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# ENHANCING CITIZEN ENGAGEMENT WITH OPEN GOVERNMENT DATA

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## ABSTRACT

The research deals primarily with the research question – How can engagement of civil society organizations with open government data be instigated or enhanced? To answer the question, an action research was conducted in two provinces in the Philippines where civil society organizations in Negros Oriental province were trained, and in the Bohol province were mentored on accessing and using open government data. The research showed that for capacity building programs to be effective, they should be relevant to the condition of the CSOs and the individual needs of learners; conducted with a long-term view of ensuring use and actual impact not only on the organization but also on the constituencies that they serve; focused on higher-order results like changes in practices and behavior of organizations and their staff members or the actual production of outputs that benefits citizens and communities; and targeted to achieve whole-of-organization awareness, appreciation, and motivation to use data. This paper asserts that short-term, sporadic, one-time buzz trainings, or off-the-shelf training programs, currently the prevailing modes of capacity building delivery, will not yield to actual data use that will show the economic, political, and social power of open data.

**Keywords:** *open data, training, capacity building, mentoring*

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# 1. INTRODUCTION

## 1.1. WHY THIS RESEARCH?

The Department of Interior and Local Government (DILG) in 2011 implemented the Full Disclosure Policy which directs local government units (LGUs) to post public finance documents including receipt and utilisation of funds in LGU websites. The objective is to make local governments more accountable with the assumption that citizens or their representatives understand and are able to use these information. Very recently, DILG required the publication of reports in open format (at the current stage, in spreadsheets) at the Full Disclosure Policy portal (<http://fdpp.blgs.gov.ph>)

However, the current research conducted by Step Up Consulting Services supported by the International Development Research Center through the World Wide Web Foundation revealed that while provincial governments in Bohol, Bulacan, and South Cotabato post financial information in their websites, these are hardly used by civil society organizations (CSOs) for their own decision-making processes, for engaging with provincial government in budgeting processes, and in ensuring transparency and accountability in the procurement of projects and the disbursement of public funds. In the most extreme cases, the CSOs are not even aware that the information exists and how they will be able to use them. This project takes the view that for a more transparent and accountable local governance, civil society groups, media, and the business sector, needs to proactively engage with local government units through open government data in order to achieve transparency and accountability, or better service delivery to citizens.

In this case, it is important that while significant efforts have been made by the government to open data to the public, this should be matched with a capacity building program that would enable citizens to engage with government data. However, little is known about how this would be done in the local context in the Philippines, so this research is considered critical and important in moving the discussion of openness towards better citizen engagement in local governance.

## 1.2. RESEARCH QUESTIONS

This research project will deal this primary research question - How can engagement of civil society organizations with open government data be instigated or enhanced?

To answer this question, the following secondary research questions will be explored:

- a. What do CSOs know about open government data? What do they know about government data that their local governments are publishing in the web?
- b. What do CSOs have in terms of skills that would enable them to engage meaningfully with open government data?
- c. How best can capacity building be delivered to civil society organizations to ensure that they learn to access and use open government data to improve governance?

# 2. LITERATURE REVIEW

## 2.1. CAPACITY VERSUS CAPABILITY

Capacity and capability are terms that have been used interchangeably in development practice as though they refer to the same thing. But there is value in looking at how different these words are, especially in their etymological origins where capacity is about the ability to contain, while capability is about ability to perform. Baser and Morgan differentiate capacity from capability. Capacity is *“the combination of individual competencies, collective capabilities, assets and relationships that enables a human system to create value”* (2008:8) while capability is the *“collective skill or aptitude of an organisation or a system to carry out a particular function or process inside or outside the system. The organisation must have the collective embedded capabilities it needs to*

*create the development value. And it must be able to pull these aspects together with some sort of integration, synthesis and coherence.” (2008: 25).*

In recent years, and especially in the context of development studies, Sen’s capability approach dominated the literature and defines capabilities as the various combinations of functionings (beings and doings) that the person can achieve (Sen 1992). He posits that development necessitates the freedom to do things, given his capabilities, to choose between alternative livings. Applied in the context of information, Kleine (2009) argues that information and technology is a useful tool to achieve this state of development. In simplistic terms, information can be a valuable resource that enables citizens to participate better in governance, eventually leading to better quality of life. Although ‘capability’ is the richer concept, and ultimately the goal of development should be to increase the capability of individuals and communities, when it comes to specific areas of activity, such as the use of OGD, our focus is necessarily narrower – looking at methods to increase particular capacities. Importantly, however, both the definitions of capacity and capability above recognize these as having both individual, and collective elements: capacity to use OGD is social, and cannot be fostered in terms of individual skills alone.

## 2.2. CAPACITY BUILDING VERSUS CAPACITY DEVELOPMENT

While capacity building and capacity development are both encountered in international literature review, the latter is seen to be more comprehensive. The United Nations Development Programme (UNDP) views capacity building as a *“process that supports only the initial stages of building or creating capacities and alludes to an assumption that there are no existing capacities to start from.”* (UNDP, 2008: 4). The Organisation for Economic Cooperation and Development (OECD) defines capacity development as *“the process whereby people, organisations and society as a whole unleash, strengthen, create, adapt, and maintain capacity over time.”* (OECD, 2006: 12). In the context of this paper, we use the more limited term of capacity building, than the more encompassing term of capacity development. This choice is an explicit recognition of the fact that in the context of OGD, we are still at the initial stages of building open-data related capacity and more work is still to be done in creating an enabling environment that would ensure sustained and impactful use of data to help drive development within organizations and societies.

Nevertheless, the underlying concept of capacity building aims to produce sustained change at both individual and collective levels (Crisp et al, 2000), increase the capability of organizations to fulfil its mission (Wing 2004), improve conditions in attitude, vision and strategy, structure, skills, and material resources (Kaplan 2000), and achieve change and transformation (Blagescu and Young 2006).

There are several methods of undertaking capacity building and some authors make two distinctions in terms of approach; process-focused and skill-focused (Cairns et al 2005) – the former best exemplified by mentoring approach, and the latter with training. The succeeding pages will look at these two approaches, with particular focus acquiring skills and relevant processes related to open data.

## 2.3. TRAINING VERSUS MENTORING

Training is a popular method in any capability building, especially in acquiring computer skills among a group of learners. On the other hand, mentoring is also known to be the most effective in terms of expert-learner relationship. Training and mentoring have a common purpose which is to provide skills and competencies among the learners. They have similarities and differences in terms of its meaning and impact to the learner, activities and conduct, models and approaches, among others. Training can provide with learning the basics of the tasks and procedures, but it doesn’t provide that personal attention and close rapport that mentoring can offer (PMChampion.com, 2013).

Meriam-Webster dictionary defined training as *“the process by which someone is taught the skills that are needed for an art, a profession, or job”*. Training is the most widespread approach in improving one’s knowledge and skills that relate to specific useful competencies (Abdul Rasid Abdul Razzaq, et al., 2012). Training usually involves a trainer who is an expert and a trainee or group of trainees who acts as the learners. It is recognized by many organizations because of its importance in local and international development (Ryan, Ibrahim, Dakermanji, & Niane, 2012). Training, in general, helps learners to: a) obtain new and relevant information, techniques, and skills;

b) increase knowledge; c) elucidate attitudes, beliefs, and/or behaviors; d) drill skills; e) expand current abilities; and f) apply any learning achieved (Wild, Shambaugh, Isberg, & Kaul, 1999).

On the other hand, mentoring is “a help by one person to another in making significant transitions in knowledge, work or thinking” (Megginson and Clutterbuck, 1995, cited in Megginson, Clutterbuck, Garvey, Strokes, & Garrett-Harris, 2006). Unlike in a training, mentoring usually involves two individuals, the mentee who acts as the learner and the mentor who serves as the supervisor. Research shows that successful mentoring programs enhance productivity and may ultimately lead to mentees professional advancement (Rowland, 2011). Many organizations believe that mentoring provides a significant impact on the individual and the organization (Wild, Shambaugh, Isberg, & Kaul, 1999). Likewise, a study cited in (Megginson, Clutterbuck, Garvey, Strokes, & Garrett-Harris, 2006) revealed that 40% benefits accrue to the mentee, 33% for the organization, and 27% for the mentor. Moreover, (Megginson, Clutterbuck, Garvey, Strokes, & Garrett-Harris, 2006) cited four broad categories of mentoring benefits. These are: performance of the organization and policy implementation, motivational benefits, knowledge and skills development, and managing change and succession.

Training involves the transfer of knowledge and the application of skill at a later date (Wild, Shambaugh, Isberg, & Kaul, 1999). Wild et al assert that training is effective in a 25 to 1 or less participant to trainer ratio. This ratio entails multiple and diverse form of learners. The trainer must be flexible enough in dealing with the diversity of his/her learners during training. Thus, the trainer has a variety of tasks during capability building. Berteig (2009) explains that training is very formal, and it should have well-defined learning objectives. In terms of model, the most popular model in the field of training is ADDIE – Analysis, Design, Development, Implementation, and Evaluation (Chan, 2010). According to Chan, ADDIE offers reliable structure and it allows flexibility during the process. “Discussion, simulations, case studies, and other forms of interaction are critical for an effective training experience” (Berteig, 2009).

Mentoring involves casual or semi-structured communication between the mentor and mentee during a sustained period of time (Bozeman & Feeney, 2007). Also, it establishes a relationship that is complex, interpersonal and meaningful (Pitney & Ehlers, 2004) and builds self-confidence (Wild, Shambaugh, Isberg, & Kaul, 1999). The techniques in mentoring are broad and complicated and it requires wisdom because of its objective that is to develop the whole person (Daloz, 1990; (Megginson, Clutterbuck, Garvey, Strokes, & Garrett-Harris, 2006). Evanciew & Rojewski (1999) found that instruction, demonstration, coaching, and explanation are the major ways during the mentoring process. Their findings recommend that mentors selected instructional strategies that are convenient and comfortable for them.

On the other hand Hart (2010) suggested that mentees must be “flexible, honest, open and receptive to feedback and insight”. Further, Megginson et al articulated that there are four main components to the mentoring process. These are: mentoring structure, the relationship agreement, the learning conversation, and what what mentor and mentee do as a result of the learning conversation. Moreover, Megginson et al presented also the seven steps of mentoring. These are: 1) identify the need, 2) gather evidence, 3) motivate, set targets, 4) plan how to achieve, 5) create practice opportunities, 6) observe, give feedback, 7) support through setbacks.

Training and mentoring involves a lot of innovations. The integration of information and communication technologies makes training and mentoring more engaging, collaborative and increase connectivity among the learners and mentees. Rowland (2011) asserts that e-mentoring offers knowledge creation and creativity among the mentor and mentees. Both can be delivered synchronous or asynchronous through the Internet. Digital simulations, virtual learning spaces, learning analytics, and intelligent tutor, are among the common innovations in training and mentoring.

### 3. THE LANDSCAPE OF CAPACITY BUILDING ON OPEN DATA

Capacity building on open data is a term used both at the supply and the demand side. By supply side we mean the owners and providers of data, and on the other hand, demand side means the consumers of that data. With open government data, the interventions on the supply side are mostly with governments, aimed at ensuring the open data is proactively disclosed to the public. On the other hand, interventions on the demand side are mostly with civil society organizations, media or journalists, researchers or academics, who are expected to use and benefit from open government data.

The following does not attempt to provide a comprehensive inventory of open data capacity building interventions<sup>1</sup> available but provide the reader a view of what is currently available.

#### 3.1. SUPPLY-SIDE INTERVENTIONS

Several organizations are at the forefront in supply-side capacity building interventions for open government data. The World Bank for example, has [a suite of technical assistance](#) interventions for governments. Among these are readiness assessments, provision of advice to country governments, and conduct of engagement, outreach and training. Other institutions as the [Open Knowledge Foundation](#) run different training programs on open data – open data introduction for those who plan to implement open data for the first time, administrative open data management for those who are responsible in managing open data programs, and open data portal technology for those who manage open data portals. The [Open Data Institute](#) also offers similar supply side interventions, and focuses on key topics as law and licensing, open data technologies, among others. These courses range from half-day trainings to five day trainings with experts doing lectures and supervising exercises.

#### 3.2. DEMAND-SIDE INTERVENTIONS

Those that provide open data training to increase open data demand and uptake have organizations from the private and the non-profit sector as primary audiences. The trainings ranged from basic open data introductory courses to accessing, using, visualizing, and creating narratives based on open data. The School of Data (run by Open Knowledge), for example, runs trainings on open data fundamentals, data cleaning, data extraction, data exploration, geo coding, working with budgets and spending data, and data journalism. It also runs Open Data Bootcamps to increase open data literacy in countries with on-going open government initiatives. The Open Data Institute also offers similar trainings on creating narratives from open data, using open data to win public sector business, and finding the value in open data. These courses also range from half day to five days, depending on the level of skills that trainees have and the level of skills they would like to acquire. The Open Data Labs Jakarta of the World Wide Web Foundation on the other hand, do not have specific open data training modules but customize its training program depending on the needs of the audience of capacity building intervention. These models, in theory, focus on action learning with presentation inputs and hands-on learning activities.

Of late, hackathons and data expeditions are used by different organizations to encourage open data uptake. Hackathons are one-time events that encourage collaborative programming from among developers usually based on a particular open data set. A 'data expedition' (a model developed by School of Data), on the other hand, is gathering of people, mostly data users, who solve real world problems or challenges using available open data: either as a learning activity, or as a mixed action-learning process, where both substantive outcomes (.e.g. designing new advocacy work with data) and learning outcomes are both important.

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<sup>1</sup> For a more comprehensive review, please refer to Boyera, S., & Iglesias, C. (2014). *Open Data in Developing Countries: State of the Art*. Available at [https://docs.google.com/document/d/1FMylU-jouL7j7Pw0kEwUn\\_B07aZ9IX3vIFGqPO0gX0/edit](https://docs.google.com/document/d/1FMylU-jouL7j7Pw0kEwUn_B07aZ9IX3vIFGqPO0gX0/edit)

### 3.3. WEB-BASED RESOURCES TO BUILD CAPACITY ON OPEN DATA

There are a wealth of web-based resources that both suppliers and users of data can use to increase capacity on open data. The World Bank, for example, has the [Open Government Data Toolkit](#) that discusses open data essentials, supply and quality of data, as well as the conduct of readiness assessments. The Open Knowledge Foundation makes available the [Open Data Handbook](#) which focuses largely on supplying open data than using it. Other organizations as [Socrata](#), [Open Data Commons](#), [Smart Cities Council](#), and the [United Nations](#) also have its own web-based open data guidebooks that suppliers or users of data can use to build their understanding and skills in open data.

## 4. OPEN DATA CAPACITY BUILDING IN THE PHILIPPINES

The Philippines is one of the 8 pioneering countries in the world that founded the Open Government Partnership (OGP) in September 2011. The partnership calls for greater availability of government information to the public, implement standards of transparency and accountability in governments, as well as use technology for openness and accountability. While the country does not have yet its freedom of information law, it has made significant steps in proactively disclosing data to the public through a Full Disclosure Policy and the establishment of its open data portal, part of its commitment to the OGP. In January 2014, it launched the Philippine open data portal ([data.gov.ph](http://data.gov.ph)) which “aims to make national government data searchable, accessible, and useful, with the help of the different agencies of government, and with the participation of the public.

Most of the capacity building trainings on open data started only very recently, more particularly in 2012 to 2013. Again, the following subsections intend to describe the capacity building events on open data in the country and do not attempt to offer an exhaustive list of open data trainings.

### 4.1. CAPACITY BUILDING ON THE SUPPLY SIDE

[Data.gov.ph](http://data.gov.ph) is managed by the Open Data Task Force of the Philippine government. The Task Force is spearheaded by three agencies, namely, the Department of Budget and Management, the Office of the Presidential Spokesperson, and the Presidential Communications Development and Strategic Planning Office. The Task Force, composed mostly of young people with a very good understanding of data and its value and implications to society, got its capacity building largely from World Bank. The contracting of a design and development firm to build the first version of the open data portal was also supported by the World Bank.

With the capacity it gained, the Open Data Task Force conducted a series of masterclasses and bootcamps in Open Data for government agencies, with the end view of creating open data champions based in agencies in order to ensure that agencies also disclose data. Initially, the goal was to engage 200 agencies. Out of the 200 agencies targeted, 50 agencies or so participated in the masterclasses, and finally, 26 agencies were able to share data in open format, that the Task Force eventually published in the open data portal. To date, the task force continues to conduct mentoring activities with the agencies to increase the datasets currently housed by the portal.

School of Data has a fellow in the Philippines, Happy Ferraren. She is one of those actively engaged in conducting open data trainings and has [conducted one for the Civil Service Commission](#), a commission of the Philippine government.

### 4.2. CAPACITY BUILDING ON THE DEMAND SIDE

Capacity building on the part of users of data is undertaken in two ways – trainings, and the conduct of hackathons. The first large-scale and targeted [open data training](#) was conducted in the Philippines by the Open Knowledge Foundation, with funding support from the World Bank and in partnership with the Open Data Task Force and the Partnership for Open Data. This happened on 13-14 May 2015 in the Philippines with media and civil society organizations as the main participants. The training consisted mainly of open data introduction and open data skills that the participants can use in engaging with government data (which may not be necessarily in open format).

Bantay.ph, a civil society organization that uses technology to encourage citizens to demand for better governance, also conducts training for civil society organizations and the media. In February 2015, they conducted [Data Jam](#), with journalists and civil society organizations. Open Knowledge (OK), on the other hand, through OK local ambassador Joseph de Guia, conducts open data socialization sessions with students and teachers in a university in Manila.

Besides training, a series of hackathons were also sponsored by different organizations to increase data uptake using data.gov.ph data. To date, several hackathons have been conducted using different data sets from the government, namely, [transportation data](#), [disaster resilience data](#), [budget and spending data](#), and finally, [procurement data](#). These events were sponsored by private companies (e.g. Globe Telecom, Brother, Microsoft), aid agencies (e.g. USAID, World Food Programme, SEATTI), and the Open Data Task Force.

## 5. METHODOLOGY

It is quite apparent that training is a primary method used by different organizations to build capacity of civil society organizations on open data, while hackathons are intended to engage application developers. However, as can be noticed above, most of these trainings are conducted in the country's capital – Manila, and in several instances, uses national data as a point in conversation, the hackathons included. However, the country has many islands, many local government units, and also has available local government data through [the full disclosure policy portal](#). How should these trainings be conducted to increase open data uptake and improve conditions at the sub-national level?

This question, including those outlined at the beginning of this paper, is the motivation of this paper. The research team used an action research approach that compares training (the usual mode of open data capacity building delivery) and mentoring (one that has not been tried in the country). The research project was implemented in two provinces in the Central Visayas – Bohol and Negros Oriental.

To answer the first two questions (question a and b) a training needs analysis (TNA) was conducted among representatives from CSO, media, business groups from each research site to serve as basis for a capacity building program on “Enhancing Citizen Engagement with Open Government Data”. This TNA was conducted at two levels. A survey questionnaire was developed, pilot-tested, administered online to respondent organizations. This survey also served as a profiling tool for the organizations covered. After the results were collated and analyzed, a focus group discussion was conducted in each site to explore further the answers to the research questions.

Two training programs were developed out of the results of the TNA. One approach was classroom learning/teaching activity, while the other was based on targeted mentoring. For classroom learning, the training was conducted with respondent organizations with a re-entry action plan at the end where trainees were required to plan how they will use skills learned in engaging with government data for two months. This action plan became the basis of monitoring.

The second approach took the form of a mentoring lab. Civil society groups were assisted in identifying the open government data that they would like to work with, teach them the skills on how to access and use the data and come up with a plan of undertaking the open data engagement in two months time. Mentoring support was provided all throughout this phase.

The first method was implemented in Negros Oriental while the second method was implemented in Bohol. A learning workshop was conducted at the end of the two month period to see what has been accomplished, what challenges were met, and what lessons can be learned from the process.

The intention of the research was not to compare the two approaches, but to look at strengths and weaknesses at each of the approach and advise those who will be conducting capacity building activities as to what to expect, what to guard against, what sets of context work and for what purposes. An analytical framework was developed to inform the design of the learning workshop.

In effect, this research project did not only in itself answer the research questions, but also at the same time capacitated civil society organizations in improving their knowledge, skills, and abilities in engaging with open

government data. The beneficiary province of the second approach also had an assured open data engagement by select civil society organizations.

The research was conducted by Step Up Consulting Services from December 2014 to March 2015.

## 6. OPEN DATA AND CIVIL SOCIETY ORGANIZATIONS: SUMMARY OF FINDINGS

This section is divided into four parts. The first part discusses the case study sites briefly in terms of geographic area, socio-demographic characteristics, and political landscape. The second part discusses the findings regarding what civil society organizations know about open data, what they know about the open data that their local government units publish on the web, and what skills they have to be able to meaningfully engage with open government data. The third part discusses the process and outputs of capacitating the civil society organizations on open data using the two approaches identified.

### 6.1. PROFILE OF THE PROVINCES

The two provinces covered by this study, Bohol and Negros Oriental, are located in central Visayas, a region in the central part of the country, around 850 kilometers away from Manila. The choice of the provinces was purposive. Both provinces were part of the first open data project that Step Up implemented in 2013 under the Open Data In Developing Countries project funded by IDRC through Web Foundation; Bohol as research site and Negros Oriental as test-site. Civil society organizations in both provinces expressed strong interest to attend open data trainings.

#### 6.1.1. BOHOL PROVINCE

Bohol is located at the central part of the Philippines and 556.16 nautical miles away from Manila. The Province is the 10th largest island in the Philippines covering a total land area of 4,117.26 square kilometres or 411,726 hectares. Bohol is administratively divided into 47 municipalities, 1 city and 1,109 barangays. It is composed of a mainland and 81 islands and islets with an estimated coastline of 654 kilometres.

In 2000, poverty incidence was very high in the province - 50.2% in terms of population (NSCB 2000), affecting mostly farmers and fisherfolk (PPDO 2001). In the same year, the province was one of the poorest twenty in the country (18<sup>th</sup> out of the 82 provinces) using monetary measures as criteria (NSCB 2000). With strong social programs from the provincial government, Bohol leaped out of the list of top 20 poorest provinces in 2003 (NSCB 2005) with monetary poverty incidence reduced to 29.2%(NSCB 2005) and was considered second best performer in the whole country in terms of poverty reduction. Also, in the same year, Bohol leaped out of the 20 poorest provinces using human development index as a criteria (HDN 2005).

Bohol is currently headed by Gov. Chatto whose brand of governance is perceived by the NGO community and the private sector as transparent and participatory. The incumbent provincial government's Executive-Legislative agenda is embodied in the phrase HEAT BOHOL which means HHealth and Sanitation, Education and Technology, Agriculture and Food Security, and Tourism and Livelihood.

In 2011, the Department of the Interior and Local Government (DILG) recognized Bohol for its performance in governance, accountability, transparency, and frontline services. In 2012, the DILG's Silver Level Seal of Good Housekeeping awarded the provincial government as the Best Governed Province. This recognized Bohol's outstanding performance on administrative, social, economic and environmental governance, and its adherence to the fundamental principles of good governance including transparency, participation and financial accountability.

Civil society organizations in Bohol are very active in provincial governance. There are several networks of non-government organizations that engage proactively with government on several thematic issues. For example, the Bohol Alliance of Non-Government Organizations is engaged in the area of rural development and civil society strengthening, the Bohol Transparency Network for Transformation that focuses on government transparency, accountability, and anti-corruption, and Bohol United Sectors Working for the Advancement of Community Concerns working in the area of social entrepreneurship.

### 6.1.2. THE NEGROS ORIENTAL PROVINCE

The Province of Negros Oriental occupies the southeastern part of the Negros Island. Its capital, Dumaguete City, is home to one of the oldest institutions in higher learning in the country, established in 1901 by the American protestant missionaries. Negros Oriental is primarily an agricultural province, with majority of its population relying on farming and fishing as primary sources of livelihood. The province is home to 19 municipalities and 6 cities, with a total land area of 5,402 square kilometers.

Poverty incidence in the province is significantly high in 2009, the latest data available for the province. Near to half (42%) of its 1.2 million people are below the poverty line (NSCB 2009). As of 2014 statistics, the province remained one of the 10 poorest provinces in the country and the only single province from Central Visayas region that remained in this list.

The provincial government of Negros Oriental is headed by Governor Noel Degamo, once the vice-governor of the province who became the governor in 2011 when the elected governor died due to sickness. He was elected officially in 2013 on a platform that focuses on Health, Education, and Livelihood Programs and Projects (HELP). Interestingly, transparency advocates have criticized his government's program, branded as "[MagDegamo Ta](#)" [because it actually carries the name of the politician](#), something they think is in violation of a related policy of the Department of Interior and Local Government.

Civil society participation in governance in the province of Negros Oriental is relatively strong but this is significantly fragmented and issue-based. A network of civil society organizations working on cross-cutting themes in the province is relatively weak and while the Negros Oriental Network of NGOs existed in previous years, this has been limited to a few organizations only and works largely on issue advocacy. Among the top issues engaged individually by civil society organizations are child rights, disability, micro-entrepreneurship, and education.

## 6.2. AWARENESS AND KNOWLEDGE OF CSOS REGARDING OPEN DATA

A survey was conducted among civil society organization in the two provinces. The population of the survey is the accredited organizations in each province. The Department of Interior and Local Government requires the [accreditation of CSOs](#) in each local government unit in accordance with the Philippine constitution. The accreditation is necessary so that CSOs can actively participate in local special bodies. Accreditation is a proof of capacity on the part of CSOs as the implementing rules require submission of different documents to show proof that the organization is indeed operating within the province and has relevant programs, projects, and services intended for their constituencies.

The results of the survey for both provinces are discussed below along with the results of the focus group discussion that was conducted in order to get more insights from select respondents regarding from the results of the survey.

### 6.2.1. BOHOL CSOS

*Profile of respondents.* There were 21 respondent organizations to the survey, representing 71% of the total number of accredited organizations. Of the 21 organizations, 13 are advocating for budget transparency and accountability though they are engaged in different political and socio-economic programs as health, education, livelihood development, rights promotion, and environment. In terms of size, 90% of these organizations have more than 30 people belonging to the organization.

*Data and Computer Use.* In terms of computer literacy, almost all (90%) of the organizations have been using computers for more than five years but only 43% of the respondent organizations have people assigned to work with data and computers. In some organizations, the function is shared among employees while data, software, and hardware support are sourced-out externally. An overwhelming majority (95%) of the respondent organizations collects data on their own and mostly (12 of 20) do it through surveys. Forty-three percent (43%) of the respondents use the data they gather as input to preparation of programs and projects.

*Knowledge on Open Data and Open Government.* Only a minority (38%) of the respondents claimed to have knowledge about open data and more than half (62.5%) of this group said that open data is all about making data available and accessible to everyone. No one mentioned about machine-readability and re-use. On the other

hand, the same percentage of respondents (38%) claimed to have knowledge about open government, half of whom said that it is about transparency and accountability. It is noted that not all those who claimed to have knowledge about open data also claimed to have knowledge about open government.

*Awareness regarding Full Disclosure Policy.* Close to half (48%) of the respondents have read or heard of the FDP, 40% of them said that it is about posting government data or documents in public places. Of the FDP required documents, Report of Local Disaster Risk Reduction and Management Fund utilization (90%), Trust Fund utilization (86%), and Annual Budget Report (81%) got the highest awareness level of the participants. Nevertheless, only one respondent has seen the documents from the government website and this respondent has seen only one document from among the many that were required to be published. A few have seen the documents in softcopy and fewer have seen hardcopies of the documents.

Special Education Fund (SEF) income and expenditure estimates, report of SEF utilization, and abstract of bids as calculated were the top three documents that were not seen in any form by 86% of the respondents. However, majority of the respondents have not used the documents that they have seen or accessed. The CSO, however, have different information needs than those published in the website or in the FDP portal that they were able to request from government. Fifty-two percent (52%) of the respondents normally ask data from the government, but the documents requested were very varied.

*Ways of Accessing Government Data.* The top 3 ways by which the respondents ask for data from the government are: writing a formal letter, going directly to the office producing the data or information, and calling through phone. Of those who get data from the government, 33% said they were 100% successful in getting the data. All the respondents said they were interested to attend training on open government data and 52% of them said they are interested for additional knowledge. The majority of the respondents were not familiar with the data processing skills presented (e.g. downloading, data scraping, data cleaning, data visualization), but majority are also interested to learn the skills. All the persons handling IT functions in the organization were interested to attend training on open government data. Among the data processing skills presented, the persons handling IT functions in the organization were most familiar with data downloading.

## 6.2.2. NEGROS ORIENTAL CSOS

*Profile of Respondents.* A total of 16 recognized CSOs in Negros Oriental were included in the analysis, 9 from Dumaguete City, 3 from Siaton, 3 Bayawan and 1 from Bacong. One response is considered invalid due to insufficient information. The different organizations differ in size – some are mid-sized (less than 6-15) while others are large (30 or more). These organizations are engaged in different issues as health, gender, education, rural development, and agriculture.

*Data and Computer Use.* There are 2 (13%) respondents who revealed that they have not used computers in their organization while 14 (88%) respondents said that they had been using computers in their organization for more than 5 years already. Eight (50%) respondents said that they had no employee assigned to work with data and computers in their organization while 8 (50%) respondents said that they assigned an average of 2 employees.

Only 1 (6%) respondent said that they do not collect data on their own while the 15 (94%) gather data on their own in the form of pool, profiling, interview, evaluation and testing, interview, among others. These data, according to the respondents, are primarily used for decision-making, program planning, monitoring and reporting purposes.

*Knowledge on Open Data and Open Government.* Nine (56%) respondents revealed that they had an idea about open data and 7 (44%) of the respondents don't. Asked whether what they know about open data, those who said they know open data only half of those mentioned regarding access and availability while no one mentioned about machine-readability and license. In terms of their knowledge about open government, 11 (69%) respondents have knowledge while 5 (31%) don't have a knowledge of open government. Those who said they know open government, they equate the concept to transparency and data availability.

*Awareness regarding Full Disclosure Policy.* Only 6 (38%) respondents have read or heard of the FDP of the DILG, and 10 (63%) have not read or heard of the FDP. Nevertheless, thirteen (81%) respondents aware of the documents in FDP, 3 (19%) have not seen them. Majority of the respondents are aware of government records like

Annual Budget Report (13, 81%), Executive Legislative Agenda (15, 94%), Report on Salaries and Allowances (10, 63%), Annual Procurement Plan or Procurement List (9, 56%), Items to Bid (14, 88%), Bid results on Civil Works, Goods and Services, and Consulting Services (10, 63%), Supplemental Procurement Plan (9, 56%), Annual GAD Accomplishment Report (9, 56%), Trust Fund PDAF Utilization (9, 56%), 20% Component of the IRA Utilization (11, 69%), and Report of Local Disaster Risk Reduction and Management Fund Utilization (12, 75%). On the other hand, less than the majority of the respondents are not aware of the government documents like Statement of Receipts and Expenditures (7, 44%), Abstract of Bids as Calculated (6, 38%), Irrigation Use and Expenses (7, 44%), SEF Income Expenditure Estimates (6, 38%), Report of SEF Utilization (4, 25%). Half of the respondents are aware of the government documents like the Statement of Debt Service, and Quarterly Statement of Cash Flow.

Ways of Accessing Government Data. Eleven (69%) respondents said that they normally ask data from the local government, and 5 (31%) said that they don't ask data from the government. The types of information they asked surfaces in the socioeconomic profile, demographic profile, utilization report, among others. In terms of the ways in requesting the information, only 7 of them said that they request the data by writing a formal letter, and 7 of them said they approached a person they know. Five of them said that they go directly to the office producing the data or information, 4 of them by calling on a phone, and 3 said by visiting the government website. Only one respondent said that he was 100% successful in getting the information. Seven of the respondents said that they are successful most of the time when they asked data from the government, 2 said they are successful in half of their efforts in getting the information, and 1 said that he was successful in less than half of his effort in getting the information.

Among the challenges that the respondents experienced in accessing government information include: approval protocol, duration in requesting the information, data are outdated, lack of personnel in data retrieval, accessibility, and reliability issues.

### 6.3. PROCESS AND OUTPUTS IN CAPACITATING CSOs ON OPEN DATA

Not all CSOs who were respondents of the survey became participants in the training and mentoring processes. The research team used three criteria in selecting those that will be included as part of the trainee/mentee organizations – capacity to undertake open data work, interest to attend and commit to a capability building program, and commitment to use learnings in actual organizational work. In Bohol, 4 CSOs were selected while in Negros Oriental, 8 CSOs were selected to attend the capacity building programs.

The content of both training and mentoring were identical. There were three main topics that were introduced and made part of the capacity building program, namely, Open Data and Open Government, Open Government Data in the Context of the Philippines (Full Disclosure Policy and the Philippine Government Data Portal), and Open Data Skills (downloading, scraping, cleaning, visualization, and creating narratives from data). The first two topics were delivered through classroom training from the same set of resource persons while the Open Data Skills Module was delivered via skills training method in Negros Oriental and through mentoring in the case of Bohol. To ensure that same topics are discussed by the trainer/mentor in both locations, an Open Data Skills Guide was developed by the research team in partnership with the Open Data Task Force. This guide, which was developed initially in Bahasa by Open Data Labs Jakarta, was translated to English to serve Filipino audience and improved on by the Open Data Task Force.

#### 6.3.1. CSO MENTORING IN BOHOL

The introductory workshop on Open Data, intended to cover topics (1) and (2) for Bohol CSOs was conducted on 31 January 2015. This was held for one whole day and ended with the signing of Memorandum of Understanding between Step Up Consulting and the mentee organizations. An action plan for each CSO was formulated during this workshop to ensure that there is agreement on mentoring arrangements and schedules. There were four organizations who participated – Participatory Research, Organization of Communities and Education towards Struggle for Self-reliance (PROCESS)-Bohol, Inc. (PROCESS-Bohol), the Bohol Integrated Development Foundation, Inc. (BIDEF), the Bohol United Sectors Working for the Advancement of Community Concerns (BUSWACC), and World Vision Development Foundation, Inc. (WV).

The different organizations decided to use one data set that they would like to work on for their open data project. BIDEF, World Vision, and BUSWACC decided to focus on Local Disaster Risk Reduction Management Fund Utilization while PROCESS decided to focus on the Special Education Fund and Statement of Receipts and Expenditures. The choice of data set is reflective of the state of concern among CSOs in the province. Bohol was a victim to three natural calamities in 2013 and 2014 – a 7.2 magnitude earthquake that shook the province in 2013 and two strong typhoons that crippled local economy in 2013 and also 2014. PROCESS, on the other hand, chose Special Education Fund to work on, because of their strong advocacy on children’s rights.

Mentoring sessions were conducted for each organization. These sessions were done in the offices of the organizations and the mentor visited each organization based on the schedule agreed upon. The goal of these mentoring sessions was for the mentees to be able to work on a particular data set, clean it, analyze it, and create a story out of it that they were asked to present during a learning workshop a month after.

The primary challenge during the mentoring session was internet connection, more particularly for PROCESS, whose office is way outside the city centre of Tagbilaran. All organizations were able to attend the mentoring sessions and committed participants have significantly gained data skills as evidenced by the amount of data they were able to analyze and the outputs that they were able to produce thereafter. The mentoring session was conducted on 9 March 2015.

Among the four organizations present, PROCESS and World Vision were not able to produce a data narrative, because of resource constraints. PROCESS does not have stable internet connection and was in the middle of the preparation of its organizational anniversary during the mentoring session. World Vision, on the other hand, lacked the human resources to focus on the task. But BUSWACC and BIDEF were able to develop a very meaningful and persuasive presentation (see Figure 1 below) that looked into the utilization of disaster risk reduction funds of three local government units. BUSWACC focused on the city of Tagbilaran, while BIDEF focused on the municipalities of Jagna and Duero. Both were able to focus resources to the open data project because disaster risk reduction and management is at the core of its programs and advocacies.

A concrete forward plan was also agreed upon by the organization during the learning workshop. They agreed to meet every month and discuss disaster risk reduction fund utilization and each CSO will analyze at least 10 municipalities over the course of 6 months. The end goal was to create a position paper and a data narrative that would convince local government units to proactively use disaster risk reduction funds and focus programs on disaster risk reduction via education and preparedness.

**6.3.2. CSO TRAINING IN NEGROS ORIENTAL**  
 A training workshop was conducted on 12-14 of February 2015 at the Uytengsu Computer Studies Hall, Silliman University, and was participated by civil society organizations members (CSOs) located in Negros Oriental. The participants were from the following CSOs: Kristohanong Katilingban Credit



FIGURE 1. OUTPUT OF BUSWACC

(AABEMUCO), Gender Watch Against Violence and Exploitation (GWAVE), Katilingbanong Pagtagad Alang sa Kauswagan, Inc. (KAPASKI), Youth Advocates Through Theater Arts (YATTA), RTN Daglo City Habitat, Inc.

(HABITAT), and DCCO Multipurpose Cooperative (DDCO), Young Men’s Christian Association (YMCA), and Bacong Small Coconut Farmers Multipurpose Cooperative (BasCoFaCo).

The 3-day activity consisted of three lectures from credible individuals regarding the Open Government and Open Government Data (Dr. Emmanuel Lallana), the Full Disclosure Policy (Dir. Farah Dibs Gentuya), and the Philippine Open Data Portal (Ms. Gianne Karla Gaoiran). There were open fora conducted after each lecture. There were also three workshops conducted and distributed orderly over three days. The topics were (1) offline data visualization facilitated by Dr. Dave Marcial, (2) Data Skills Workshop and Online Visualization by Ms. Gianne Gaorian, and (3) Online Data Narrative by Michael P. Cañares. Participants created their outputs for presentation and shared their reflection on the particular activity.

For the workshops related to offline and online visualization as well as open data narrative, the organizations decided to group themselves according to their area of interest. Habitat worked on its own and looked at housing data for the province. Both GWAVE and KAPASKI worked on Gender and Development Fund Utilization while DCCO worked on population data and its implication to the membership growth of the organization. YMCA, YATTA, and BascoFaco worked as one group and tackled Gender and Development Fund Utilization. At the end of the training, the participants were told that they are to practice their learned skills on one data set that they are interested in and will work on it and create a data narrative.

Almost month after the three-day training, a learning workshop was conducted among participants. The workshop was held in Dumaguete City on 7 March 2015 and was attended by a lesser number of organizations than the previous workshop. Also, among the eight (8) organizations which attended the open data training, only two (2) organizations were actually able to produce an output and one (1) organization able to have a data narrative. Like BUSWACC and BIDEF, RTN Habitat and GWAVE was able to focus resources on the open data project because the data they were working on is at the core of its advocacy and development agenda. These besides the fact that these organizations have the resources and the learned skills to undertake open data work.

## 7. WHAT HAVE WE LEARNED?

The experiences of CSOs in the provinces of Bohol and Negros Oriental point to important lessons in the design, implementation, and evaluation of capacity building programs on open data, more particularly for civil society organizations in the global South. These lessons are not new or novel – they are successful practices that have been tested in other capacity building interventions other than open data that may have been forgotten or ignored in the desire to fast-track interventions or probably because of inappropriate baseline assumptions. These lessons are presented below:

### 7.1. BASELINE CONDITION SHOULD INFORM CAPACITY BUILDING APPROACH

To start a capacity building intervention, whether it is training or mentoring, assessing baseline conditions of trainees is important. This baseline condition does not only refer to the trainees themselves, as captured through training needs assessment tools, but also to the condition of the organizations that will participate in the trainings. This is particularly true for open data skills trainings, where people’s skills are not only important but also hardware (e.g. computers) and connectivity (e.g. internet). When conducting open data trainings for people from civil society organizations who may be interested to learn skills it is important to note some may still be without the appropriate infrastructure to be able to make use of the trainings.

The selection of CSOs with which the research project established partnership during the duration of this project was based not only on the interest of the organizations, but also the presence of people with basic computer skills and the necessary infrastructure. Despite these criteria of selection, there were still challenges for organizations in both provinces in accessing the data mainly due to weak internet connection that does not allow them to access the government data portals (national and local) or to access online tools for data scraping and visualization. If the process of selection of participants had not followed these certain criteria, it is likely that the results would have been less productive than what was experienced in this research project.

It is a basic process in capacity building that an assessment of trainee conditions is done at the beginning, to ensure that the capacity building interventions are suited to the needs and conditions of beneficiary organizations (Chan 2010, Pearson, 2011). The UNDP capacity development approach, for example, identifies the assessment of capacity assets and needs as a cornerstone step in its five-step capacity development model. In this model, the assessment does not only include functional capacities, but also institutional arrangements, the quality of leadership, and the dimension of accountability (UNDP, 2008).

Thus, baseline condition must not be assumed by sponsors or providers of open data trainings. Open data trainings should start off from a good understanding of civil society organizations – what organizations have and what they would like to learn. The appropriate approach for open data capacity building may not be classroom training for all; it may be mentoring training for some, and coaching in others.

This research shows that organizations with resources and good management skills may be able to produce open data outputs after training better than other organizations which may have people with the required data skills but less management commitment. A case in point is RTN Habitat in Negros Oriental who sent a sole delegate to the open data training, a senior executive director. He was one of those who finished the open data skills practice exercises last but ended up as the one awarded as the most productive CSO three weeks after the training. He convinced his board and team that using data for their work is critical, utilized the interns and volunteers in his organization to gather and analyze data, managed the whole process to create a persuasive narrative regarding the housing and shelter condition of Dumaguete City.

For organizations that need to create a strong buy-in for open data, mentoring may be more effective. This was exemplified by BUSWACC, the CSO awarded as most productive in Bohol, where a board member, an executive director, and a couple of project staff attended all the mentoring sessions and worked together to produce a compelling data story on the weaknesses in planning and utilization of funds allotted for disaster risk reduction and management. The mentoring sessions built commitment across stakeholders in the organization that made possible the achievement of a meaningful output.

Several of the examples that get held up as great examples of open data use come from people who are self-motivated, and self-managing, and who thrive outside formal management structures. However, if an organization doesn't have such people with technical skills, then it is going to need to work out how to manage a process of producing tangible outputs from open data, rather than relying on the intrinsic motivation of the staff member. In the BUSWACC example, mentoring representatives from each organizational level (e.g. board of directors, executive director and implementation team, and field personnel) proved effective. Top management provided the analytical skills and the strategic framework in the analysis of data. The executive director and implementation team did the dirty work in scraping, cleaning, analysis while field personnel provided the a grounded understanding of what citizens need in terms of information and how this can be best presented to make it useful.

Admittedly, this research project did only convenience sampling in assigning CSOs to a particular approach and not based on the results of the training needs analysis conducted. But this is intentional in order to generate the lessons we highlight in this subsection. Not in all contexts will classroom and skills training work, in the same way that mentoring may not be suitable for some organizations. Capacity building has costs so it is critical that the approach chosen will yield cost-effective results.

## 7.2. DATA USE IS DEPENDENT ON DATA SUPPLY

This finding is expected and not surprising. CSOs would like to work on data related to their advocacies or development. As such, trainings or mentoring should be based on the types of data that CSOs are most interested to work with and that they have the capacity to understand. Using examples that are far from the priority advocacies or areas of work of CSOs will be counterproductive. What is helpful is when CSOs will, for theory discussion and practical work, use actual data of interest in the training or mentoring sessions.

However, this approach will be severely constrained when the data they are interested to explore are not available, or when available, incomplete. This happened to several organizations in both Bohol (e.g PROCESS,

World Vision) and Negros Oriental (e.g. KAPASKI, KKCC) where CSOs became frustrated when the local government units they would like to analyze failed to upload the data sets they would like to use. This, despite the fact that the documents they were interested in were required by policy to be proactively disclosed.

In the current context, available data sets are not numerous, and CSOs have limited options on what data to work on. Having the data available in the web is very helpful for them as it saves them time and resources. But if data is not available or of poor quality, this limits the CSO's use of data, and eventually hampers the usefulness of open data initiatives.

Another significant finding of this research is on the mismatch of information contained in government portals and those that are demanded by citizens. This is also one of the reasons why CSOs working in rural development in Negros Oriental like AABEMUCO and BascoFaco, whose members are small rural farmers, became less interested in producing outputs because rural development is hardly one of those data disclosed in the portals, besides budget allocation reports. This also confirms the results of another study conducted in three other provinces in the country where data use is affected by the unavailability of the data that CSOs want (Canares, 2014)

### 7.3. OPEN DATA REQUIRES ACCESSIBLE AND STABLE INTERNET CONNECTION

One of the primary challenges of several CSOs in both Negros Oriental and Bohol was the inability to download data from government portals and use online open data tools. This is not true for CSOs based in city centers where internet infrastructure is relatively stable. An interesting case, however, is PROCESS, a CSO in Bohol based in Tagbilaran City. Their office is located in one of the barangays around 10 kilometers away from the city center and in a less populous area. Their internet connection is so slow at times that opening web pages is not even possible. For this research, and in order to produce output, they had to go to a coffee shop to view and download data, as well as use online visualization tools.

The Philippines, according to recent broadband study has household internet penetration of 23% in 2013 (Broadband Commission, 2014) with internet speed among the lowest in the world (Akamai, 2014). This condition has certain implications. First, not all people, areas, or probably CSOs have access to internet services. If they do, like in the case of PROCESS, they may not have stable internet access. In this contexts, open data will be less useful, or may not be useful at all. CSOs, will then go back to the customary mode of accessing government information and government disclosure of the information through the web may only benefit those who are able to have access. In the case of South Cotabato, one province in southern Philippines, the business community were the ones who were able to access and benefit information by anticipating procurement activities of the province in ensuing year (Canares, 2014).

Second, open data interventions may need to engage in offline formats to ensure that information generated from open data will reach people without access to internet. In this case, open data intermediaries are crucial for different reasons. BIDEF, for example, see their role in accessing governance information for and in behalf of the farmers that they serve. Like BIDEF, CSOs are important to access, analyze, and visualize open data and create narratives from data that are understandable to citizens. They are also important to create knowledge products that may be accessed by people without internet connection. GWAVE, for example, has women constituents in the rural areas that they need to educate regarding utilization of gender and development budget. For them, online dissemination will not make them reach their audience.

### 7.4. OPEN DATA SKILLS ARE IMPORTANT BUT INSUFFICIENT

Most of demand-side capacity building interventions on open data, at least in the Philippines, concentrates on open data and open data skills (e.g. downloading, to scraping, cleaning, and visualization). However, these are just the "what" and "hows" of open data, respectively. Sometimes, these trainings include the "why" of open data. Participants, however, need more information other than these.

They need to know the context of open data in the country and in their respective local areas. They want to see specific examples of the benefits of engaging with governments through open data that are not available to them using their customary means of public participation. They need to know what they can do with the data that they were able to visualize, and how they can use it to improve their collaboration with governments. These are

contextual, issue-based, and location-sensitive information that provides an overall context of open data as well as its overarching purpose. As such, while open data skills experts are wanting, subject matter experts are also necessary.

One interesting finding that the research arrived at, was the lack of data analysis skills on the part of civil society organizations. In the design of the capacity building interventions, both for training and mentoring approaches, the presence of data analysis skills was assumed on the part of participants because all of them were collectors, users, and reporters of data. While this was roughly included as part of the course outline on offline and online data visualization, it was not treated as a separate topic nor allotted a time for a more extensive discussion. But the kinds of data that are published by governments require a rather advanced level of analytical skills. These are budgets, procurement documents, financial reports, customs data, among others, that may require more skills than just the ability to convert data to percentages in a pie graph or a histogram. YATTA for example, is a group of artists and may not have good understanding of budgeting and procurement processes. Even GWAVE, and advocacy group believes that they need to have analytical skills specific to their areas of interest.

One may argue, however, that capacity building topics will largely be dependent on on the objective of the training or mentoring, in such a way that if the only purpose is to build open data skills then discussion on scraping, cleaning, visualization are sufficient. However, this begs the question regarding the purpose of teaching those skills. If teaching data skills to CSOs is to improve their engagement with governments, then focusing only on these is less useful.

## 7.5. OUTCOMES, AND NOT JUST OUTPUTS, PROVE CAPACITY IMPROVEMENTS

Often, capacity building initiatives measure outputs to prove success. In results measurement language, outputs are immediate results of an activity (WB 2009). For example, if open data training is completed, then an immediate result will be number of individuals trained in open data. If we use this as a basis for measurement, then any open data training conducted will be assessed as successful. But outputs are insufficient to gauge capacity improvements. Outcomes, those we consider as higher order results, are more indicative of a capacitated learner, and in this case, a capacitated CSO in open data.

Result Layer	Critical questions	Examples of result indicators
<b>Input</b>	How are resources used to deliver sets of capacity building activities?	Amount of funds used Number of resource persons engaged
<b>Activities</b>	Were capacity building activities conducted effectively to bring about desired learning outcomes?	Activities conducted
<b>Participants</b>	How many participants were able to participate in the capacity building activities?	Participants trained (m, f)
<b>Reactions</b>	How did participants perceive the capacity building activities?	Participants satisfied, dissatisfied with the capacity building program
<b>KAS</b>	What changes in Knowledge, Attitudes, and Skills are evident?	Participants with improved knowledge, attitudes, or skills
<b>Practice Change</b>	What changes in organizational practices are triggered by the capacity building activities?	Outputs produced Organizational services enhanced
<b>Impact</b>	What results in target communities are achieved as a consequence of the capacity building activities?	Benefits received by citizens and communities

TABLE 1. HEIRARCHY OF CAPACITY BUILDING RESULTS

Table 1 below shows the hierarchy of results and the kinds of questions that open data capacity builders should focus on when conducting capacity building activities on open data. These are also the same set of questions that this paper used to assess the results of both mentoring and training sessions.

If we measure for example the results of the capacity building interventions using lower-order results (inputs, activities, participants, reactions), we can say that both approaches in Bohol and Negros Oriental are successful approaches in building capacity of CSOs in open data. However, if we use higher order results, more particularly the outcome result layer referred to above as “practice change”, then the Bohol mentoring process will be considered more successful because of the number and quality of output produced compared to the number of organizations trained (50%). Bohol CSOs were able to produce not only meaningful visualizations, but were also able to arrive at a plan of action, largely brought about by a collective realization of the power of open data.

Needless to say, the ultimate test of improved capacity will be the impact of open data training to people for whose benefit these processes are intended. For example, an open data training that yielded to an advocacy program for better utilization of disaster risk reduction funds may result to more informed citizens because of the implementation of an education program for disaster preparedness. But then, if lives are saved as a consequence of this process, then this is the most ideal result of what open data can do to people and communities.

Having said this, it is also important to mention that the degree of influence open data trainings can have on these impact-level results may be slim. However, it may be realistic to look at open data trainings to generate results far beyond changes in participant reactions to actual outputs that participants are able to produce as a consequence of improved capacity. Thus, the design of OD capacity building interventions should be geared towards the production of actual outputs by participants. Capacity building service providers should not be contented that an event is conducted and that people from CSO, media, or research institutions have attended.

## 7.6. TRAINING OR MENTORING IS JUST SCRATCHING THE SURFACE

There were several reasons why CSOs in Bohol and Negros Oriental succeeded or failed in producing concrete products out of an open data capacity building program, but several of these are organizational in nature. For example, several organizations were not able to produce the agreed post-training/mentoring outputs because there are competing priorities within the organization affecting work deadlines. Some others were not able to do anything yet because it took them a while to present their plans to their respective top managers (e.g. boards or chief executives). Some others also were not able to do so because of resource constraints (e.g. people, equipment, connectivity). On the other hand, those that were able to produce meaningful outputs were those where leaders were committed to the process, where the open data work provides an enabling mechanism to their core work or business, and those that were able to dedicate resources, people included.

Kaplan (2000) argues that for capacity building interventions to generate results, there is a need to move interventions from the tangible to the intangible. By this he means that while capacity building necessitates development of skills and the acquisition of material resources (the tangible ones), the production of outputs or the changes in organizational practices necessitates changes in organizational attitude, vision and strategy (the intangible ones). Training or mentoring on open data only changes the tangible. Without a corresponding shift in leadership priorities or without having open data add value to CSO's core business, then actual CSO-led outputs cannot be produced. This is echoed in change management literature, where change readiness is characterized by attitude, conditions, and resources (Pearson, 2011). Attitude refers to organizational and individual motivation while condition refers to mandates, structures and systems. Resources are about people's knowledge and skills, as well as organizational financial and technical assets. Without strong motivation and a clear mandate and structure, skills learned may not lead to how CSOs view and use data even with the existence of required resources.

The advantage of mentoring processes over training is the closer relationship between mentor and mentee. While providing mentoring support at the workplace of the CSOs, the mentor is able to influence organizational leadership and motivation and people's attitude. Continuous working with mentee organizations may lead to changes in structure and reallocation of resources. But these results will depend on the quality of the mentor and the amount of time he or she is able to devote to the organization. Training will hardly be able to provide these kinds of support.

## 8. CONCLUSION

This research has shown that for CSOs in the Philippines, more particularly in the provinces of Bohol and Negros Oriental, awareness and knowledge on open data is significantly low. Open data and open government are very new concepts for these CSOs and only very few of them know that government publishes information in data portals. For most of the CSOs in both provinces, accessing government information is done through formally requesting information from offices and agencies or informally requesting friends or contacts working in these agencies to provide the information. This is the case despite the fact that the open data portal of the national government was launched in January 2014 and the Full Disclosure Policy portal was also launched almost the same time. The capacity building activities conducted through this research project was the first time for most of the CSOs to hear about these data portals and also learn about open government data.

However, at least half of the accredited CSOs in both provinces have personnel with basic computer skills that are useful to access, download, and use open government data. Several of these CSOs also have adequate hardware and internet connection, albeit sometimes weak, to facilitate using open government data for their work. But not one of these CSOs have people with open data skills, more particularly in scraping, cleaning, and visualizing open government data, though they have been for many years engaged in data collection, processing, analysis, and reporting. To all of these CSOs, open data skills are new and they were very satisfied in learning these skills.

The intention of this research is not to compare mentoring and training approaches in delivering capacity building for open data for civil society organizations, but to arrive at lessons as to how best capacity building interventions can be delivered. While currently, training is the most commonly used mode of delivery, this research shows that it may not be the best approach for all.

This research tells us that for an open data capacity building program to result to actual data use in the development and advocacy work of CSOs it has to have the following characteristics:

- a. **Context-relevant.** The capacity building program needs to be relevant to the condition of the CSOs and the individual needs of learners. It should take into account the needs and assets of organizations and their team, including, among others, the mandate of the organization, the availability and accessibility of technology, the availability of data they are interested in, and their experience in utilizing data in their advocacy and development work. In this case, a good understanding of CSOs and the environment where they operate is critical.
- b. **Strategic.** Trainings should be conducted with a long-term view – of ensuring use and actual impact not only on the organization but also on the constituencies that they serve. Short-term, sporadic, one-time buzz trainings, or off-the-shelf training programs will not yield to actual use that will show the economic, political, and social power of open data.
- c. **Outcome- focused.** Open data capacity building providers should focus on higher-order results like changes in practices and behavior of organizations and their staff members or the actual production of outputs that benefits citizens and communities. Providers should not be satisfied with outreach, or the number of people trained, but with outcome, or how the capacity building program change the way organizations do things or how they participate in governance.
- d. **Comprehensive.** Open data capacity building programs should not only focus on concepts or skills. They should focus also on a whole-of-organization awareness, appreciation, and motivation to use data. Thus, trainings should change attitudes, systems, and not only resources and must facilitate the organization's collective recognition of the value that open data can bring to the achievement of its vision, fulfillment of its strategies, and the effectiveness, efficiency, and sustainability of its operations.

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