How can the Local Government of Pasig Encourage Workers/Employees to "Bike to Work?"

Background of The Survey:

Pasig city aims to make biking a feasible option for its constituents by improving both biking policy and infrastructure. To craft inclusive policies and projects that would encourage constituents and employees working in Pasig to bike to work, the local government ran two sets of online surveys to collect stakeholder feedback and extract key insights related to the topic.

Objectives of the Survey:

- o Identify opinion groups related to the policy topic;

- o Understand citizen sentiment and opinion re: biking to work;

- o Identify key points of conversations and opinion groups; and,

- o Highlight key concerns about the initiative, to inform policy and LGU programs.

Methodology

Pasig LGU ran two sets of survey collection sessions; the first one is for pedestrians and the general public while the second is targeted specifically at MSMEs and their management. Below is a high-level flow of the feedback collection and analysis process.

Initial meeting with Pasig LGU and formulation of survey questions → Opening Citizen Assembly → Feedback data collection and analysis → Closing Citizen Assembly and presentation of results

Feedback Collection Process and Instruments

The primary feedback collection tool for this topic is Pol.Is.

The Pol.Is survey for this topic has 34 (1st survey) to 39 (2nd survey) topic-related statements. The statements are in English, with Filipino translation. Respondents voted either agree, disagree, or pass, for each statement. At the end of the survey, participants may also submit open-ended feedback regarding the policy topic.

Feedback Collection Summary

Under this policy topic, Pasig conducted two iterations of the survey collection and analysis process. One is for pedestrians, while the second iteration is specifically targeted to MSMEs. Below is a summary of the two feedback collection iterations:

Survey Iteration	1st SURVEY	2nd SURVEY
Target respondents	Pedestrians, general public	MSMEs and management
Opening Citizen Assembly	July 11, 2022	August 30, 2022
Closing Citizen Assembly	August 11, 2022	August 28, 2022
Days of Feedback Collection	26 days	26 days
Number of Individual Voters	403 voters	158 voters
Number of Statements	34 statements	39 statements
Number of Qualitative Feedback Received	280 rows	76 rows
Number of Opinion Groups Detected	3	2

Opinion Groups Identified

In a certain policy-related topic, 'factions' can emerge. Opinion groups are similar to 'factions' when it comes to a policy topic. These are groups of voters that voted similarly on certain statements. This means that an individual will most likely fit into a certain opinion group when it comes to the topic of discussion. For the first iteration, THREE opinion groups were detected, while in the second iteration, there are only TWO opinion groups that emerged. The following describes what these opinion groups look like.

For the first polling, THREE opinion groups were detected:

Opinion Group A	• This type of respondent is mostly not bothered by the heat, rain, the sweat. • This type of respondent is typically physically fit and strong to ride a bike to work on a daily basis.
Opinion Group B	• This type of respondent is NOT aware of the policies that give priority to pedestrians and bikes. • This type of respondent is NOT aware of laws that promote the development of sidewalks and bike lanes.
Opinion Group C	• This type of respondent mostly worries about the cost of biking. • This type of respondent is not bothered by rain when biking, a trait similar to Opinion Group A. However, this type of respondent also claims that they usually don't have the energy to ride a bike. • This type of respondent mostly uses public transport in Pasig.

For the second polling (for MSMEs), there are TWO opinion groups that were detected:

Opinion Group A

- This type of respondent usually works from home.

- This type of respondent tends to be employees of medium or large enterprises.

- This type of respondent is aware of existing policies that promote biking, including the Pasig City 2011 ordinance that mandates establishments to have bike parking facilities.

Opinion Group B

- This type of respondent tends to go to work in person.

- This type of respondent tends to be employees of MSMEs.

- Majority of respondents under this group are NOT aware of existing policies that promote biking nor policies that mandate establishments to install bike parking facilities. This is a key contrast with Opinion Group A.

In brief, for the first iteration (the general public), the key differences between the opinion groups are:

1. Physical fitness to bike to work;
2. Awareness of existing policies that promote biking; and,
3. Those who are worried about the cost of owning a bike.

For the MSMEs, the key difference between the opinion groups is the awareness of existing policies that promote biking. Even though the majority of the respondents claimed to be aware of existing policies (these are mostly employees of medium to large companies), the MSMEs, the focus of the survey, are not.

Points of Consensus (for MSMEs)

For MSMEs, both opinion groups agree on the following:
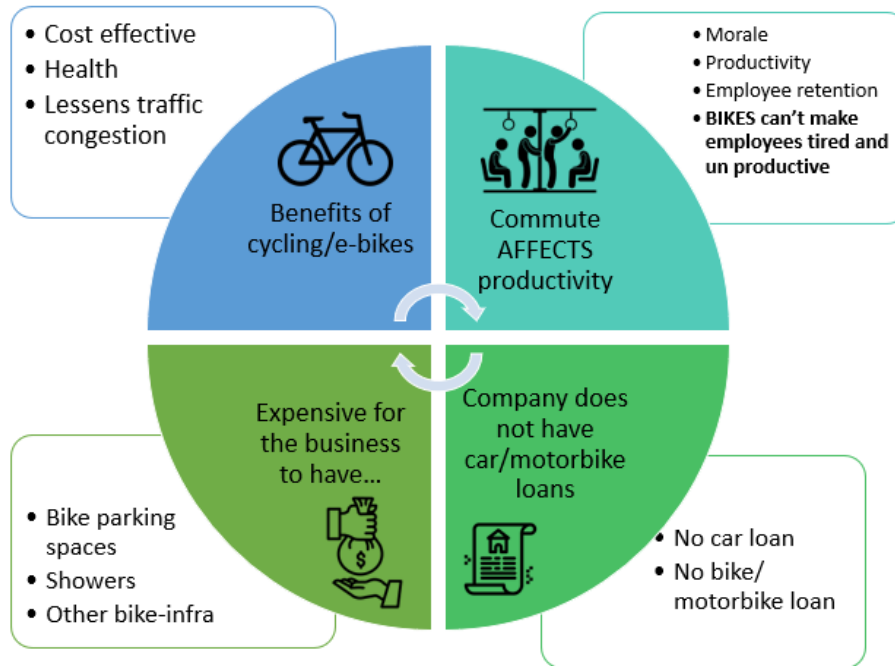
The respondents are already aware of the health and economic benefits of biking. Additional information dissemination about this may not be as necessary. On the other hand, additional information about the cost of owning a bike and how best they can fill the bike-related infrastructure requirements for businesses is something that both opinion groups agree on.

Points of Uncertainty (for Both Iterations)

Both survey iterations raise the following points of uncertainty. This means that a significant number of voters, regardless of opinion group, voted 'pass' on these statements:

- Cost of owning a bike or an e-bike
- Availability of charging stations for e-bikes.
- The preference of employees whether to commute or bike to work

If these points of uncertainty are addressed and clarified, it offers great potential to convince non-bikers to try biking to work.

Mining Insights from Qualitative Data

Apart from the votes, respondents also submitted feedback in an open-ended format. From the hundreds of qualitative feedback received, key topics and insights were mined using Natural Language Processing or NLP.

On the left is a word cloud visualization showing the frequent words included in the qualitative feedback for the 1st iteration.

The topic mining model showed the following key concerns and suggestions:

Iteration	Category	Label
1st survey (for pedestrians)	Suggestions from respondents	• More sidewalks and pedestrian lanes • Strict implementation of rules and regulations • Make parking spaces safe and secure
	Main concerns of respondents	• Safety of riders • Inconvenience in bike lanes (heat, occupied, etc.) • Lack of visual signs • Requests for road repair
2nd survey (for MSMEs)	Suggestion from respondents	• Give bike loans to employees • Have bike rental/sharing programs
	Main concerns of respondents	• Safety of riders (Hold-ups and accidents) • Weather conditions not fit for biking • Improve street lanes and signages • Improve lighting • Have more bike lanes • Fair and strict implementation of policies

Highlights:

- 68% of non-bikers are willing to bike to work if given a chance or concerns are resolved.
- The number one concern of the respondents for both survey iterations are their safety and protection.
- Participants are willing to compromise things such as timid weather and physical toll on the body due to biking to work.
- Both survey iterations stress the importance of strict implementation of road rules and regulations.
- Both survey iterations suggest having a form of assistance from both the government and private companies to encourage employees to bike to work. These may be in the form of bike sharing/rental programs and bike/e-bike loans.
- **Opinion Group B for the 2nd Survey (**MSME employees) are not aware of existing policies about biking in Pasig.
- For both surveys, a common uncertainty is the cost of owning a bike/e-bike, which includes the availability of charging stations.
- For MSMEs, a major challenge is installing bike spaces/shower rooms as it can be costly.
- Businesses are not sure whether their employees would prefer biking to work, or just use public transportation, hence the difficulty in designing programs that best support the commute of their employees.

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END OF REPORT
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