Problem Solving (A3) Report

1. Identify a Problem PLAN

ASK:

- What is the standard
- Does it reflect the customer's point of view?
- Is understood by those doing the job
- Are we meeting the standard?
- What is the GAP
- Gather facts as known from Gemba

 Who, What, When, Where
- How important is it to solve this problem?
- What did you do to contain the problem?

SHOW:

A clear statement of the problem using sketches, graphs, and charts

TOOLS

Line graph, prioritization Matrix, 4Ws. Tree diagram, pareto diagram

2. Set the Target PLAN

ASK:

• What are your intermediate targets (milestones) and when do you expect to achieve them?

SHOW:

A statement or graph indicating targets

3. Analyze the Causes PLAN

ASK:

- Why does this problem occur?
- Do potential causes map to the known facts?
- What are some reasonable assumptions to make about potential causes (where should we look first)?
- Can we gather more facts to help determine Root Cause?
- Can we explain the cause and effect relationship plausibly?

SHOW:

How we arrived at the Root Cause

TOOLS:

Fishbone diagram, pareto chart, tree diagram

Topic: The Voice of the People **Date:** August 19, 2020

Name: Jean Carlos Rodríguez

4. Propose & Implement Countermeasures

PLAN/DO

ASK:

- What countermeasures are most likely to eliminate the Root Cause?
- Which countermeasures are most feasible and effective; likely to cause the least impact; what is the cost, difficulty?
- Can I select the countermeasures that will achieve my targets?

SHOW:

Countermeasures and why they were selected

TOOLS:

Countermeasures Matrix

5. Check/Evaluate CHECK

ASK:

- Did the countermeasures work?
- Was the target achieved
- Can I verify that the Root Cause was eliminated (can I turn it off & on)
- If the Countermeasure was not effective, why didn't it work

SHOW:

The results; describe the reliability of the new process

TOOLS:

Line graph, pareto

6. Act and/or Standardize ACT

ASK:

- How will we ensure the process continues to work (stays solved)?
- What have we learned?
- Where else can we apply this learning?

SHOW:

New or changed procedures, plans to apply learning in other areas

TOOLS:

Standard Operating Procedures

Template by Ignacio Tampe

1. Identify The Problem

For decades now in PR, every city/town's community has suffered from not having a simple and reliable form in which they can file petitions and/or complaints that won't fall on deaf ears. The current, and only, standard is to file complaints/petitions (this can be physically, by phone call, or email) followed by hoping and praying that both the complaints are acknowledged and that changes arrive. This standard doesn't at all reflect the customer's point of view because customers (the people that are part of the community in question) generally want changes to arrive in a timely manner.

- Is the problem understood by those doing the job? In this case, those doing the job are those who are in charge of managing a specific town/city. These people, including the mayor, generally work in the town's corresponding town hall (what we know as: alcaldía). It is my belief and that of most people in Puerto Rico that most people who work there either do NOT see the customer's (community of the town) needs and point of view or choose to ignore it.
- Are we meeting the standard? The standard isn't being met. Using the quality of streets as one example, many imperfections (which vary in severity from slight imperfections to large imperfections) can take from months to years to be fixed.
- How important is it to solve this problem? To my understanding, this problem (which lowers the community's quality of life) has been a primary issue of most if not all communities in Puerto Rico for decades. Something as basic as being able to voice concerns and easily create petitions which won't fall on deaf ears is of great importance to any modern community.

2. Set a Target

The primary target to reach is that <u>if and when</u> an individual discovers something in their town that should be improved they are able to file a request (including details of the issue, location of the issue, and pictures if available) directly visible to those in charge of that town who can organize and perform a fix for this issue. The individual should also be able to see and support requests submitted by other members of their community. Ideally **once these targets are reached**, fixes will be performed for most issues leading to a vastly improved quality of life.

3. Analyze Causes

The causes of the problem at hand are hard to determine with 100% certainty due to the fact that we are unable to peek into how each municipality's respective mayor and their town hall carry out their daily work and how they process requests submitted by individuals from that respective municipality. In general, municipalities try to keep confidential how they carry out their work. There are some reasonable assumptions of causes for the situation at hand:

- There may be a lack of organization
- There may be a lack of interest and/or priority towards requests arriving from individuals that don't hold important (political) positions
- There may be faulty distribution of labor and funds that are meant to fix issues such as those we seek fixes for

These general assumptions we are able to make about town halls (alcaldías) are mostly based on many cases in which a lack of action was observed from their part. Some of these assumptions may also be supported by information leaked by people who work (or used to work) for these town halls. Once we acknowledge the fact that there are countless cases of political corruption in Puerto Rico, these assumptions seem even more understandable.

4. Propose and Implement Countermeasures

What we can do to contain the problem is to create a platform in which every community can submit petitions. These petitions will be visible to their town's corresponding representatives. Each petition will be public to other members of the community it's linked to. This will allow individuals of the community to not only be able to choose to sign and show support for petitions, but also to spread awareness for issues that are affecting their community. Allowing individuals to view and sign these petitions will allow the town's representatives to see the urgency in which these issues need to be addressed. This platform made to reach the targets mentioned earlier should, in the end, lower the chances for issues to end up being overlooked and speed up the fixes for issues which would regularly be addressed slower (such as potholes on the roads).

RAW (OLD) IDEAS

(Note: The ideas here may or may not be considered for this project, this is simply a collection of bullets I wrote when I initially came up with the idea for this project. It is in Spanish and there may be grammar errors.)

- El objetivo de "La Voz de Puerto Rico" o "Puerto Rico Opina" es proveerle a cada municipio una manera de crear peticiones para el bien de su comunidad.
- El metodo de autentificacion utilizado para que el voto sea legitimo y para asegurar que cada votante solo vote una vez sera utilizar el numero de la tarjeta electoral del usuario. Utilizamos la tarjeta electoral ya que es la manera de autentificacion menos compremetedora que asegura que el votante sea de una edad "razonable" para votar y que solo este votando una vez, a menos que por alguna razon el individuo posee dos tarjetas electorales.
- El usario tendra un perfil en el cual escogera su edad solamente para ser usada como un estadistico (muestral) (al presentar los resultados de una peticion, una grafica presentara el porciento de votantes por edad). La edad del usuario no determinara lo que puede y no puede hacer y no sera visible al resto de los usuarios (a menos que este lo desee).
- Cada usuario escogera su municipio al crear su perfil. En la pagina "Home" de la pagina web y la aplicacion, se presentaran las peticiones que hay en el municipio del usuario. El usuario tendra acceso a ver cuales peticiones son las mas populares presentemente, cuales son las mas recientes, las que pronto alcanzan su fecha limite, etc.
- El municipio solo se podra cambiar una vez cada mes, de esta manera aseguraremos que el individuo no cambie su municipio para votar en otros municipios que no conoce. Si se crean peticiones a nivel Isla el usuario puede votar en ellas.
- El voto sera "Si" o "No" apoyo.
- Cada peticion puede tener un foro en el cual usuarios pueden discutir dicha peticion (esta opcion es del usuario que publique la peticion). El foro sera cerrado una vez acabe el tiempo de la peticion.
- Las peticiones tienen la opcion de durar un tiempo determinado (como por ejemplo, un mes) o hasta alcanzar una meta determinada (por el creador de la peticion) de aportantes. Una peticion con una meta determinada tendra un tiempo de alrededor de 6 meses para alcanzar su meta.
- Cada peticion creada sera revisada por mi u otros individuos confiables para asegurar que no se creen peticiones inapropiadas o peticiones que ya han sido hechas. No habran dos peticiones iguales en un municipio.
- Si se hace una peticion y por alguna razon no alcanza la meta anticipada, los usuarios deben esperar 1 mes para poder crear la misma peticion. Por cada vez que no alcanze la meta, se le añadera un mes a la espera. Al otro lado, si una de las personas confiables que revisa la peticion [que ha sido submitida de nuevo] considera que el tiempo de espera deberia ser mas corto o que la peticion deberia ser submitida immediatamente, lo debe discutir con otros miembros del grupo. La peticion como tal es marcada en la base de datos como una que no se puede volver a submitir hasta que pase el tiempo determinado, de esta manera otros usuarios no pueden submitir le peticion tampoco.
- Si lo desean, los usuarios pueden editar la apariencia de su perfil.
- Si hay contenido inapropiado en un foro o perfil, el usuario que lo detecte puede reportarlo al equipo, quien tomara acciones razonables.
- Al alcanzar la meta o el tiempo decidido por el usuario, este recibira un certificado para presentarlo al gobierno del municipio. La peticion sera enviada por correo electronico a posiciones altas en el municipio (si es posible) para que estos tomen accion.
- En el futuro, es planeado crear una cierta localizacion en cada municipio de la Isla en la cual habra un aparato conectado a la internet en el cual las personas que no tengan acceso a la red (tal como muchas personas envejecientes) podran votar y crear sus perfiles.
- Toda interaccion entre el usuario y este sitio web o aplicacion sera completamente libre de costos. Todas las ganancias seran adquiridas utilizando anuncios (ads)