decides which contributions from the chat to incorporate into the meeting, choosing “insightful and valuable opinions” to include. The meeting is also recorded and transcribed to be used as materials for the next action.

- 1.** The meeting begins with the facilitator describing a summary of the issue’s process thus far.
- 2.** Then, stakeholder groups are allowed to give presentations.
- 3.** During this process, the facilitator takes notes digitally to document a summary in real-time, which is all displayed on the projector.
- 4.** Following the meeting, the videos are released on the vTaiwan Facebook page so that citizens can continue to share ideas in the following weeks.

IV. Ratification

A final discussion on the results of the process which decides the action that the government will take.

- A.** After the consultation meeting, there is another discussion between the community and competent government agency on:
- 1.** The raw report(s) from the opinion collection stage.
 - 2.** The secondary study on the discussion throughout the vTaiwan process.
 - 3.** The transcript of the consultation meeting.
 - 4.** The “rough consensus”¹² – the relevant government agency is responsible for using this to take action.
- B.** The final outcomes can take one of two forms.¹³
- 1.** In some cases, the issue is resolved with a guideline, policy, or statement from the competent government agency. This often includes a point-by-point explanation of why legislation is not being enacted.

¹² Berman, Paula. “Hacking Ideology: pol.is and vTaiwan.” Democracy Earth, 2017.

¹³ Avross Hsiao. “vTaiwan Slide Deck.” 2018.

2. In others, it is formulated into a draft bill to be sent to the Yuan (Taiwanese Legislature).

Permanent beta

Minister Audrey Tang emphasizes the importance of seeing the process as an experiment that can and will always be improved upon and modified. She explained that:

“vTaiwan’s scope is not limited to Taiwan or any particular government; it’s an experiment to prototype a model for consensus generation among large groups in general.”

- Audrey Tang, *Digital Minister, Taiwan*

Moreover, she described it as “an experiment for a new way of working together, to unconditionally trust when collaborating, to be more open and transparent, and to gain the potential to be trusted.”

The process is inherently adaptive, meaning each issue discussed through vTaiwan may follow a different path. No two issues are assumed to be identical in nature and there is scope for each issue to be subject to a unique process, with progress determined by the community involved. In some cases, all four stages are not required. For example, in the case of developing a Fintech Sandbox, an effort to liberalize regulation and allow innovative financial technology companies to thrive, the reflection stage was skipped because there was pressure for immediate legislation. Similar regulatory sandboxes for electric scooter usage, autonomous vehicles, and the 5G spectrum network are currently in development on vTaiwan.

There is no set policy in place to decide when an issue advances from one stage to the next. Rather, the vTaiwan community decides this when they reach a “rough consensus” at any given point based on the situation at the time. According to PDIS Co-founder Shu-Yang Lin, “every case is different, and should be treated differently.”¹⁴

Rather than aspiring to become a “best practice” for citizen engagement, vTaiwan’s stated goal is to advance knowledge and research in the field of digital and participatory democracy, so that other governments and institutions--including its own--may learn from it.

¹⁴ Lin, Shu-Yang. [“Reinventing democracy.”](#) issuu.com, November 14, 2017.

Participation

Since the platform's launch in 2015, over 80 percent of vTaiwan deliberations have led to decisive government action.¹⁵ One of the most notable processes, and the first to utilize the Polis software, was a 2015 debate over the country's policies regarding taxis and the ride-hailing app Uber. Participation statistics from this process were as follows:

- ▶ 31,115 total votes (highest of any process to date)
- ▶ 145 statements submitted on Polis survey (during opinion gathering stage)
- ▶ 925 participants voted on Polis survey (opinion stage)
- ▶ 1,875 participants joined online during the two-hour live-streamed consultation meeting¹⁶
- ▶ 4,000+ participants crowdsourced the meeting agenda for the consultation

Impact

The Taiwanese government shifted from making decisions that angered the neglected public¹⁷ to requiring each Ministry to create a vTaiwan forum account and holding them responsible for responding to citizens' comments within seven days, resulting in a diverse range of topics being discussed on the platform, none of which are trivial. Although it tends to attract participants who often spur discussion on topics related to economics, data, and technology, vTaiwan has also exhibited its capacity to catalyze deliberation on issues of social justice such as the Nonconsensual Pornography case.

This award-winning platform has been praised for its innovation, impressive technology, and its ability to bridge the gap between online and offline participation as well as gaps between various sectors and citizens. From topics like the sharing economy to security management, vTaiwan continues to showcase its capacity to invite stakeholders of all backgrounds to identify problems and generate rational, collaborative, and productive dialogue about key issues, to the point where possible solutions are often put forth and agreed upon.

¹⁵ Avross Hsiao. "vTaiwan Slide Deck." 2018.

¹⁶ Tang, Audrey. "Uber responds to vTaiwan's coherent blended volition." Pol.is blog, May 23, 2016.

¹⁷ O'Flaherty, Kate. "Taiwan's revolutionary hackers are forking the government." Wired, May 4, 2018.

Overall, it has proven to be a multipurpose platform that can help all parties that wish to be involved. It enables Taiwanese citizens to bring their concerns to light where they can actually be heard, while also diminishing the burden placed on lawmakers and public servants by fostering open, productive collaboration and mitigating citizen opposition.

The UberX case is touted as one of the most constructive processes facilitated through vTaiwan to date. Before the vTaiwan consultation, the regulation of ride sharing was a contentious topic. Citizens were concerned for their safety as UberX did not require its drivers to obtain a professional driver's license and was not subject to the same requirements as taxis. Taiwan's taxi drivers complained they were losing a significant portion of their business, hurting their income by 30 percent according to Chen Deng, Chairman of the Taipei City Taxi Passenger Transport Trade Association.

But, as a result of the vTaiwan process, Taiwan's Ministry of Transportation and Communications pledged to ratify the consensus reached on Polis and amend the existing regulation consistent with the plans worked out online and agreed upon by Uber Inc., the Association of Taxi Drivers in Taipei, Taiwan Taxi, and the Ministries of Transport and Communications, Economic Affairs, and Finance. These included such changes as:¹⁸

1. Taxis no longer need to be painted yellow.
2. High-end, app-based Taxis are free to operate as long as they do not undercut the existing taxi fare.
3. App-based dispatch systems must display car and driver identification, estimated fare, and customer rating.
4. Per-ride taxation would be imposed.¹⁹

The Uber case is evidence for the claim that the vTaiwan process does more than merely collect opinions; it provides a method for genuinely improving legislation.

Learnings

vTaiwan offers a replicable, open-source model for supporting constructive collaboration between committed members of the public and public servants and suggests several lessons.

¹⁸ Rashbrooke, Max. How Taiwan is inoculating itself against the Uber “virus.”, CityMetric, February. 8, 2017.

¹⁹ Sui, Cindy. “Taiwan: The place Uber couldn’t crack.” BBC News, February. 10, 2017.

1. Keeping it user-friendly

Although vTaiwan includes multiple stages and different tools, each component is simple and easy to understand.²⁰ During a presentation she gave in Paris, Audrey Tang jokingly remarked that g0v is, “a movement that tries everything [sic] to create a way for lazy people to engage in real action.” From using titles that are very slight offshoots of common existing references (gov-g0v, Taiwan-vTaiwan) to creating timelines to help participants understand the context of certain issues, vTaiwan makes every attempt to make their process simple and inclusive for everyone.

What is unique is fostering a process to bring together different groups of people who do not usually work together, including tech experts, social activists, and public servants.

2. Engaging diverse audiences

With 85 percent of its population online and 90 percent on Facebook,²¹ creating an online participation program was not a big stretch.

Another example is the crowdsourcing platform created by the vTaiwan community to fact-check the statements made by

presidential candidates during public speeches in the lead-up to Taiwan’s 2020 election. g0v even helped launch Talk to Taiwan, a sibling project of vTaiwan consisting of a broadcast talk show where government ministers, mayors and scholars show up to respond to citizen ideas and concerns expressed via Polis.

As Minister Tang said, “...I think [vTaiwan] is closer to the civic tech community than it is actually to my office or any minister...what we’re doing is institutionalizing the parts that worked.”

Nonetheless, the vTaiwan community has made some efforts to institutionalize the process in law. One piece of legislation, a clause in the Digital Communications Acts, would have created a legal framework for the executive branch to respond to cross-ministerial issues that originated on forums like vTaiwan. However, this legislation, itself a product of vTaiwan, did not complete its parliamentary process in 2019. Regardless, there appears to be bipartisan support to create a dedicated authority to institutionalize digital policymaking processes like vTaiwan.

²⁰ “2016-03-02 Conference at SuperPublic.” PDIS, March 3, 2016.

²¹ “2016-03-02 Conference at SuperPublic.” PDIS, March 3, 2016.

3. Mandating engagement

vTaiwan's organizers have emphasized the importance of trust among citizens, civil society, and the public sector.²² The government trusts activists to maintain this largely volunteer-run process, while the community activists trust the government to listen and use their insights and opinions to shape legislation. Building upon its initial commitment to use the platform, the additional requirement that began in 2017--every ministry within the Taiwanese government assign at least one “participation officer” (PO) to “be involved in engagements with the civil society and to acquaint themselves with multi-stakeholder collaborative settings, as to shape regulations appropriate to their ministry”—is a crucial development.²³ Although many public officials are still reluctant participants, mandatory public engagement is beginning to create a culture of mutual trust.

Special thanks for editorial assistance to:

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²² Atlee, Tom. “vTaiwan (Part 2) – Notes on Aspects of the vTaiwan Phenomenon.” April 23, 2018.

²³ Atlee, Tom. “vTaiwan (Part 2) – Notes on Aspects of the vTaiwan Phenomenon.” April 23, 2018.