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RESEARCH ARTICLE

HOW AN APPLICATION CAN ASSIST IN PUBLIC SAFETY

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Abstract

This article provides a broad view on public safety in the city of Manaus, with data of robberies, robberies, among others, these data were taken from the statistics of the website of the Secretariat of Public Security (SSP-AM), in addition to the data of the SSP also we collected some data to be able to confirm according to the reality of the citizen, proposing a mobile application, whose function is to assist in communication between people in a particular street, neighborhood or different parts of a city. Based on this analysis, an application called community security system was developed.

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Introduction:-

In everyday life people are robbed, suffering attacks, feminicides, thefts, theft of cars and motorcycles, among others, this becomes a reality of society. According to Vaz (2017, n.p) Public security as an activity developed by the State is responsible for proposing repression actions, inhibiting criminal apology and socially reprehensible acts, offering forms of protection to the citizen, ensuring collective protection.

There are in the newspapers, merchants seeking means of security for their establishments, others trying to find ways to secure themselves, leaving their jobs on account of working hours and some coming to the point of carrying weapons illegally to try to protect themselves in some way. According to G1 (2021)

Because of insecurity, merchants are working behind bars. The fear of the action of the criminals caused the merchant Amauri Vilaça to put bars in his grocery store. The problem is that with customers banned from entering the establishments, sales have dropped.

According to the Secretariat of Public Security of Amazonas (SSP-AM), Manaus has suffered from high crime, by dispute of criminal factions, among other reasons, generating a wave of frequent assaults. In 2020, the Security Secretariat itself recorded 33 cases of latrocinium in the city (SSP-AM, 2020). With these data there is the perception of how much the security system can not prevent much of these crimes, especially when it comes to robberies, which is one of the major problems, in 2021 there were 44 cases of the same type, robbery followed by death (SSP-AM, 2021), that is, anyone can become another number of statistics. In 2022, with data collected from the Secretariat, until June, there were 21 cases of latrocinias (SSP-AM, 2022).

Insecurity on the streets has been worrying the population, because of this, they feel afraid that at any moment they will be assaulted. Today there is no means of alertness or efficient communication that shows what is happening on the streets, for this reason, people need to leave home to follow their daily lives and end up having the misfortune of being assaulted at some point, or worse, suffer a latrocinium. Not to mention the risks of living in areas of risk

where drug trafficking thrives, where there are conflicts of rival factions and occasionally there may be stray bullets, at this time is when the citizen is exposed and without the capacity to defend.

The system of Ronda in the Neighborhood made by the police is not enough to pass the aspect of security, the vehicles pass by shift and in the time in which they do not pass, become vague to criminals, this is when the community is exposed, if every citizen had an application in which he interacted with the community, could make their own security in that vague time, an application in which agents will publish if there is any assault or suspicious persons, theft or attempted thefts, among other types of crimes. The idea is that the community join forces to prevent crime, so the tendency is to reduce the crime rates that occurred in the city.

Since in Manaus there was a 48.9% increase in deaths between 2020 and 2021, one of the main factors for this statistic is the dispute of criminal factions (G1, 2022).

If there is a means of communication between people, these problems could be mitigated in some way, those people who just want to go out to work and return safely at the end of the day, so the idea of an application that with the support of the population can prevent these problems from continuing, let more and more people register and use, the greater the range to help others, thus being able to avoid assaults, because the citizen will be aware of what is happening on his own street or in his destination, and it is up to the person to make a decision. A cross-platform application whose purpose is to assist in the safety of the community. Confirming the perspective of Cabelho, Escolastico and Fernandes (2021, p 58-59).

[...] the practical cordiality of the Community Police signs ties of a mutual feeling that the police and society must solve the problems of the community, as well as society must help the State to solve the difficulties of the police.

Given that it is essential that the police and society come together and work together to reduce crime rates. Since "the concept of Community Police requires and requires effective participation of society." (CABELHO; ESCOLASTICO, FERNANDES, 2021, p. 28 apud SILVA, 2019, p. 31).

To enjoy an application that reports the daily events, where the community itself can cooperate in collaborating in monitoring, would be of great help to decision making, considering that the events of everyday life will be published. The dissemination of situations such as assaults, attempted robberies, suspicious attitudes, among others, is fundamental, since it is a way to protect yourself at times when policing does not make the rounds. We live in a technological world in which information is transmitted instantly, the power to use this transmission capability for monitoring is of great importance, so the technology will be used in favor of the community.

The aim of this article is to present an application whose purpose is both to assist the citizen in decision-making and to contribute to public security, helping to combat these crimes, reducing the rates by frustrating the actions of criminals.

Theoretical Reference

Public Safety

The concept we have about Public Security, according to Costa and Lima (2014, n.p).

Integrated and optimized set involving instruments of coercion, justice, defense of rights, health and social. The process of public security begins with the prevention and end in the reparation of the damage, in the treatment of the causes and in the reinclusion in the society of the perpetrator of the illicit.

The citizen has a fundamental role in public security, because without the support of the population, the police do not effectively fulfill their duty, just as without the support of the police, the citizen could not live in society, one depends on the other for the gears of society to work. To complement the thought, Costa and Lima cite Dias

Public Security, provided for in the law, concerns law enforcement officers, police officers, properly prepared and qualified, members of the police power, tasked with always preventing, repressing when necessary, with emphasis on the latter obligation in supporting citizens. Public Safety complements Personal Safety: Personal Safety is completed with Public Safety! The citizen in principle prevents, the police repress (COSTA and LIMA, 2014, n.p apud DIAS, 2003, p.5).

Crime

Focusing only on crime on the streets of Manaus, such as robberies and homicides for example, we have the concept described by Carlyle (2019, n.p)

[...] it is the occurrence of conduct contrary to the legal precepts that inhibit violence, and direct or indirect disobedience to legislative dictates materialized in criminal laws.

That is, crime is associated with crime, which can be committed by any citizen, both of the highest hierarchy and the lowest in a society. Therefore, those who disobey the laws of the country in which they live will be subject to punishments, such as fines, imprisonment, depending on the criminal act and the country, even the death penalty.

Application

We created the project in application form, so that the largest number of people is reached and thus increasing the confidence of the application, the greater the number of people using and participating in the application, the greater the effect it will have on crime rates.

According to Da Silva e Santos (2014, p. 162)

[...] a mobile device has become an opportunity for entertainment, access to information and problem solving, thus integrating into people's daily lives and facilitating various day-to-day tasks.

PHP Programming Language

PHP was used to create the application, because it is better known to programmers, thus facilitating the development of the project. The idea of working with PHP is also given by the fact that it is possible to make the project responsive, that is, that it is possible to better view on the phone, which is the main focus, that users use the application by mobile phone.

According to Dall'oglio (2015, p. 21)

The PHP programming language, which at first meant Personal Home Page Tools, was created in the fall of 1994 by Rasmus Lerdorf. This language consisted of a set of scripts written in C language, aimed at creating dynamic pages that Rasmus used to monitor access to his curriculum on the Internet.

HTML Hypertext Tagging Language

To work with web development it is necessary to use HTML, it is easily interpreted in several browsers, and the reach is much greater, reaching a larger number of people.

According to Silva's thinking (2019)

HTML is the Acronym for HyperText Markup Language, which, in Portuguese, stands for language for hypertext tagging.

[...] we can summarize hypertext as all the content inserted in a document for the web and that has as its main feature the possibility of connecting to other documents of the web.

Linguagem CSS (Cascading Style Sheet)

The CSS language aims to manipulate the style of the page, making the user have a better visual experience, which feels more comfortable when accessing the application. For Scheidt (2015, n.p) CSS is the main technology used to define appearance. Scheidt (2015, n.p.) also says that:

CSS or *Cascading Style Sheet* is a language focused on creating style sheets on web pages. The term style sheet means the description of a set of rules *that* allow you to define the appearance of a website. When we talk about appearance, we are referring to the various features that exist on a page.

Methodology:-

Quantitative research was used, according to Mattar and Ramos (2021) "is experimental, empirical and static; uses instruments for data collection, such as scales, tests and questionnaires, and is deductive."

The type of exploratory research was used, according to dos Santos' thinking (2016, p. 1).

The objective of an exploratory research is to familiarize one another with a subject that is still little known, little explored. At the end of an exploratory research, you will learn more about that subject, and be able to build hypotheses.

That is, the chosen theme is little known, seeking something new that can be useful to contribute to society, in addition to the knowledge acquired with this theme.

Google Forms was used to search with the public, in which we can create forms and share to various contacts. From there the questionnaire was elaborated, after this was generated a link so that we could forward the form to the general public, the distribution of the link was made by social media, such as Whatsapp, email and Messenger, with this was reached a larger number of people so that the data were more reliable, and also to give their opinions on the subject and with this were collected the data to support this article.

Google has allowed with this search tool, ordinary people can collect data for your articles, academic papers, and other activities that might be useful.

According to Mota (2019, p. 373)

The great advantage of using Google Forms for search, whether academic or opinion is practicality in the process of collecting information. The author can send to respondents via email, or via a link, so everyone can reply from anywhere.

Following this thought, we feel more comfortable using Google Forms, both for the trust we have in the platform and for the practicality to create, edit and share the form from wherever we are.

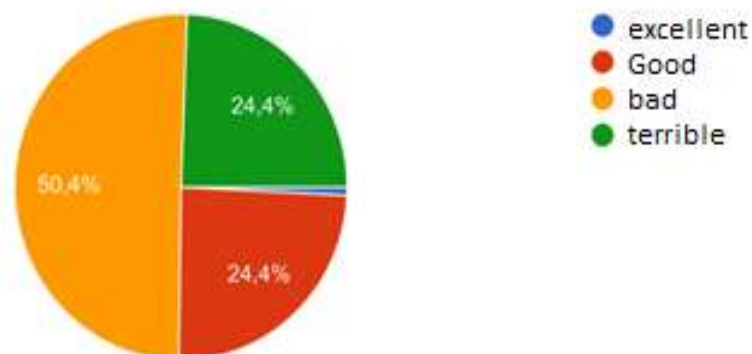
Results:-

We thought of a way to confirm our point of view on the insecurity that citizens feel in the city of Manaus and that how necessary can be an application to assist each other in relation to the safety of the community itself, therefore was developed a questionnaire with 8 objective questions of multiple choice, aimed at people living in Manaus, to show the reality of security in their respective neighborhoods, so we received 131 responses, more than we expected, which is great to give more reliability to the research. From there we realize that the trust that people have in security and policing is low, we realize that there is negligence on the part of the authorities in relation to the subject. The upcoming charts give us an idea of how great the lack of confidence in Public Safety is.

Graph 1:- How do you evaluate Public Safety in your neighborhood?

How do you rate public safety in your neighborhood?

131 answers



Source: Autores, 2022.

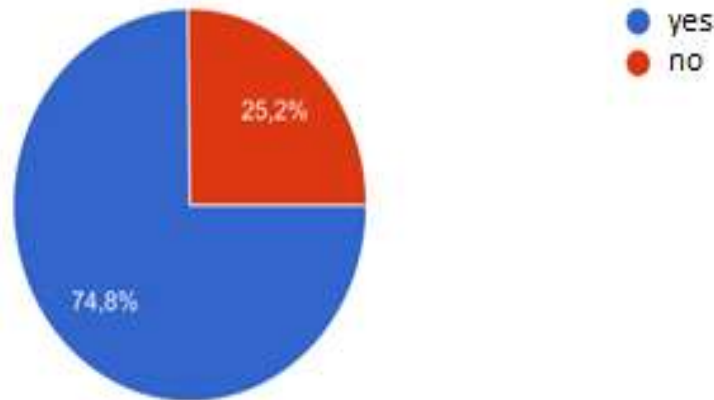
Note in chart 1 that 0.8% of respondents voted for the Optimal option, followed by 24.4% in Bom and 50.4% in the Bad option, in the Bad option.¹

Given that more than half of the answers were in the Bad option, Graph 2 shows us why most people think this way. The data show that many people were victims of assault, and this gives reason for the population to find public security in Manaus bad.

Graph 2:- Have you ever been a victim of assault?

Have you ever been a victim of robbery?

131 answers



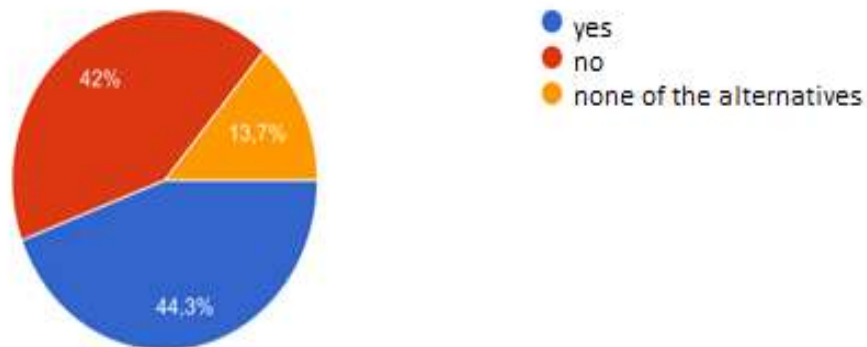
Source: Authores, 2022

It is noted that approximately every 100 people, 25 have suffered from assaults. 74.8% of respondents voted yes while another 25.2% voted no.

Graph 3 shows the data of the people who were assaulted and recorded the Police Report. People who don't register may have a variety of reasons for this, from not having time to register until they don't know how to register.

Figure 3:- Have you registered the Police Report?

Did you file a police report?
131 answers



Source: Authores, 2022.

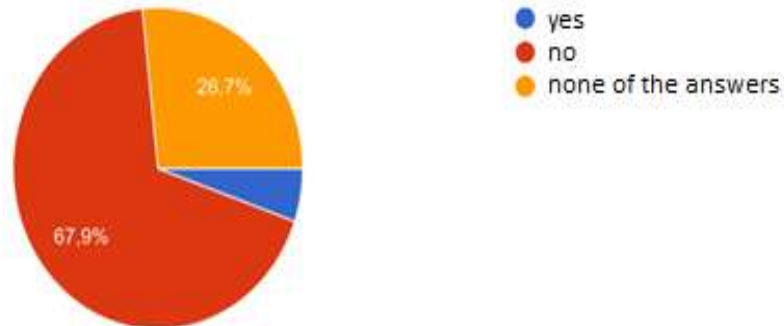
¹ Who answers questionnaires, surveys, general questions, among others.

We see that it is divided between registering the newsletter, 44.3% and not registering, 42%. 13.7% did not want to answer.

Therefore, for those who have registered the Police Report, it is stated in Graph 4 that most people have not had the problem resolved.

Graph 4:- Has the problem been resolved?

The problem was solved?
131 answers



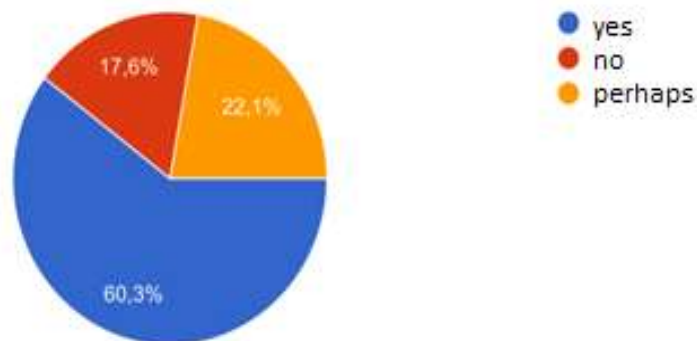
Source: Authores, 2022

Since for those who were victims of assault and recorded the police report, only 5.3% of the cases were solved. We noticed that 67.9% of the cases were not resolved. Since when small objects are stolen, the authorities can hardly recover them. 26.7% did not want to answer.

For the tool to be effectively useful, as shown in graph 5, it is perceived that frequent assaults occur in the neighborhoods of Manaus, so the citizen has the option of making use of the tool to alert others.

Figure 5:- Are burglaries in your neighborhood frequent?

Are burglaries in your neighborhood frequent?
131 answers



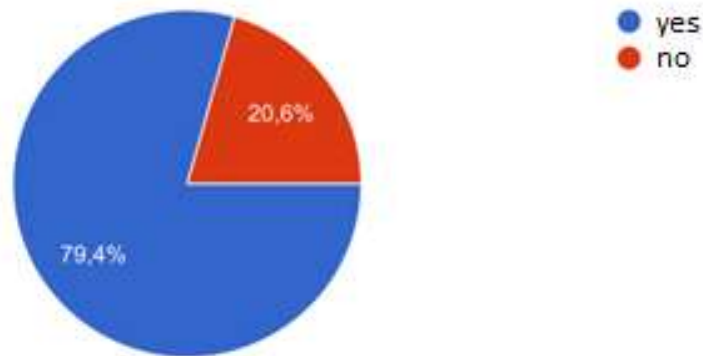
Source: Authores, 2022.

According to graph 5 it is evident that the neighborhoods of Manaus are dangerous, where 60.3% answered that Yes, assaults occur frequently. 17.6% answered that No. Another 22.1% answered perhaps.

To better explain the need for a tool for the help of the citizen, we noticed that about 79.4% have seen a robbery happen, another 20.6% answered that No, as seen in graph 6.

Graph 6:- Have you ever seen a robbery going on?

Have you ever seen a robbery happen?
131 answers

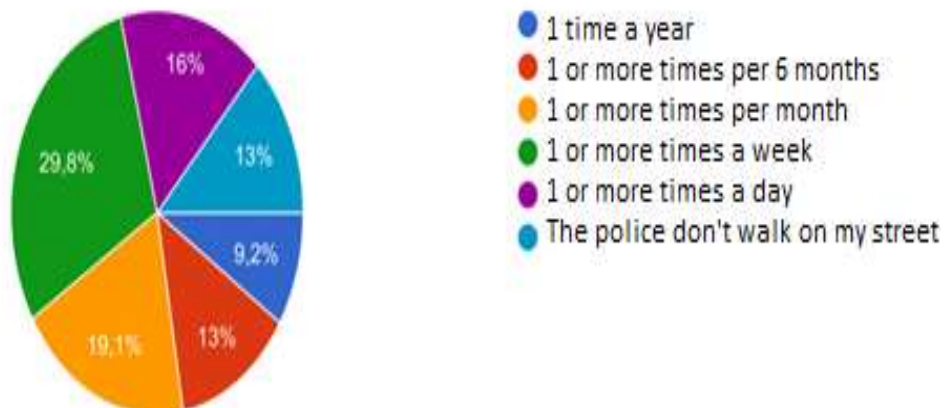


Source: Authores, 2022.

When observing Graph 6 we note that the application can be useful in these cases, in which there is clear evidence that when a robbery occurs, the citizen can warn the others, making them may be on alert.

Figure 7:- How often do the police walk down your street?

How often do the police walk on your street?
131 answers



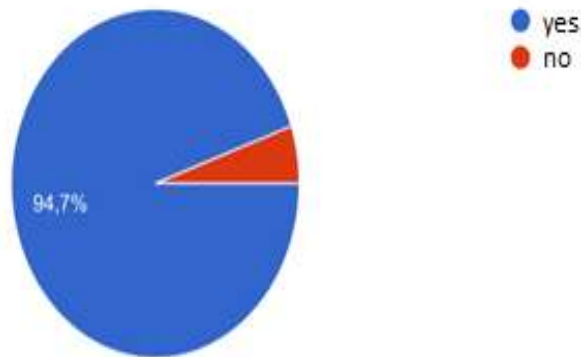
Source: Authores, 2022.

In graph 7 we can observe that the lowest percentage is given to the police do not pass through the street, this can occur for several reasons, one of the main conditions are the precarious conditions in which several streets of the city of Manaus are. According to Duarte (2022), there are situations in which the streets are paved, but only in half, the population charges the city, but nothing is done.

There is a demand for an application that assists the authorities in combating crime in the capital of Amazonas, Manaus, since according to research conducted for this article, was not found application to make this aid to the community.

Figure 8:- If there was a way to help the population in community safety through application, would you participate?

If there was a way to help the population with community safety through an app, would you participate?
131 answers



Source: Authores, 2022.

According to graph 8 data, 94.7% of respondents are willing to use an app that will help the population with the support of the residents themselves. 5.3% of respondents voted NO in our survey.

Discussion Of Results:-

The results collected in the graphs show us that the objective of the application is feasible and that they confirm the problems in relation to public safety. The evaluation of those involved in the public safety survey evaluated as bad and bad according to graph 1, with the bad option being the highest percentage, this indicates a warning sign and we see that the objective of the project has great value in this scenario.

The high rate of people surveyed who responded to the survey is much higher than we thought at the beginning of the project, graph 2 indicates 74.8% have already suffered assaults and this is alarming, in graph 3 shows that 44.3% registered the police report and 42% stopped registering, this shows the fragility of policing in neighborhoods and how much people do not trust that the problem will be solved.

According to Graph 4, 67.9% of the data indicate that the problem has not been solved, this may be a factor by which almost half do not record the police report. And 60.3%, according to Graph 5, indicates that neighborhood robberies are frequent, well above average, this worries citizens on a daily basis, as they already come out of the house for fear that they may be assaulted.

According to Graph 7, the frequencies of police patrols vary widely, and some indicate that the police do not even pass the streets of some neighborhoods, a variation is shown in which the rounds take up to weeks to pass.

According to graph 8, it is displayed how much people see with good eyes an application or tool to assist in daily life, which can have information to make decisions, since 94.7% confirmed that they would use the application. With this there is a great possibility of the application becoming very used by the population, so there is the possibility that crime rates can be mitigated.

Final Considerations

Given the reports and data collected, we see how real public safety problems are and affect residents every day, analyzing these problems we think of a way to help the community, keeping in mind a method to try to reduce crime rates by providing an application, so that each citizen can have on his cell phone and contributing together with other residents to publish daily events that are relevant to the community security, that each citizen can rest assured about events related to community security, obtaining the information so that he can make his own decisions before

they go their way, thus softening the crime rate that occurs daily in several neighborhoods in the city of Manaus, frustrating the action of criminals.

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