



ZENCITY ORDER FORM

Order form #: 341809

Order form prepared for: City of Doral, FL

This Order Form ("**Order Form**") is entered into between the Zencity entity detailed below ("**Zencity**" or "**Provider**"), and the entity identified below ("**Customer**", and jointly with Zencity the "**Parties**"), as of the Effective Date (as defined below) which shall remain in effect for the duration of the Initial Term as defined below and any renewal term (the "**Term**") unless agreed otherwise explicitly and in writing between the Parties. This Order Form includes and incorporates the Zencity Terms and Conditions attached hereto as Appendix A (the "**T&Cs**"). In the event of any conflict between this Order Form and the T&Cs, the terms of this Order Form shall prevail. All prices are quoted in USD.

ZENCITY	
Entity (legal) name:	Zencity Technologies US Inc.
Full address:	1313 N Market St, Suite 5100 Wilmington, DE 19801
Contact:	Cara Frazin
Phone:	516-530-7811
Email:	cara@zencity.io

CUSTOMER	
Entity (legal) name:	Doral, FL
Full address:	8401 Northwest 53rd Terrace Miami, FL 33166
Contact:	Maggie Santos
Phone:	(305) 593-6678
Email:	Maggie.Santos@cityofdoral.com

RECURRING FEES						
Name	SKU	Product Description	Yearly List Price	Term	Discount	Yearly Discounted Price
Zencity Organic	ZC-ORG	SaaS Platform for gathering and processing organic feedback from channels throughout the client's community and translating that data into quickly digestible analysis and personalized insights, for cities with up to 100,000 residents	\$36,000	1 year	60%	\$14,500
Total List Price						\$36,000

Total Discount	(- \$21,500)
Total Fees	\$14,500

Any additional modules, quantity increases or other custom development and integration work requested by Customer during the Term shall require an Order Form executed by the Parties, and shall be subject to the prevailing Zencity rate card subject to amendment from time to time.

ORDER FORM TERMS	
Effective Date:	October 1, 2023
Initial Term:	12 months, commencing on the Effective Date.
Fees:	The Fees are exclusive of any applicable taxes (including sales tax) and withholdings, which will be added to the Fees and paid by Customer, to the extent applicable.
Payment Terms:	The Fees shall be payable on an annual basis within 30 days of the Effective Date and on each annual anniversary thereof.
Customer Billing Contact:	Name: [], Phone: [], Email: []
Customer PO # (if applicable):	

CUSTOMER

Signature: BAH.
 Name: Barbara Hernandez
 Title: City Manager
 Date: 10/27/2023

ZENCITY

Signature: Eyal Feder
 Name: Eyal Feder
 Title: CEO
 Date: October 24, 2023

Appendix A

Zencity Terms and Conditions

1. SOFTWARE LICENSE & SUPPORT SERVICES

- 1.1. Subject to the terms and conditions of these Zencity Terms and Conditions and of the applicable Order Form (collectively, the "**Agreement**"), Zencity hereby grants to Customer a personal, non-exclusive, non-transferable limited license to use the products and services licensed by Zencity to Customer (the "**Licensed Program**") identified in the applicable Order Form entered into by Zencity and Customer and the documentation and user manuals for the Licensed Program supplied by Zencity to Customer throughout the Term (the "**Documentation**").

For the purposes of this Section 1.1, the term "use" shall be only in accordance with the confidentiality provisions of this Agreement and shall include the rights to use the Licensed Program only for the use of the Customer's organization, company or institution.

For the purposes of this Section 1.1 the term "use" shall not include: (i) the right to make, use, or sell products incorporating the Licensed Program, or (ii) the right to sub-license the Licensed Program.

No right is granted to the source code of the Licensed Program or to create derivative works thereof or to transfer ownership of the media containing such software except as a part of, or with, or for use in the equipment with which it operates.

- 1.2. Routine customer support is available via email. Any claim will be answered within 24 hours of the report. On or before the Effective Date, Customer and Zencity shall each designate a liaison as a respective point of contact for technical issues. Each party may change such liaison upon written notice from time to time at reasonable intervals. Zencity will not be obligated to provide support to any person other than the Customer's designated liaison.
- 1.3. During the Term, Customer may have access to Updates upon request at no additional cost. "**Updates**" shall mean certain new features as determined by Zencity, or fixes of minor errors in the Licensed Program which are incorporated in a new release of the Licensed Program.
- 1.4. Certain upgrades can be delivered to Customer upon commercial terms and conditions to be agreed upon. "**Upgrades**" shall mean enhancements, new functionalities that are added into the Licensed Program.

2. RESTRICTIONS AND RESPONSIBILITIES

- 2.1. Customer agrees not to, directly or indirectly: reverse engineer, decompile, disassemble, or otherwise attempt to discover the source code, object code, or underlying structure, ideas, or algorithms of the Licensed Program, Documentation or data related to the Licensed Program, except to the extent such a restriction is limited by applicable law; modify, translate, or create derivative works based on the Licensed Program; or copy, reproduce, rent, lease, distribute, assign, sell, or otherwise dispose of the Licensed Program, in whole or in part, or otherwise commercially exploit, transfer, or encumber rights to the Licensed Program; or remove any proprietary notices.
- 2.2. Customer will use the Licensed Program only in compliance with all applicable laws and regulations (including, but not limited to, any export restrictions, surveillance and monitoring restrictions, and any privacy and data protection requirements).
- 2.3. Customer shall be responsible for obtaining and maintaining any equipment and other services needed to connect to, access, or otherwise use the Licensed Program and Customer shall also be responsible for (a) ensuring that such equipment is compatible with the Licensed Program, (b) maintaining the security of such equipment, user accounts, passwords and files, and (c) for all uses of Customer user accounts with or without Customer's knowledge or consent. To the extent Customer provides any Personal Data (as defined below) of personnel for registration purposes, Customer represents and warrants that it has any right, license, consent, and power and it has provided any notice, all as required under applicable law, to provide Zencity with such Personal Data and will be fully and solely responsible for providing only Personal Data of personnel related to the Customer. Zencity will handle

such Personal Data in accordance with its Privacy Policy available at: <https://zencity.io/privacy-policy/>.

3. **PROPRIETARY RIGHTS.** Zencity retains all right, title, and interest in the Licensed Program, Documentation and any future modifications and enhancements thereof, and all intellectual property rights (including all past, present, and future rights associated with works of authorship, including exclusive exploitation rights, copyrights, and moral rights, trademark, and trade name rights and similar rights, trade secret rights, patent rights, and any other proprietary rights in intellectual property of every kind and nature) therein. Customer is granted only a limited right of use to the Licensed Program and Documentation as set forth herein, which right of use is not coupled with an interest and is revocable in accordance with the terms of this Agreement.
4. **CONFIDENTIALITY.** Each party (the "**Receiving Party**") agrees not to disclose (except as permitted herein) any Confidential Information of the other party (the "**Disclosing Party**") without the Disclosing Party's prior written consent. "**Confidential Information**" means all confidential business, technical, and financial information of the disclosing party that is marked as "Confidential" or an equivalent designation or that should reasonably be understood to be confidential given the nature of the information and/or the circumstances surrounding the disclosure (including the terms of the applicable License Agreement). Zencity's Confidential Information includes, without limitation, the software underlying the Licensed Program and all Documentation. The Receiving Party agrees: (i) to use and disclose the Confidential Information only in connection with this Agreement; and (ii) to protect such Confidential Information using the measures that Receiving Party employs with respect to its own Confidential Information of a similar nature, but in no event with less than reasonable care. Receiving Party shall, before receipt or usage of such Confidential Information inform its personnel of Receiving Party's confidentiality obligations under this Agreement. Notwithstanding the foregoing, Confidential Information does not include information that: (i) has become publicly known through no breach by the Receiving Party; (ii) was rightfully received by the Receiving Party from a third party without restriction on use or disclosure; or (iii) is independently developed by the Receiving Party without access to such Confidential Information. Notwithstanding the above, the Receiving Party may disclose Confidential Information to the extent required by law or court order, provided that prior written notice of such required disclosure and an opportunity to oppose or limit disclosure is given to the Disclosing Party. Upon notice being provided, the Disclosing Party shall, notify the Receiving Party of their objection to the disclosure and take legal action as deemed appropriate by the Disclosing Party within ten (10) business days from receipt of the written notice of potential disclosure.
5. **DATA AND MATERIALS LICENSE.**
 - 5.1. Customer grants Zencity a non-exclusive, transferable, perpetual, worldwide, and royalty-free license to use any data or information provided by Customer for use in, by, or in connection with the Licensed Program, any information collected, and/or any analysis of any such information conducted by the Licensed Program.
 - 5.2. Any content created by Customer and provided to Zencity for use in connection with the Licensed Program or other services provided by Zencity ("**Customer Materials**") shall be the sole property of the Customer. Customer hereby grants Zencity and its successors and assigns a perpetual, irrevocable, transferrable, worldwide, royalty-free, fully paid-up, and non-exclusive license under any of Customer's intellectual property, moral or privacy rights to use, copy, distribute, display, modify and create derivative works of any Customer Materials for the provision of the services in accordance with the terms of this Agreement. The parties acknowledge that Zencity does not require any Personal Data to be provided in order to provide the Licensed Program and Customer undertakes that it shall not provide Zencity with any Personal Data as part of the Customer Materials. To the extent the Customer Materials shall include any Personal Data it shall be incidental and Customer shall be fully liable for such Personal Data in accordance with the terms of this Agreement and applicable law.
6. **FEES.**
 - 6.1. The fees for the Licensed Program ("**Fees**") are set forth in the applicable Order Form. Properly submitted invoices for which payment is not received within fourteen (14) days of the invoice due date shall accrue a late charge in accordance with the Florida Prompt Payment Act, Section 255.0705-

255.078, Florida Statutes. The Fees are exclusive of any applicable taxes, which, if payable by Zencity, shall be billed to and paid by Customer, including any bank fees related to the Customer's wire transfer. Customer may not withhold or set-off any amounts from the Fees. For the avoidance of doubt, discounts or credits relating to any term defined in any Order Form shall apply to said term only and shall not carry over to any Renewal Term.

7. TERM & TERMINATION

- 7.1. This Agreement shall commence on the Effective Date and continue for the period of the Licensed Program purchased pursuant to any applicable and outstanding Order Form, including any renewal term, unless earlier terminated in accordance with this Section 7. In the event of any Renewal Term, the Fees payable for the Licensed Program shall be updated as specified in the Order Form. Either party may terminate this Agreement immediately by giving written notice to the other party if: (i) the other party breaches a material provision of this Agreement and fails to cure the breach within seven (7) days after being given written notice thereof; or (ii) the other party is judged bankrupt or insolvent, makes a general assignment for the benefit of its creditors, a trustee or receiver is appointed for such party; or any petition by or on behalf of such party is filed under any bankruptcy or similar laws, or (iii) Customer has budgeted insufficient funds in a fiscal year for said services.
- 7.2. The Initial Term shall be automatically extended for successive renewal terms of 12 months each (each, a "**Renewal Term**" and collectively with the Initial Term, the "**Term**") unless either party provides written notice of non-renewal to the other party at least 90 days before the end of each applicable term.
- 7.3. Upon termination, Customer will pay in full for the Licensed Program up to and including the effective date of termination. Upon any termination of this Agreement: (a) the license of the Licensed Program hereunder shall immediately terminate; and (b) each party shall return to the other party or, at the other party's option, destroy all Confidential Information of the other party in its possession, unless applicable law or Florida Records Retention Schedules require that said information be retained by the Customer.
- 7.4. All sections of this Agreement which by their nature should survive termination will survive termination, including, without limitation, accrued rights to payment, confidentiality obligations, warranty disclaimers, and limitations of liability.

8. WARRANTY AND DISCLAIMER

- 8.1. Zencity represents and warrants that: (i) it has all right and authority necessary to enter into and perform this Agreement; and (ii) the Licensed Program shall perform in accordance with generally prevailing industry standards.
- 8.2. Customer represents and warrants that (i) it has all right and authority necessary to enter into and perform this Agreement; (ii) it owns all right, title, and interest in and to all data, including without limitation, any Personal Data that may be included therein, provided to Zencity (if any) for use in connection with this Agreement, or possesses the necessary authorization thereto; and (iii) Zencity's use of such data or materials including Customer Materials as contemplated hereunder will not violate the rights of any third party; (iv) it has all right, license and consent required to provide Zencity with the Customer Materials, including Personal Data contained therein, if and to the extent provided in accordance with Section 5.2 above; (v) the Customer Materials and Zencity's use thereof in accordance with the terms of this Agreement does not and will not infringe upon any third party's right; and (vi) it shall at all times use the Licensed Program in compliance with applicable law. "**Personal Data**" have the definition ascribed to it by the General Data Protection Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 ("**GDPR**") or any parallel term in the jurisdiction in which the Licensed Program is being used.

- 8.3. ZENCITY DOES NOT WARRANT THAT USE OF THE LICENSED PROGRAM WILL BE UNINTERRUPTED OR ERROR-FREE; NOR DOES IT MAKE ANY WARRANTY AS TO THE RESULTS THAT MAY BE OBTAINED FROM USE OF THE LICENSED PROGRAM. EXCEPT AS SET FORTH IN THIS SECTION 8, THE LICENSED PROGRAM IS PROVIDED "AS IS" AND ZENCITY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, TITLE, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. ZENCITY DOES NOT WARRANT THAT ANY OR ALL FAILURES, DEFECTS OR ERRORS WILL BE CORRECTED, OR WARRANT THAT THE FUNCTIONS CONTAINED IN THE LICENSED PROGRAM WILL MEET CUSTOMER'S REQUIREMENTS.
- 8.4. To the extent the Licensed Program or any services provided by Zencity hereunder are provided through or in connection with any third-party services, Zencity shall not have any responsibility for any technical issues or limitations resulting from the use of such third-party service, including actions of Zencity on such third-party service taken on behalf of and at the instruction of Customer. Customer acknowledges and agrees that use of any third-party service shall be in accordance with such third party's terms and privacy policy.
9. **LIMITATION OF LIABILITY.** NEITHER PARTY, NOR ITS SUPPLIERS, OFFICERS, AFFILIATES, REPRESENTATIVES, CONTRACTORS, AND EMPLOYEES, SHALL BE RESPONSIBLE OR LIABLE WITH RESPECT TO ANY SUBJECT MATTER OF THIS AGREEMENT OR RELATED TERMS AND CONDITIONS UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER THEORY: (A) FOR ERROR OR INTERRUPTION OF USE OR FOR LOSS OR INACCURACY OF DATA (EXCEPT AS OTHERWISE SET FORTH IN SECTIONS 2.3 AND 5.2) OR COST OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES OR LOSS OF BUSINESS; (B) FOR ANY INDIRECT, EXEMPLARY, PUNITIVE, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES; OR (C) FOR ANY MATTER BEYOND SUCH PARTY'S REASONABLE CONTROL, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE. IN NO EVENT SHALL EITHER PARTY'S AGGREGATE, CUMULATIVE LIABILITY FOR ANY CLAIMS ARISING OUT OF OR IN ANY WAY RELATED TO THIS AGREEMENT EXCEED THE FEES PAID BY CUSTOMER TO ZENCITY (OR, IN THE CASE OF CUSTOMER, PAYABLE) FOR THE LICENSED PROGRAM UNDER THIS AGREEMENT IN THE 12 MONTHS PRIOR TO THE ACT THAT GAVE RISE TO THE LIABILITY.
10. **MISCELLANEOUS.** Capitalized terms not otherwise defined in these Terms and Conditions have the meaning set forth in this License Agreement. Neither party shall be held responsible or liable for any losses arising out of any delay or failure in performance of any part of this Agreement, other than payment obligations, due to any act of God, act of governmental authority, or due to war, riot, labor difficulty, pandemic, failure of performance by any third-party service, utilities, or equipment provider, or any other cause beyond the reasonable control of the party delayed or prevented from performing. Notwithstanding the previous recitation, if Zencity is unable to perform its responsibilities under this Agreement for ninety (90) consecutive days, Zencity shall refund a pro-rata portion of the subscription fee paid by the Customer. Zencity shall not use and/or display Customer's logos and trade names for any purpose without the express written permission of the City Manager. If any provision of this Agreement is found to be unenforceable or invalid, that provision will be limited or eliminated to the minimum extent necessary so that this Agreement will otherwise remain in full force and effect and enforceable. This Agreement is not assignable or transferable by either party without the other party's prior written consent, provided however that either party may assign this Agreement to a successor to all or substantially all of its business or assets. This Agreement (including the License Agreement) is the complete and exclusive statement of the mutual understanding of the parties and supersedes and cancels all previous written and oral agreements, communications, and other understandings relating to the subject matter of this Agreement. All waivers and modifications must be in a writing signed by both parties. No agency, partnership, joint venture, or employment is created as a result of this Agreement and neither party has any authority of any kind to bind the other party in any respect. In any action or proceeding to enforce rights under this Agreement, the prevailing party will be entitled to recover costs and attorneys' fees. All notices under this Agreement will be in writing and will be deemed to have been duly given when received if personally delivered; when receipt is electronically confirmed, if transmitted by facsimile or e-mail; the day after it is sent if sent for next day delivery by recognized overnight delivery service; and upon receipt, if sent by certified or registered mail, return receipt requested. This Agreement shall be governed by the laws of the

State of New York without regard to its conflict of laws provisions and the competent courts of New York City shall have exclusive jurisdiction to hear any disputes arising hereunder.

11. **GOVERNING LAW AND VENUE.** This Agreement is governed by and construed in accordance with the laws of the State of Florida, without giving effect to any choice or conflict of law provision or rule that would require or permit the application of the laws of any other jurisdiction other than the State of Florida. Any suit, action or proceeding arising out of the performance of this Agreement shall be instituted in the courts of the 11th Judicial Circuit in and for Miami-Dade County, Florida or in the event of federal jurisdiction in the United States District Court for the Southern District of Florida.

12. **E-VERIFY.**

11.1 Employment Eligibility Verification (E-VERIFY). The Provider must comply with the Employment Eligibility Verification Program (“E-Verify Program”) developed by the federal government to verify the eligibility of individuals to work in the United States and 48 CFR 52.222-54 (as amended) is incorporated herein by reference. If applicable, in accordance with Subpart 22.18 of the Federal Acquisition Register, the Provider must (1) enroll in the E-Verify Program, (2) use E-Verify to verify the employment eligibility of all new hires working in the United States; (3) use E-Verify to verify the employment eligibility of all employees assigned to the Agreement; and (4) include this requirement in certain subcontracts, such as construction. Information on registration for and use of the E-Verify Program can be obtained via the internet at the Department of Homeland Security Web site: <http://www.dhs.gov/E-Verify>.

The Provider shall also comply with Florida Statute 448.095, which directs all public employers, including municipal governments, and private employers with 25 or more employees to verify the employment eligibility of all new employees through the U.S. Department of Homeland Security’s E-Verify System, and further provides that a public entity may not enter into a contract unless each party to the contract registers with and uses the E-Verify system. Florida Statute 448.095 further provides that if a Provider enters into a contract with a subcontractor, the subcontractor must provide the Provider with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. In accordance with Florida Statute 448.095, Provider, if it employs more than 25 employees, is required to verify employee eligibility using the E-Verify system for all existing and new employees hired by Provider during the contract term. Further, Provider must also require and maintain the statutorily required affidavit of its subcontractors. It is the responsibility of Provider to ensure compliance with E-Verify requirements (as applicable). To enroll in E-Verify, employers should visit the E-Verify website (<https://www.e-verify.gov/employers/enrolling-in-e-verify>) and follow the instructions. Provider must retain the I-9 Forms for inspection, and provide an executed E-Verify Affidavit, which is attached hereto as Exhibit “B”.

13. **SCRUTINIZED COMPANIES.** Provider certifies that it and its subcontractors are not on the Scrutinized Companies that Boycott Israel List. Pursuant to Section 287.135, F.S., the Customer may immediately terminate this Agreement at its sole option if the Provider or its subcontractors are found to have submitted a false certification; or if the Provider, or its subcontractors are placed on the Scrutinized Companies that Boycott Israel List or is engaged in the boycott of Israel during the term of the Agreement. If this Agreement is for more than one million dollars, the Provider certifies that it and its subcontractors are also not on the Scrutinized Companies with Activities in Sudan, Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or engaged with business operations in Cuba or Syria as identified in Section 287.135, F.S. Pursuant to Section 287.135, F.S., the Customer may immediately terminate this Agreement at its sole option if the Provider, its affiliates, or its subcontractors are found to have submitted a false certification; or if the Provider, its affiliates, or its subcontractors are placed on the Scrutinized Companies with Activities in Sudan List, or

Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or engaged with business operations in Cuba or Syria during the term of the Agreement.

14. COMPLIANCE WITH FLORIDA PUBLIC RECORDS LAW. Pursuant to Section 119.0701 of the Florida Statutes, Provider agrees to:

(i) Keep and maintain public records in Provider's possession or control in connection with Provider's performance under this agreement. Provider shall ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed, except as authorized by law, for the duration of the Agreement, and following completion of the Agreement until the records are transferred to the Customer.

(ii) Upon request from the Customer's custodian of public records, Provider shall provide the Customer with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided by Chapter 119, Florida Statutes, or as otherwise provided by law.

Unless otherwise provided by law, any and all records, including but not limited to reports, surveys, and other data and documents provided or created in connection with this Agreement are and shall remain the property of the Customer. Notwithstanding, it is understood that at all times Provider's workpapers shall remain the sole property of Provider and are not subject to the terms of this Agreement.

(iii) Upon completion of this Agreement or in the event of termination by either party, any and all public records relating to this Agreement in the possession of Provider shall be delivered by Provider to the City Manager, at no cost to the Customer, within seven (7) days. All such records stored electronically by Provider shall be delivered to the Customer in a format that is compatible with the Customer's information technology systems. Once the public records have been delivered upon completion or termination of this Agreement, Provider shall destroy any and all duplicate records that are exempt or confidential and exempt from public records disclosure requirements. Notwithstanding the terms of this Section, the Parties agree and it is understood that Provider will maintain a copy of any information, confidential or otherwise, necessary to support its work product generated as a result of its engagement for services, solely for reference and archival purposes in accordance with all applicable professional standards, which will remain subject to the obligations of confidentiality herein.

(iv) Any compensation due to Provider shall be withheld until all records are received as provided herein.

(v) Provider's failure or refusal to comply with the provisions of this section shall result in the immediate termination of this Agreement by the CITY.

IF THE PROVIDER HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE PROVIDER'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO

THIS AGREEMENT, THE PROVIDER SHALL CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (TELEPHONE NUMBER: 305-593-6730 E-MAIL ADDRESS: CONNIE.DIAZ@CITYOFDORAL.COM, AND MAILING ADDRESS: THE CITY OF DORAL HALL 8401 NW 53RD TERRACE, DORAL, FL 33166.



ZenCity // Differentiating Technology + Unique Attributes

ZenCity works **only with the local government sector**, for the sole purpose of garnering an in-depth understanding of citizen feedback and making it useful to different decision makers across the city. We understand that cities have **particular, city-specific needs** in analysing social media and other data, and have built our whole platform to fit the unique, city use case.

Our platform relies on award-winning Artificial Intelligence technology and provides the following differentiating features:¹

1. **Classification Algorithm:** *ZenCity's classification algorithm categorizes a wider breadth of data automatically to fit the city's organizational structure. Our machine learning was trained on literally millions of data points.*

The ZenCity solution both collects a much wider data-set than other services and automatically classifies all data coming in according to city-centric topics that reflect the organizational structure of city-hall. There are a few key components to this:

- a. ZenCity **does not require keyword lists**. Our automatic classification means we are not constrained to collecting data by keywords, as many other platforms are, and that we can therefor cast a very wide net. We collect data automatically, based on its source and *not* based on keyword.
- b. ZenCity only classifies **relevant** data. Our automatic classification enables us to sift through as many data sources as necessary, automatically classify them according to topics of interest for the city, and filter out spam and irrelevant data or mentions. This means **more, relevant data** for the city.

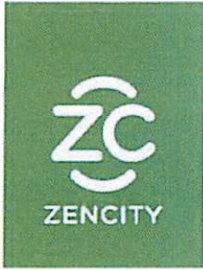
2. **Analysis of More Data Sources:** *We aggregate and analyze data from a more diverse pool of both internal and external data sources, providing a more comprehensive view of citizen feedback.*

The ZenCity platform integrates and processes citizen-generated data from across both **external sources** such as **social media** and local media, and **internal data sources** such as **311**, contact emails and more. This makes our analysis platform 10X stronger and much more representative since it actually provides a wholesome view of citizen feedback in the city in one easy-to-use platform. You can see all of the data together or filter by type of source.

3. **Geolocation Technology:** *Our unique geolocation technology enables us to geolocate up to 40% - 50% of data, in comparison to 3-5% of the data on social media.*

We know cities are run geographically, and therefore we've built a strong geolocation mechanism which helps cities visually understand the *where* in citizen feedback. We use **Name Entity**

¹ For a deeper dive into our technology, please see *Appendix A*.



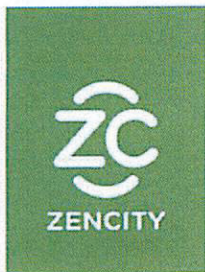
Recognition (NER) to extract locations from data like social media posts and tweets, and other written content. NER technology is an NLP (Natural Language Processing) classifier algorithm that extracts a defined location based on the mention of specific types of words, for example the name of a park, school or other landmark.

Our geolocation technology, integrated with a city's GIS layer, then maps the data points in three different ways. By:

- a. **Leading Topic Map**, which demonstrates the city-centric topic in each neighborhood or district.
- b. **Topic Map**, which identifies the location of each individual data point, categorized by city topic.
- c. **Heat Map**, which visualizes the level of discourse about each area of the city.

4. **Privacy + Security:** *As a platform tailored for government, we put a high emphasis on privacy, and we don't keep any names of specific residents in our data.*

ZenCity only collects public and open data, or proprietary, city-owned data. Our platform *always* anonymizes the names or identities of an individual source - even when a name is tagged in the post. In cases where we incorporate city data (such as 311), we anonymize it. This means we will never hold any PII's in our system at any point. Finally, all of our data is stored on Azure Microsoft Cloud - central West US node (SF) and is protected also by Microsoft's cloud security.



APPENDIX A

Technology Deep Dive:

The ZenCity platform's core capability is analyzing content, context and sentiment of social conversations and interactions in real time and over-time, in order to deliver insights to different stakeholders in the city's management. We aggregate data in a dashboard that visualises millions of conversations by city department and by geographical area, and by sharing a mobile-first alerting system providing relevant alerts to each stakeholder in real time and over-time. All of this is possible based on robust AI developed especially for tracking social media for cities.

Our world class, award-winning data collection and analysis technology, powered by cutting edge AI, is:

1. **A topic classifier** which identifies citizen conversation topics across 90+ different types of topics of citizen life (e.g. public spaces, personal safety, sidewalk maintenance, education, public / private transportation to name just a few), and filters out irrelevant results as well (ads, spam, irrelevant requests). In addition to textual features (the conversation itself) the classifier also leverages the context of the conversation, source of information, and other features (time of day, geography when available, for example). The topic classifier is based on our own, improved implementation of Facebook's FASTText, with an NLP pipeline based on NLTK (and other libraries) stacked with a model taking into account content "metadata" (e.g. neighbourhood, time of day, data source and other features).
2. **A sentiment analysis tool** based on a unique combination of Machine Learning and a self-developed, city-specific phrase lexicon, allowing us to discern positive, negative or neutral conversations and requests of citizens around city issues. We use a combination of a lexicon-based approach (using a modified version of VADER sentiment analyzer) with our own, bespoke use-case specific lexicon that generalizes to new phrases automatically, and we combine that with a Machine Learning classifier to improve results. We have been very successful in this approach, and are seeing accuracy of greater than 90% across all implementations of the sentiment analyzer.
3. **A name-entity recognizer** trained to identify locations and personas/organizations in conversations, which helps us provide geographic context to conversations happening in the city, or identify entities relevant in understanding what the conversation is about. We have wrapped the Stanford NER implementation and augmented that with clients' data about streets and landmarks in their city, and our understanding of data sources in a



learning and rule based system (e.g. conversations for a neighbourhood specific citizen group are likely to be in the context of the neighbourhood). We can provide a geographic context ~30% of locationless data, much more than can be achieved using naive approaches.

4. **An anomaly detection engine** which can produce alerts when out of the ordinary phenomena appear in citizen conversations (e.g. there's a peak of negative conversations around a topic). we've implemented linear convolution with a moving average to detect anomalies. We've implemented this algorithm ourselves since it's not based on any openly available library, but on statistical analysis of the data.
5. **An image classification engine** which helps provide context for conversations which include images (e.g. photos of garbage on the street, graffiti, cracked pavements, potholes and other types of common city phenomenon). The image classification engine is a self-trained CNN (convolutional neural network) implemented on TensorFlow.

Our current process of analyzing data includes ingesting the data into our own pipeline which analyzes the data using a pipeline with some, or all, of the core services described above. We are experienced in building dedicated ETL (extract/transform/load) data pipelines and bespoke Artificial intelligence models based on citizen customer experience data, in case those are needed to support data streams as they are collected by the city. Our technology stack is based on proprietary modifications on top of heavily used open source libraries such as NLTK, Gensim, SKLearn, FastText and Tensorflow, and we use external APIs such as Google Vision and Microsoft's Cognitive Toolkits and AI APIs when applicable.