



YOUR GUIDE TO CloudCT .tech

What can I do with CloudCT Platform?

A Module for Public Users and Researchers

This module is produced with support of FeedbackLabs Feedback Tools Accelerator Programme





This module was created while Layertech's CloudCT team is under the **FeedbackLabs: Feedback Tools Accelerator Programme 2021.**

Revised: 9/15/2021

Topic Outline

Part I -What is Feedback?

- Why feedback is important?
- How does feedback work?

Part II -What is CloudCT?

- How does Cloud CT work?
- Main features of CloudCT

Part III -What is Open Data?

- Dimensions of Open Data
- Benefits of Open Data
- Summary

Part IV – Use-cases

- Featured Study

Part I - What is Feedback?

- Why is feedback important?
- How does feedback really work?
- Why feedback rarely does what it's meant to?



WHAT IS FEEDBACK?

Feedback is the information that we give, to respond to a certain action, activity, or experience that we went through.

We give our feedback so that we will have better experience next time!

For example, you bought a shirt from a store. The shirt was nice, but the salesperson was very rude. You give your feedback so that next time, your experience will be better! (Or, so that others won't have to go through the same thing!)



Why Feedback is Important?

- Feedback HELPS US IMPROVE OUR (and others') EXPERIENCES.
- Feedback encourages transparency and participation.
- Feedback gives us fresh ideas and new perspectives.
- Feedback shows us the "REALITIES" that we have to face in order to improve.

A problem doesn't go away if we don't acknowledge it.

In fact, it may get worse!



Why Feedback is Important?

In local governments for example, its important that the leaders, decision-makers are aware of the experiences of their constituents. Just as we need them to provide us services, they also need our feedback.

Let them know which programs are working, which programs are NOT working, and how they can improve.



How Does Feedback Work?

Feedback Loop

"A **feedback loop** is a two-way stream of communication between someone who designs a program or service and someone who uses that program or service. [1]"

It is called a "LOOP" because we want to see the feedback actually being used by the service provider to make decisions, changes, ultimately improving our experience working with them.

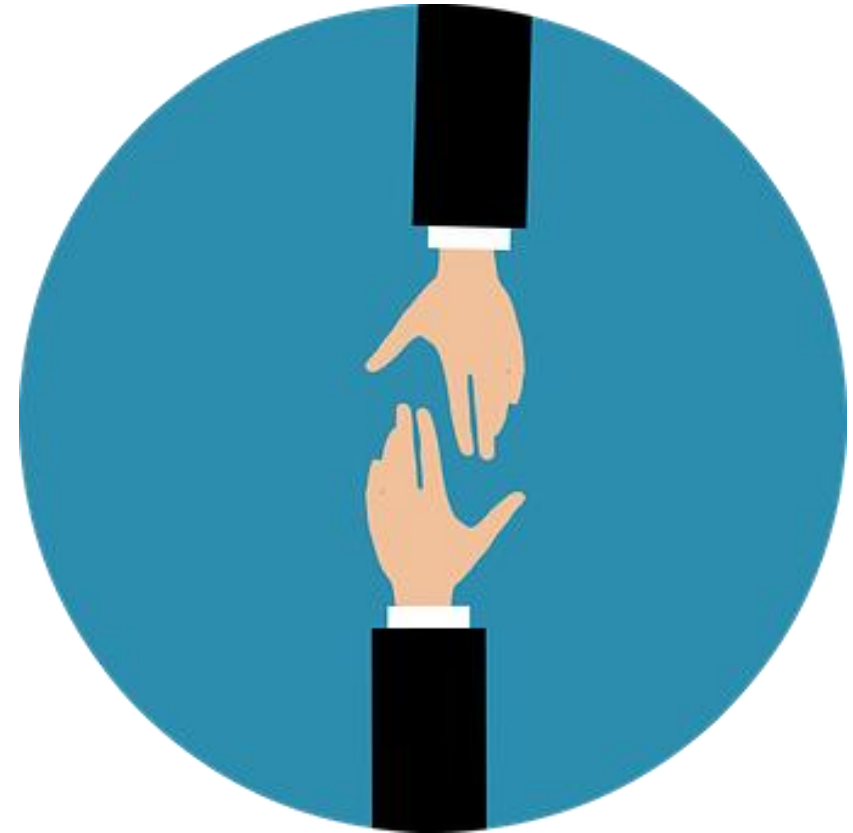


How Does Feedback Work?

Closing the Feedback Loop

“**Closing the feedback loop**” means that our feedback is communicated clearly and properly to decision-makers.

It means that our feedback are taken seriously, used as input in planning for programs and policies, and that **we can SEE AND FEEL improvements in our experiences.**



How Does Feedback Work?

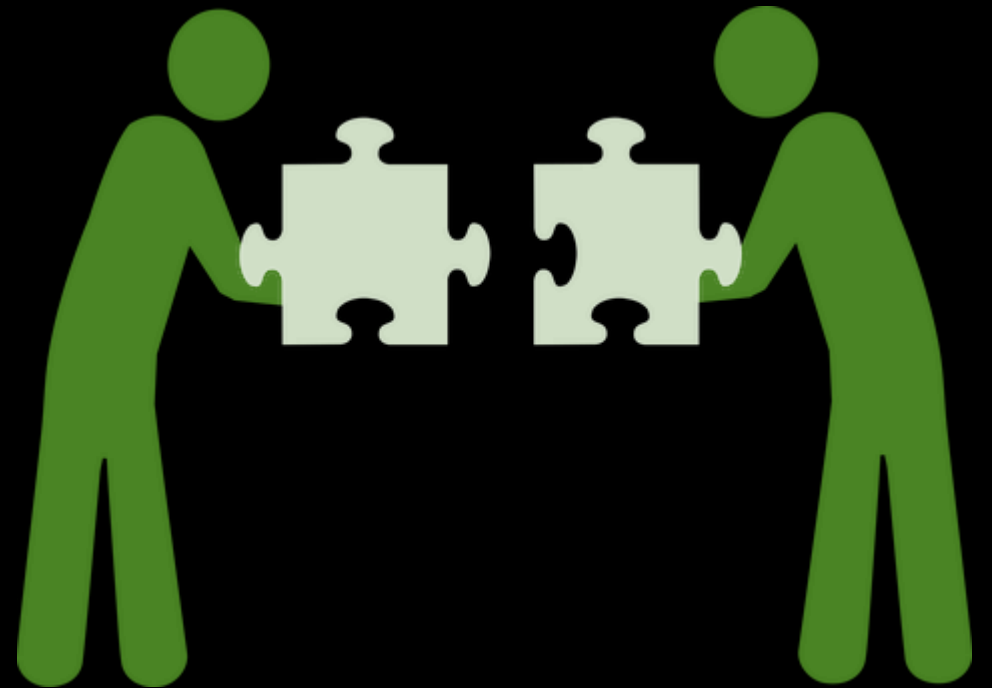
How do we "CLOSE THE FEEDBACK LOOP?" (fr. FeedbackLabs)

1. The service provider must DESIGN A STRATEGY FOR COLLECTING FEEDBACK.
2. Next, the service provider uses the system they designed to collect feedback from those who use the service.
3. The service provider takes the feedback they collected and analyzes it.
4. Now, the service providers take their analysis back to the community they collected feedback from and starts a dialogue.
5. Once both groups come to a consensus about the feedback they collected and what it means, the service provider corrects their program to reflect the feedback.



" No one knows it better [community issues], than those who experience it first hand. Listen."

Give your FEEDBACK.
Be HEARD.



Part II – What is CloudCT?



- How does CloudCT work?
- What are the main features of CloudCT.

What is Cloud CT?

CloudCT.tech or **Cloud CT**, is a FREE, PUBLIC analytics portal that visualizes citizen feedback into graphs that can be used to detect sentiments, trends, and public opinion.



What is Cloud CT?

The goal is to encourage citizens to participate and give **constructive feedback** on the issues within their city or municipality and rate the quality of services of the local government services.

The citizens' responses will be then visualized, analyzed, and used to inform local governments and stakeholders to help improve their services and address urgent issues in the community.



How does Cloud CT work?

LINKED TO OFFICIAL WEBSITES

Cloud CT is linked to official Feedback Portals/Websites of partner Local Governments and Institutions.



How does Cloud CT work?

PILOT CITY

Piloted in Legazpi city in 2017-2018, CloudCT.tech opens up feedback data from the Legazpi website to the public, to encourage residents and visitors of Legazpi city to give structured feedback. Furthermore, CloudCT.tech encourages researchers to use live data to help them come up with the most relevant researches and innovations that would benefit the community.

In 2021, CloudCT opened the portal out to scale of other LGUs/institutions.



How does Cloud CT work?

What are the Objectives of the CloudCT Portal?

- o To encourage citizens to give constructive feedback and participate in the continuous improvement of their LGU's services.
- o To promote data-driven decision making in LGUs.
- o To produce good quality datasets which can be used by researchers and innovators.
- o To encourage local students, researchers, and innovators to conduct studies and create innovations that would help solve issues of their respective local governments.

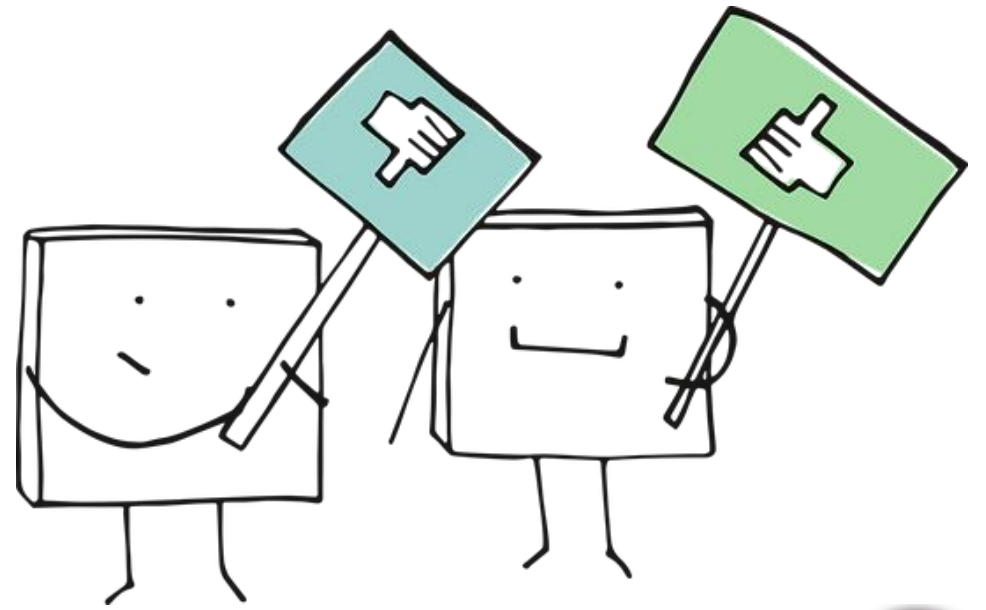


How does Cloud CT work?

Where does Cloud CT get feedback data?

Feedback data is collected from various sources:

- o Cloud CT collect feedback data using the in-house feedback forms in the "Feedback Portal" section.
- o From time to time, Cloud CT also 'scrape' data from Social Media platforms such as Facebook.
- o Sometimes, Cloud CT collect feedback offline (using survey forms and the like) and digitize them.



How does Cloud CT work?

Who collects feedback data?

The in-house feedback forms are available 24/7. Cloud CT lets its partner LGUs and organizations encourage their constituents or target respondents to use the link and give feedback.

For specific analysis projects, Cloud CT have partner researchers (mostly from the academia) who scrapes feedback data from social media platforms. If manual surveys are needed for a study, Cloud CT's partners collect manual data, which Cloud CT and its partners jointly digitize.



How does Cloud CT work?

How does Cloud CT ensure that the feedback data is legit?

In many cases, respondents hold back with their feedback if they are requested to log-in or give their identity.

Cloud CT and its partners are constantly looking for ways to balance anonymity and credibility of feedback using several tools.



How does Cloud CT work?

How does Cloud CT ensure that the feedback data is legit?

- o Cloud CT is using (and constantly exploring) machine learning tools to “score” credibility of anonymous feedback.
- o Cloud CT supplements feedback data collected in-site, with data collected from other platforms.
- o Cloud CT’s non-personally identifiable data is frequently subjected to data mining tools and analysis to detect possibly malicious feedback data. (Yup! They show! ☺)



How does Cloud CT work?

Who analyzes feedback data collected?

Cloud CT has a public dashboard of feedback data. While it can be a helpful lead, relying solely on its dashboard when making important decisions is not recommended.

Cloud CT is always communicating and working with partner LGUs, its stakeholders, and partner researchers from the academe to constantly use feedback data in this portal and come up with studies, recommendations, and innovations related to their localities.



How does Cloud CT work?

Who analyzes feedback data collected?

Our R&D section features several research and reports which you can use or refer to.

You may use them as guide on how to use the feedback data! Just make sure to give proper credit to the respective authors!



How does Cloud CT work?

Which feedback data gets visualized in the analytics section?

Currently, the public dashboard displays feedback data collected by in-house forms. The feedback data that passes the “filters” are automatically tabulated.

Cloud CT is currently working on the integration of other APIs, to allow its partners to integrate feedback data collected outside the site, with the dashboard. Updates will be made in the future.

MAKE SURE TO CHECK OUR UPDATES FOR MORE TOOLS, IMPROVEMENTS, AND FINDINGS! ☺



How does Cloud CT work?

HOW TO ACCESS THE PORTAL?

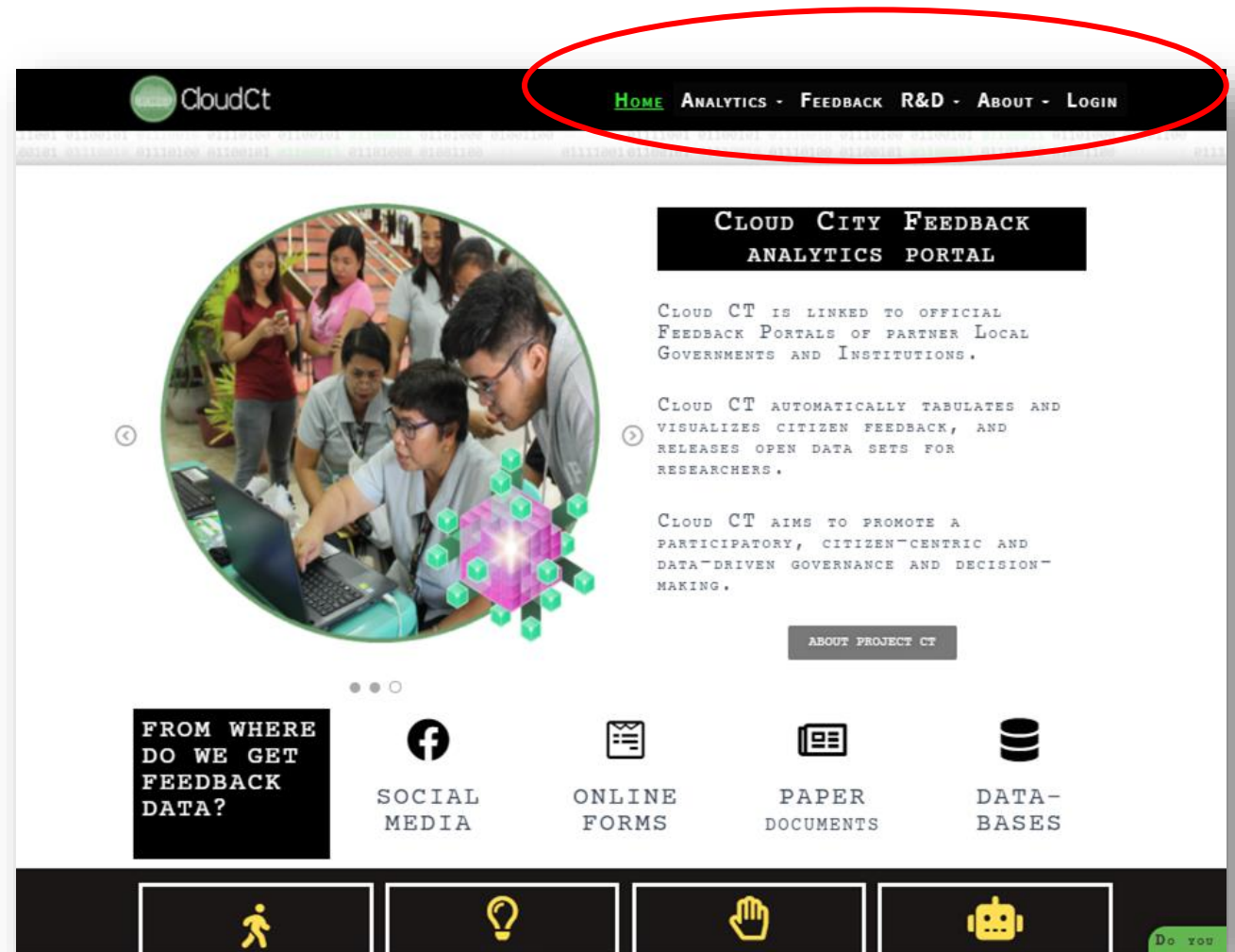
- To access the portal, simply go to **<https://www.cloudct.tech>**.
- You may also access the portal on partner LGUs official website. It will redirect you to the Feedback Section.

Main Features of Cloud CT

Once you access the portal, you will be redirected to Cloud CT's dashboard. Here, you can access all of its features.

The **MENU STRIP** on the top contains the main features of Cloud CT. Hovering your mouse cursor over the words displayed will show its subtopics.

DASHBOARD



CloudCt

[HOME](#) [ANALYTICS](#) - [FEEDBACK](#) [R&D](#) - [ABOUT](#) - [LOGIN](#)

CLOUD CITY FEEDBACK ANALYTICS PORTAL

CLOUD CT IS LINKED TO OFFICIAL FEEDBACK PORTALS OF PARTNER LOCAL GOVERNMENTS AND INSTITUTIONS.

CLOUD CT AUTOMATICALLY TABULATES AND VISUALIZES CITIZEN FEEDBACK, AND RELEASES OPEN DATA SETS FOR RESEARCHERS.

CLOUD CT AIMS TO PROMOTE A PARTICIPATORY, CITIZEN-CENTRIC AND DATA-DRIVEN GOVERNANCE AND DECISION-MAKING.

ABOUT PROJECT CT

FROM WHERE DO WE GET FEEDBACK DATA?

- SOCIAL MEDIA
- ONLINE FORMS
- PAPER DOCUMENTS
- DATA-BASES

Do you

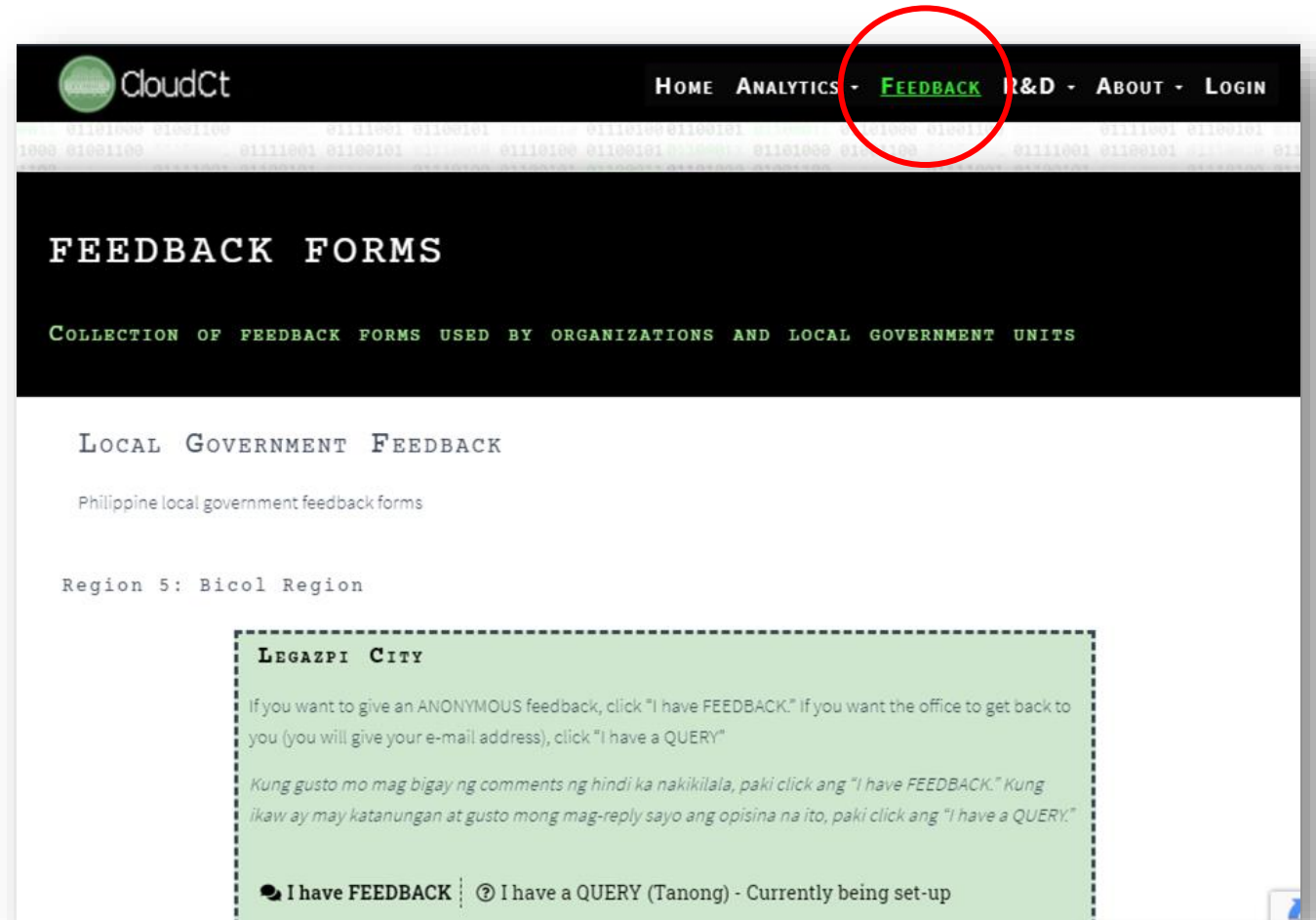
Main Features of Cloud CT

To access the **FEEDBACK** feature, click FEEDBACK at the top right corner of the dashboard on the black/green menu strip.

This section contains the following Feedback Forms:

- **Local Government Feedback**
- **Academia and Research**
- **Private Sector Partners**

FEEDBACK



The screenshot shows the CloudCT dashboard interface. At the top, there is a navigation menu with the following items: HOME, ANALYTICS, FEEDBACK (highlighted with a red circle), R&D, ABOUT, and LOGIN. Below the navigation menu, the main heading reads "FEEDBACK FORMS" with the subtitle "COLLECTION OF FEEDBACK FORMS USED BY ORGANIZATIONS AND LOCAL GOVERNMENT UNITS". Underneath, there is a section for "LOCAL GOVERNMENT FEEDBACK" which includes "Philippine local government feedback forms". A specific region is listed as "Region 5: Bicol Region". Within this region, there is a highlighted box for "LEGAZPI CITY" containing instructions for providing feedback and queries. At the bottom of this box, there are two buttons: "I have FEEDBACK" and "I have a QUERY (Tanong) - Currently being set-up".

Main Features of Cloud CT

SUBMIT A FEEDBACK/QUERY

Look for your City/Municipality. Some LGUs may also have Query option.

If you want to give an Anonymous feedback, click **"I have FEEDBACK."**

If you want the office to get back to you (you will give your e-mail address), click **"I have a QUERY"**.

FEEDBACK

LOCAL GOVERNMENT FEEDBACK

Philippine local government feedback forms

Region 5: Bicol Region

LEGAZPI CITY

If you want to give an ANONYMOUS feedback, click "I have FEEDBACK." If you want the office to get back to you (you will give your e-mail address), click "I have a QUERY"

Kung gusto mo mag bigay ng comments ng hindi ka nakikilala, paki click ang "I have FEEDBACK." Kung ikaw ay may katanungan at gusto mong mag-reply sayo ang opisina na ito, paki click ang "I have a QUERY."

I have FEEDBACK | I have a QUERY (Tanong) - Currently being set-up

SUBSCRIBE TO Legazpi's UPDATES

Region 10: Northern Mindanao

ILIGAN CITY [TESTING AND SETUP ONGOING]

If you want to give an ANONYMOUS feedback, click "I have FEEDBACK."

Kung gusto mo mag bigay ng comments ng hindi ka nakikilala, paki click ang "I have FEEDBACK."

I have FEEDBACK

Main Features of Cloud CT

Local Government Feedback (Feedback)

If you chose “**I have a FEEDBACK**”, you will be redirected to a feedback form. Fill out the form.

Many entries are OPTIONAL. But, we recommend that you don't skip it. Understanding the respondents' demographic profile will help your LGU act on sector-specific concerns and issues.

Please note that your identity will NOT be linked to your feedback.



FEEDBACK

LEGAZPI FEEDBACK

.....

Sino po sila? (1 of 3)

Responses from this section will be visualized in bar graphs, to set a base context for the responses in the following parts of this form. Your identity will NOT be linked to your feedback.

(Ang inyo pong isasagot sa section na ito ay gagamitin upang malaman naming kung anu-anong theme ang nagbibigay ng feedback. **HINDI PO NAKA-LINK** ang inyong identity sa ibibigay ninyong feedback.)

Age

18 and Below	<input type="radio"/>
19 to 30	<input type="radio"/>
31 to 45	<input type="radio"/>
46 to 59	<input type="radio"/>
60 and Above	<input type="radio"/>

Occupation

Student	<input type="radio"/>
Self-employed	<input type="radio"/>
Government employee	<input type="radio"/>
Private employee	<input type="radio"/>
Not employed	<input type="radio"/>
Out of school youth	<input type="radio"/>

Gender

Male	<input type="radio"/>
Female	<input type="radio"/>
LSBTQ	<input type="radio"/>

Are you a Resident of Legazpi?
(Ikaw ba ay residente ng Legazpi?)

Yes No

Main Features of Cloud CT

Local Government Feedback (Feedback)

You need to select a theme and a corresponding sub-theme for your feedback. This will help your LGU understand which specific aspect of governance you are commenting on.

Then, you can rate them from 1 (poor) to 10 (excellent).

You may also submit a qualitative feedback describing your experience!

FEEDBACK

LEGAZPI FEEDBACK

Rating (2 of 3)

Respondents can give satisfaction rating on various themes.
(Paki-rate po ang inyong napiling theme)

Which Theme do you want to rate? *

Selects theme

Which Subtheme do you want to rate? *

Selects subtheme

How do you FEEL about this theme? *

1- Very Poor 3- Neutral 10- Outstanding

1 2 3 4 5 6 7

BACK

LEGAZPI FEEDBACK

Message (3 of 3)

Please feel free to give your feedback on your chosen theme. You may write in English, Tagalog, or Bicol.

(Maari po kayong magbigay ng feedback sa inyong napiling theme. Maari kayo may sulat sa Ingles, Tagalog, o Bikol.)

Your Message/Feedback

Respondents can leave any message...

By clicking submit I have read and understood the terms of use of the Cloud City *

I Agree

Did you give a similar feedback in this theme before?
(Ikaw ba ay dati nang nagbigay ng feedback sa theme na ito?)

Yes No

Main Features of Cloud CT

Feedback is tabulated and displayed in this section.

To access the **ANALYTICS** feature, hover mouse cursor over ANALYTICS at the top right corner of the dashboard on the black/green menu strip. This section have the following options:

- **Live Analytics**
- **Admin Console**

ANALYTICS



The screenshot displays the Cloud Ct Analytics Portal. At the top, a black navigation bar contains the Cloud Ct logo and menu items: HOME, ANALYTICS (highlighted with a dropdown menu), FEEDBACK, R&D, ABOUT, and LOGIN. The dropdown menu for ANALYTICS shows two options: Live Analytics and Admin Console. Below the navigation bar, a large circular image shows people working at computers. To the right of the image, a black box contains the text "CLOUD CITY FEEDBACK ANALYTICS PORTAL". Below this, three paragraphs of text describe the portal's features and goals. At the bottom, there is a section titled "FROM WHERE DO WE GET" with icons for SOCIAL (Facebook), ONLINE (Email), PAPER (Newspaper), and a database icon. A green button labeled "Do you like our site?" is also visible.

Cloud Ct

HOME ANALYTICS FEEDBACK R&D ABOUT LOGIN

Live Analytics
Admin Console

CLOUD CITY FEEDBACK
ANALYTICS PORTAL

CLOUD CT IS LINKED TO OFFICIAL FEEDBACK PORTALS OF PARTNER LOCAL GOVERNMENTS AND INSTITUTIONS.

CLOUD CT AUTOMATICALLY TABULATES AND VISUALIZES CITIZEN FEEDBACK, AND RELEASES OPEN DATA SETS FOR RESEARCHERS.

CLOUD CT AIMS TO PROMOTE A PARTICIPATORY, CITIZEN-CENTRIC AND DATA-DRIVEN GOVERNANCE AND DECISION-MAKING.

ABOUT PROJECT CT

FROM WHERE DO WE GET

SOCIAL ONLINE PAPER

Do you like our site?

Main Features of Cloud CT

ANALYTICS

LIVE ANALYTICS

This section have the following tabs:

- o Summary
- o Demographics
- o Ratings
- o Citizen Statement

Summary

In this tab, you may select an LGU or specific time frame. Then, top-rated themes and subthemes for the selected LGU/time frame will be displayed.

The screenshot displays the 'ANALYTICS' section of the Cloud CT platform. At the top, there are four navigation tabs: 'SUMMARY' (selected), 'DEMOGRAPHICS', 'RATINGS', and 'CITIZEN SENTIMENT'. Below the tabs, there are two dropdown menus: 'LGU' set to 'Legazpi City' and 'All (Years)'. A black box highlights the 'QUERIES ADDRESSED' section, which shows a count of '2'. Below this, there are two tables with dashed borders:

TOP THEME	Score
Resilience, Public Order and Safety	6.5
Education	6.4
Environment	5.7
Health	5.6
Employment, Business and Investments	5.4
Permits, Licensing and Clearances	5.0
Social Welfare	4.7
Infrastructure	4.5
Administrative Services	4.2
...	3.2

TOP SUBTHEME	Score
Disaster Risk Reduction and Management	7.6
Fire safety	6.7
Education	6.4
Covid-19 related services (testing, quarantine, treatment)	6.1
Solid waste management	5.8
Water	5.8
Pollution	5.7
Other health programs	5.5
Employment, Business and Investments	5.4

Main Features of Cloud CT

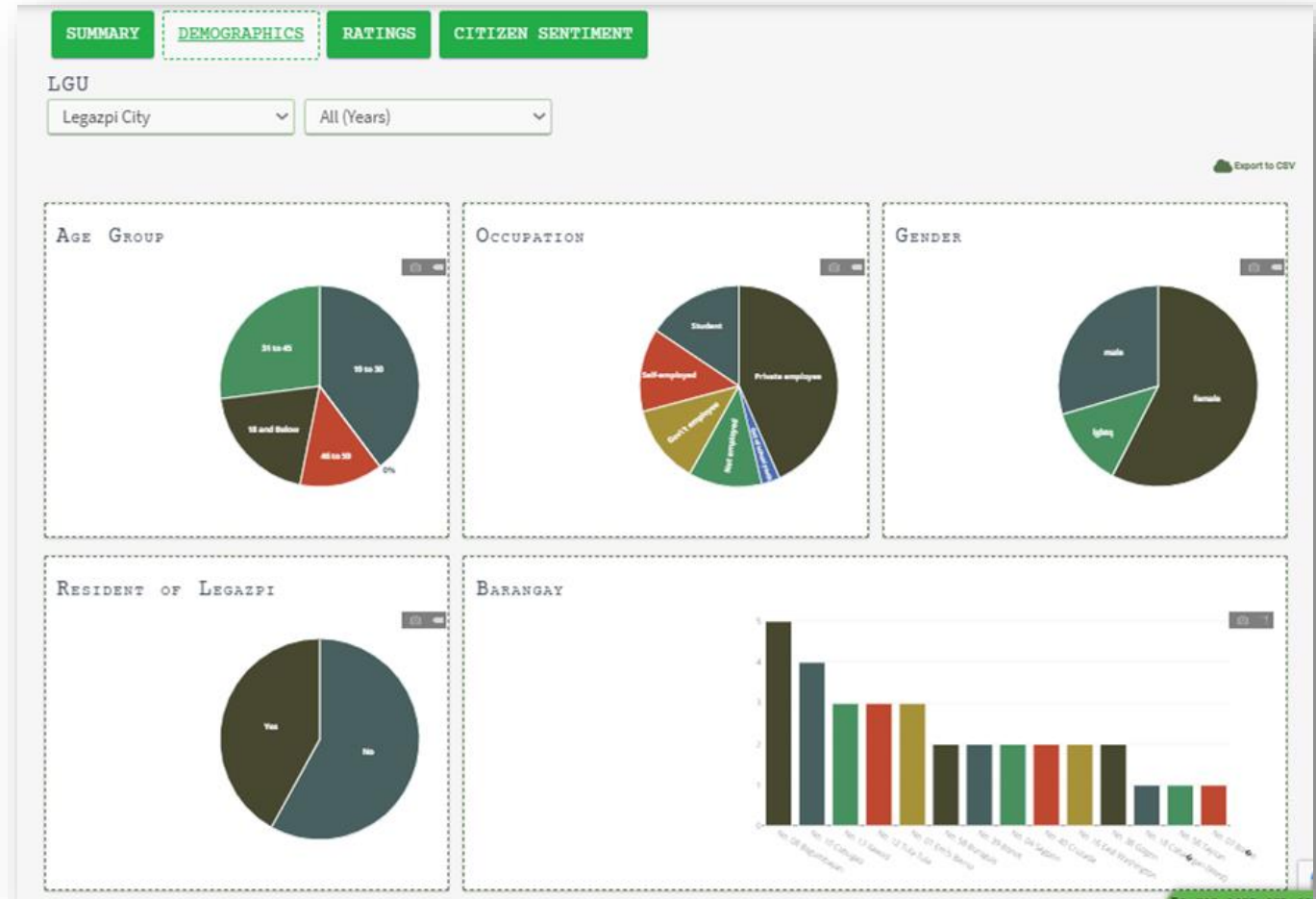
ANALYTICS

LIVE ANALYTICS

Demographics

Here, you may view respondent demographics on your selected LGU/time frame and export data to csv for research purposes.

Feel free to visit the R&D section for guidance!



Main Features of Cloud CT

ANALYTICS

LIVE ANALYTICS

Ratings

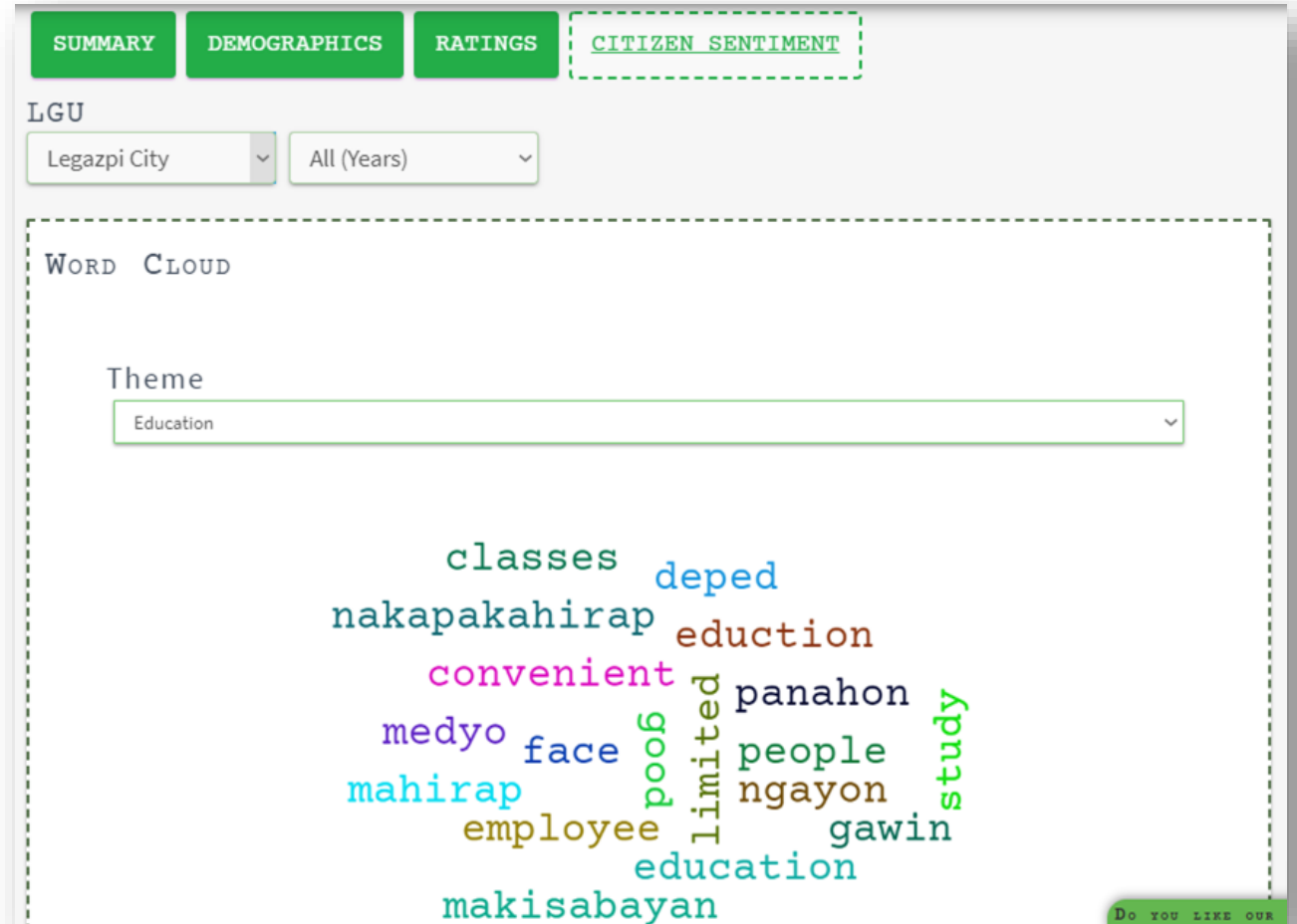
Here, you may select a LGU/time frame and view the ratings on each themes and subthemes.

The screenshot displays the 'Ratings' section of the Cloud CT Analytics dashboard. At the top, there are four navigation tabs: 'SUMMARY', 'DEMOGRAPHICS', 'RATINGS' (which is highlighted with a dashed border), and 'CITIZEN SENTIMENT'. Below the tabs, the 'LGU' section includes two dropdown menus: 'Legazpi City' and 'All (Years)'. A 'Theme' dropdown menu is set to 'Education'. The main content area shows a 'THEME RATING' of '6/10'. To the right, a dashed box highlights the 'TOTAL RESPONDENTS: 13' and a 'SUBTHEME' dropdown menu set to 'Select a Subtheme'. Below the dropdown, it states 'This subtheme is not rated'. A small blue icon is visible in the bottom right corner of the interface.

LIVE ANALYTICS

Citizen Sentiment

In this tab, you may select a LGU or specific time frame. Then, a word cloud will be generated based on your selected theme. This a collection of words mentioned by the respondents. The bigger and bolder the word appears, the more often it's mentioned.



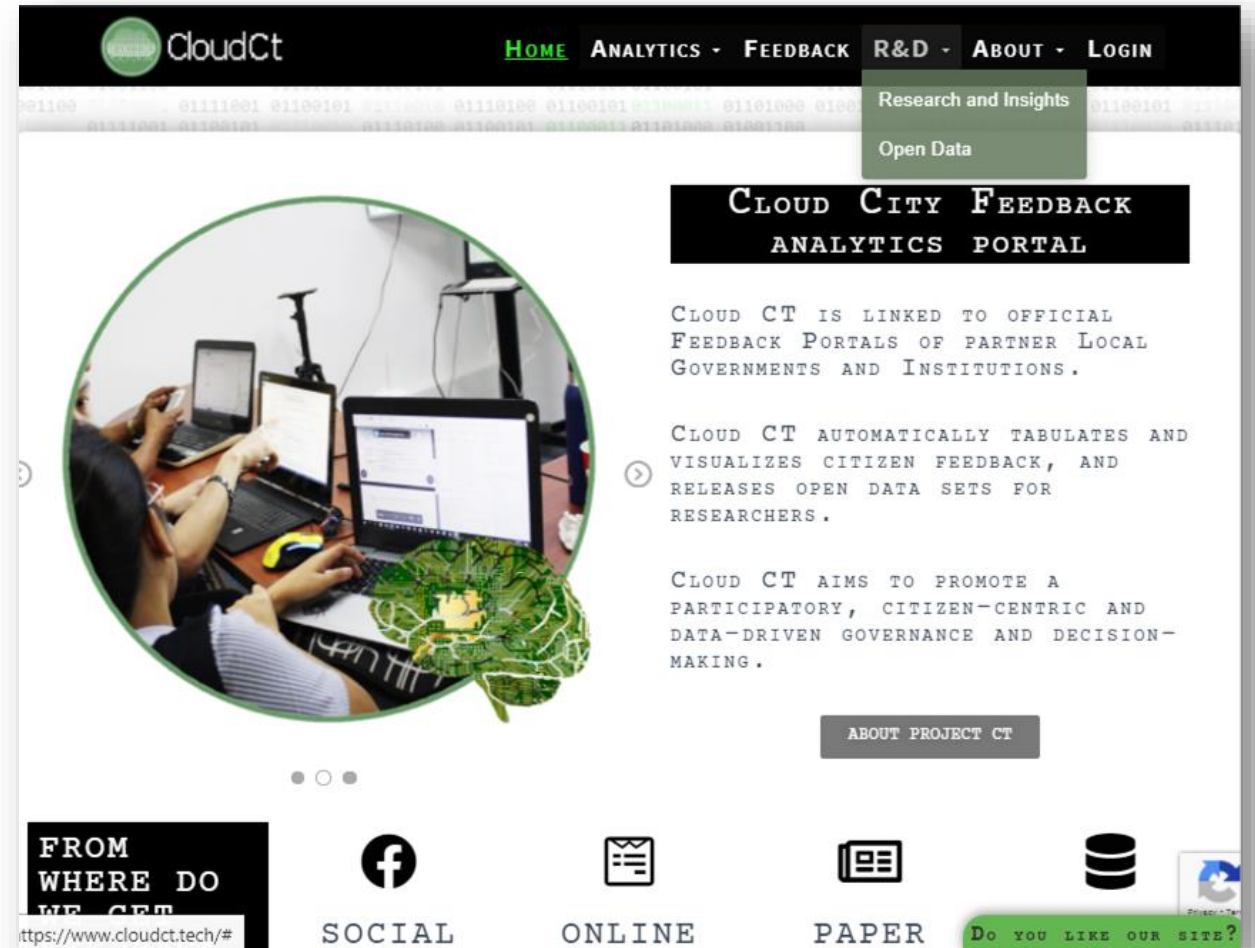
Main Features of Cloud CT

This feature lets you view findings and analysis using feedback data collected.

To access the **R&D** feature, hover mouse cursor over R&D at the top right corner of the dashboard on the black/green menu strip. This section has the following options:

- **Research and Insights**
- **Open Data**

R&D



The screenshot shows the CloudCT dashboard interface. At the top, there is a navigation bar with the following items: **HOME**, **ANALYTICS**, **FEEDBACK**, **R&D**, **ABOUT**, and **LOGIN**. The **R&D** menu is expanded, showing two options: **Research and Insights** and **Open Data**. Below the navigation bar, the main content area features a circular image of people working at computers, overlaid with a green map of a city. To the right of the image, the text reads: **CLOUD CITY FEEDBACK ANALYTICS PORTAL**. Below this, there are three paragraphs of text:
1. "CLOUD CT IS LINKED TO OFFICIAL FEEDBACK PORTALS OF PARTNER LOCAL GOVERNMENTS AND INSTITUTIONS."
2. "CLOUD CT AUTOMATICALLY TABULATES AND VISUALIZES CITIZEN FEEDBACK, AND RELEASES OPEN DATA SETS FOR RESEARCHERS."
3. "CLOUD CT AIMS TO PROMOTE A PARTICIPATORY, CITIZEN-CENTRIC AND DATA-DRIVEN GOVERNANCE AND DECISION-MAKING."
At the bottom of the dashboard, there is a footer with the text "FROM WHERE DO WE GET" and a URL "https://www.cloudct.tech/#". To the right of the footer, there are icons for **SOCIAL** (Facebook), **ONLINE** (envelope), **PAPER** (document), and a database icon. A green button labeled "Do you like our site?" is also present.

Research and Insights

In this section, you may read how LGUs use feedback in their cities/municipalities.

PEDESTRIANIZATION
TAMPAMTOS
ACTIVOS TASKS
DATA COLLECTION AND ANALYSIS OF CITIZEN FEEDBACK TO STRENGTHEN SMALL FAMILY BUSINESSES IN LEGAZPI CITY
Executive Summary The city government of Legazpi and partner stakeholders acknowledges the critical role of family businesses and MSMEs in the local economy, especially at the time of the COVID-19 pandemic. To
By CloudCity Admin, 1 week ago

PEDESTRIANIZATION
TAMPAMTOS
ACTIVOS TASKS
DATA COLLECTION AND ANALYSIS OF CITIZEN FEEDBACK ON THE PEDESTRIANIZATION OF HENERAL LUNA STREET IN INTRAMUROS
The pedestrianization of Heneral Luna street is part of the agenda of the Intramuros Administration in order to protect the structural integrity of the San Agustin church, promote tourism, and preserve the historical and cultural value of Intramuros. To
By CloudCity Admin, 4 weeks ago

LOW-SPEED STREETS
PASIG CITY
ACTIVOS TASKS
USING FEEDBACK DATA TO INFORM POLICY AND IMPLEMENTATION OF LOW-SPEED STREETS IN PASIG
In a joint project with Makati Business Club and Konrad Adenauer Stiftung (The Digital Democracy Project), Pasig City consulted with their residents about their sentiments on the enforcement of the 30 kph speed limit in their urban centers.
By CloudCity Admin, 2 months ago

TOPIC ANALYSIS OF CLOUD LEGAZPI FEEDBACK PORTAL OPEN DATA - USAPANG CITY HALL
LEARNING
Topic Analysis of Cloud Legazpi Feedback Portal Open Data USAPANG CITY HALL (Qualitative Responses) By: Lany L. Maceda, University of the Cordilleras, Doctor in Information Technology From the qualitative responses
By CloudCity Admin, 2 years ago

DATA VISUALIZATION OF CLOUD LEGAZPI FEEDBACK PORTAL OPEN DATA USING WORD CLOUDS
LEARNING
Data Visualization of Cloud Legazpi Feedback Portal Open Data Using Word Clouds Jennifer L. Llovido Data visualizations on the feedback data from the Cloud Legazpi was enhanced by employing word clouds. A Word
By CloudCity Admin, 3 years ago

SEELOG: OPEN CONTRACTING DATA STANDARD-BASED PROCUREMENT PORTAL
LEARNING
SeeLog: Open Contracting Data Standard-Based Procurement Portal Alan John Maristela Allano The IT industry has come a long way to its existing shape where it is playing a very dominant role in our sphere of life. It has made revolutionary changes in
By CloudCity Admin, 3 years ago

FREE LEARNING MODULES, DATA PRIVACY AND DIGITAL LITERACY
LEARNING
As a part of the company's advocacy for Digital Literacy and Open Education, Leytech Software Labs, Inc. is publicly sharing in-house Learning Modules, FREE of charge. Please carefully read the terms of use for each module, before use.
By CloudCity Admin, 3 years ago

PARA SAAN ANG CLOUD CITY? (PROMOTIONAL MATERIALS IN TAGALOG)
LEARNING
Masikip tulong sa ating ratings, comments, suggestions, ideya, at mga mensahe para sa pagpapalibutan ng mga serbisyo ng ating kompanya.
STEP 1
Kung ikaw ay hindi alam kung ano ang Cloud City, mag-click sa link na "Cloud City" sa ibabang bahagi ng pahinang ito. Mag-click sa link na "Cloud City" sa ibabang bahagi ng pahinang ito.
www.CLOUDCITY.tech
STEP 2
By CloudCity Admin, 3 years ago

Main Features of Cloud CT

R&D

Open Data

In this section, free datasets are available for you to view and download. All datasets published in this section is under Creative Commons attribution 3.0 license (CC BY 3.0).

Please be mindful of the privacy laws when using the datasets. While personally identifiable information from datasets are deliberately removed, please exercise caution, proper attribution, in the using the datasets.

OPEN DATA

ALL DATASETS PUBLISHED IN THIS SECTION IS UNDER CREATIVE COMMONS ATTRIBUTION 3.0 LICENSE (CC BY 3.0)

Please be mindful of your country's privacy laws when using the datasets. While personally identifiable information from datasets are deliberately removed, please exercise caution, proper attribution, in the using the datasets.

CITY SERVICES RATINGS DATA-SET

Download real-time ratings dataset of the "City Services Ratings" in CSV format.

Download

PAST FEEDBACK DATASETS

Archived Datasets of past feedback collected from various Local Governments and Institutions

Feedback on Legazpi City Services from 2018-2020 (Demographics, Text Feedback, Ratings on Quality of Service, Promptness, Expenses)
- By Cloud City Team

Download

Do you like our

“Data are considered to be “open” if anyone can freely access, use, re-use and redistribute them, for any purpose, without restrictions.”

Source: [The World Bank](#)



Part III – What is Open Data?



- **Dimensions of Open Data**
- **Benefits of Open Data**
- **Summary**



What is Open Data?

Open data is data that can be freely used, re-used and redistributed by anyone - subject only, at most, to the requirement to attribute and sharealike.

While a large amount of data is published on government websites, the majority of published data is intended only to be read as stand-alone documents, not re-used for other purposes. To be considered "open," the data must be re-usable, meaning they can be downloaded in open formats and read by software, and users have a legal right to re-use it.



Dimensions of Open Data

There are two dimensions of data openness.

- The data must be **legally open**. This means that the data is placed in the public domain or with minimal restrictions.
- The data must be **technically open**, which means that the data must be published in a **MACHINE-READABLE FORMAT** (The file is electronic and can be processed by most software. E.g. CSV, JSON, etc.) The data must also be easily accessible, downloadable, without password, firewall, or other restrictions.



Benefits of Open Data

Benefits of Open Data include:

- **Transparency.** Supports public oversight of governments and helps reduce corruption by enabling greater transparency. (e.g. tracking public budget expenditures and impacts).
- **Citizen Participation.** Encourages greater citizen participation in government affairs and supports democratic societies by providing information about various government services and performance.
- **Public Service Improvement.** Open Data gives citizens the raw materials they need to engage their governments and contribute to the improvement of public services. (e.g. Citizens can use Open Data to contribute to public planning, or provide feedback to government ministries on service quality.)



Benefits of Open Data

Benefits of Open Data include:

- **Innovation and Economic Value.** Public data, and their re-use, are key resources for social innovation and economic growth. Businesses and entrepreneurs are also using Open Data to better understand potential markets and build new data-driven products.
- **Efficiency.** Open Data makes it easier and less costly for government ministries to discover and access their own data or data from other ministries, which reduces acquisition costs, redundancy and overhead.

Open Data can also empower citizens with the ability to alert governments to gaps in public datasets and to provide more accurate information.

Summary

What can you do with Open Data?

- You can use Open Data to study and come up with solutions to help LGUs. Researchers, particularly in the sciences, use free datasets where the results of studies can be released alongside the paper and this leads to the findings.
- You can also use Open Data to tackle community problems. Open data allows individuals, informal groups, or established organizations to speak about issues affecting them in the same data-driven way that the government and other stakeholders.
- You can also use Open Data to meet goals outside of the public sector. A popular use continues to be governments releasing public sector information to engage with individuals and provide opportunities for entrepreneurship.
- Open Data may also provide a benefit and new value to citizens, communities, and organizations that are featured in the data. In order to argue for this value creation, municipal governments often use **case studies** as emblematic examples.



Part IV – Use-cases



- **Featured Study**

- **Featured Study:**

Topic Analysis of Cloud Legazpi Feedback
Portal Open Data - Usapang City Hall

Incorporating citizen feedback in improvement of Service Delivery
in the City Hall. **What do the constituents think?**



The city hall receives hundreds of FEEDBACK from its constituents.. many of which, are about the quality of services they provide in the city hall. (e.g. issuances of permits, etc.)

As much as the local government wants to address every single feedback at the fastest possible time, reality is, we have LIMITED TIME, LIMITED RESOURCES, and LIMITED MANPOWER. Therefore, we need to prioritize, and do it step by step.

A DATA MINING STUDY conducted by the local academe in the local government, used CLOUD CITY FEEDBACK DATA to inspect which specific points for improvement are raised by the constituents, and on what order of priority.



QUALITATIVE vs QUANTITATIVE DATA

QUANTITATIVE DATA - these are numbers, or numeric data. Examples of quantitative data in CloudCT are ratings (1-10) that people give for certain themes.

QUALITATIVE DATA - these are data that are composed of characters, words, or, written in paragraph form. For example, when you write your experience or message using the CloudCT feedback form, you are giving a qualitative data.

For this featured study, the researcher used QUALITATIVE DATA.
(the messages submitted by the respondents, under different themes)



USING TOPIC MODELING

The researcher used "Topic Modeling" on Cloud CT's Qualitative feedback data.

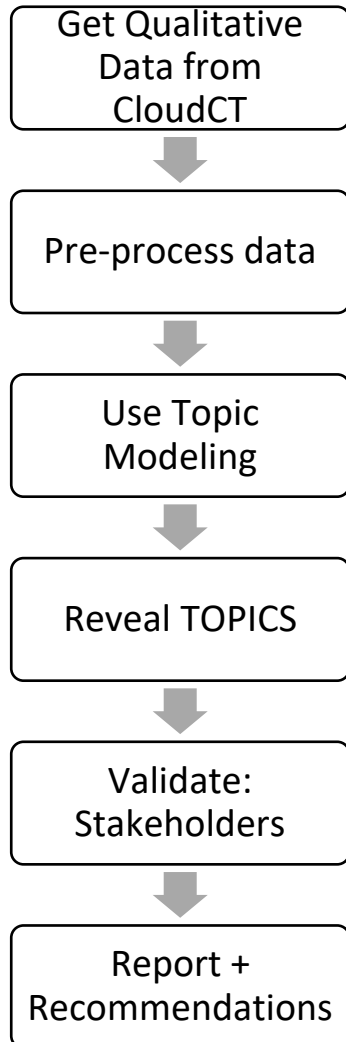
Topic Modeling is a data mining technique used to scan a set of documents (in this case, a set of feedback) to discover a set of 'topics'. These 'topics' represent what's contained in your set of documents.

As you face more and more data inputs (and more noise data!), techniques like topic modelling become more and more useful to save time and immediately show only the relevant information you are looking for.

Suggested Topics for further reading: Natural Language Processing, Machine Learning



THE PROCESS



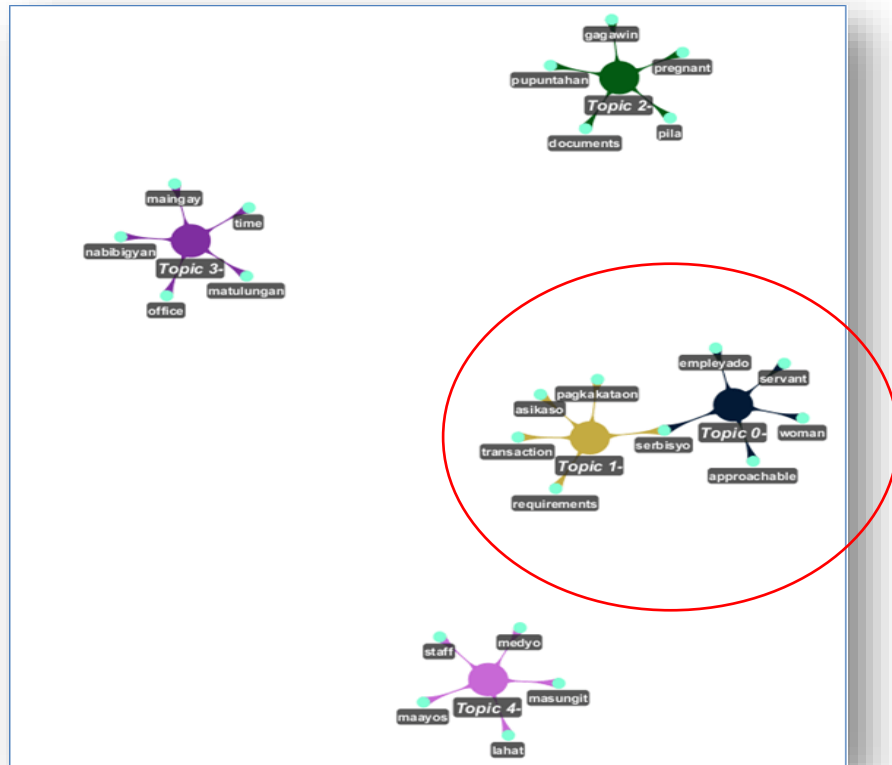
First, the researcher collected qualitative feedback data from CloudCT. They are non-personally identifiable.

Next, the researcher prepared the data for processing. She then used topic modelling to reveal the key topics.

Finally, she validated the findings from stakeholders, the Local Government, and overlaid with supplementary information to form a report + recommendations.

THE RESULTS: CITY HALL SERVICES

Five key topics were discovered:



Topic Labels	Topic Models	Topic Distribution
0 Employee attitude	empleyado, approachable, woman, serbisyo, servant	20%
1 Service Delivery	serbisyo, requirements, asikaso, pagkakataon, transaction	20%
2 Special Lane	documents, pila, pregnant, pupuntahan, gagawin	20%
3 Office Environment/ Community Assistance	office, matulungan, nabibigyan, maingay, time	20%
4 Clients/Customer's Relation	maayos, lahat, medyo, staff, masungit	20%

Topics 0 and 1 are connected!

SAMPLE REMARKS GIVEN

Sample Remarks Posted on each Topic Label:

Topic 0: Employee Attitude

"they are so approachable and ready to be of help"

"fast service and approachable staff :)"

Topic 1: Service Delivery

"mabilis ang transaction"

"nag level up na ang lgu legazpi city"

"sapat lang ang serbisyo"

Topic 2: Special Lane

"magandaang kanilang serbesyo s pag bigay ng mga documento"

Many are actually positive feedback!

(Used CloudCT Sentiment Visualizer to double check)

Topic 3: Office environment/community assistance

"kahit mahaba ang pila at medyo maingay lahat naman ay nabibigyan ng pagkakataon na matulungan"

Topic 4: Client/Customer Relations

"Ayos naman, kaso murusduton tabi he he he"

"NGUMITI NAMAN"

"Sobrang tagal magprocess. Masungit pa."



MAPPED: OFFICES CONCERNED

The remarks were given by the citizenry to the following offices of LGU Legazpi:

- **Business Permit and Licensing Office:**
 - Release of Business Permit

- **City Accountant Office:**
 - Issuance of Disbursement vouchers for claims taken up as Accts. Payables
 - Issuance
 - Vouchers/payrolls

- **City Administrator:**
 - Assistance to clients seeking queries advisescomplaints and other concerns
 - For signature of Checks/ documents



MAPPED: OFFICES CONCERNED

- **City Assessor's Office**
 - Transfer of Ownership
 - Ownership
 - Securing Assessment of Building Machinery and Other Structures
- **City Budget Office**
 - Clients submission of payrolls vouchers Purchase Request (PR) etc. accompanied by Obligation Request (ObR) Form for funds availability
- **City Engineering Office**
 - Building Permit



MAPPED: OFFICES CONCERNED

- **City Health Office:**
 - Preparation Of Medical Certificate
 - General Medical Services Nursing Division
 - Pre And Post Natal Services
 - Dental Services

- **City Human Resource and Management Office**
 - Issuance of Job Order Appointments & Contract of Services
 - Recruitment (Job Vacancies)
 - Application for Leave



MAPPED: OFFICES CONCERNED

- **City Mayor's Office**
 - Releasing of outgoing communication
 - medical/ financial/ burial / educational assistance
- **City Planning and Development Office**
 - Certifications/Certified Copies
 - Simple Subdivision Approval (SSA) Preliminary Approval for Locational Clearance (PALC) Development Permit (DP), Alteration of Plan (AP) Application
- **City Treasurer's Office**
 - Issuance of Certificate of Business Tax Retirement
 - Payment of Business Tax / Real Property Tax and Fees/ Charges/Clearances
 - Issuance of Community Tax Certificate or CTC
 - Transfer tax assessment



MAPPED: OFFICES CONCERNED

- **General Services Office**
 - Procurement Services
- **Office of the City Civil Registrar**
 - Issuance of Certified True/Xerox copies of Civil Registry Records
 - Registration of Birth
 - Processing of Petitions for R.A 9048 and R.A. 10172 (Change of First Name and Correction of Clerical Error in Civil Registry Records)
- **Sangguniang Panlungsod**
 - Application/Renewal of Mayors Permit
 - Application for change of Certificate of Franchise and order of Dropping and substitution of motor unit



FEATURED

FULL REPORT

Interested to know the full report? Go to
<https://www.cloudct.tech/topic/learning/>
for more use-cases!



Acknowledgment

The Cloudct.tech portal is a project by Layertech Software Labs, Inc. with support from InnovateGov-CIPE (2018) and FeedbackLabs Feedback Tools Accelerator (2021). The project also received technical assistance from USAID-SURGE (2021) in engaging and facilitating partnerships with LGUs like Legazpi.

Local implementors and partners are Bicol University through the College of Science - Computer Science Information Technology Department, and Southern Luzon Technological College Foundation, Inc.

References:

Barker, V. (Published: 04 January 2018) Open Government and Public Feedback. Available at: <https://www.opengovpartnership.org/stories/open-government-and-public-feedback> (Accessed: 02 June 2021).

Buckingham, M. and Goodall, A. (Published: March–April 2019) The Feedback Fallacy. Available at: <https://hbr.org/2019/03/the-feedback-fallacy> (Accessed: 02 June 2021).

Cloud City (no date) Cloud City Feedback Analytics Portal. Available at: <https://www.cloudct.tech> (Accessed: 02 June 2021).

Dignen, B. (Published 17 March 2014) Five Reasons Why Feedback may be the Most Important Skill. Available at: <https://www.cambridge.org/elt/blog/2014/03/17/five-reasons-feedback-may-important-skill> (Accessed: 02 June 2021).

Feedback Labs (no date) What is Feedback? <https://feedbacklabs.org/about-us/what-is-feedback/> (Accessed: 02 June 2021).

Gigler, S. (Published: 29 December 2015) From citizen feedback to inclusive institutions: 10 lessons. Available at: <https://blogs.worldbank.org/governance/citizen-feedback-inclusive-institutions-10-lessons> (Accessed: 02 June 2021).

Open Knowledge Foundation (no date) What is Open Data? Available at: <https://opendatahandbook.org/guide/en/what-is-open-data/> (Accessed: 07 September 2021).

The Springboard Center (no date) Learning to Receive Feedback is Important – Here's Why. Available at: <https://www.springboardcenter.org/learning-receive-feedback-important-heres/> (Accessed: 02 June 2021).

The World Bank (no date) Starting an Open Data Initiative. Available at: <http://opendatatoolkit.worldbank.org/en/essentials.html> (Accessed: 07 September 2021).

U.S. Office of Personnel Management (no date) Policy, Data, Oversight. Available at: <https://www.opm.gov/policy-data-oversight/performance-management/performance-management-cycle/monitoring/feedback-is-critical-to-improving-performance> (Accessed: 02 June 2021).



[CONTACT US: learning@layertechlab.com](mailto:learning@layertechlab.com)