Leavitt diamond

# List of changes:

1. The Time Manager application will be extended to enable planification/HR follow-up on working teams (instead of using excel sheets, or paper versions). This should result, if used properly in a fairer schedule for those who work nightshifts.
2. The trucks will be equipped with GPS tracers, in order to be able to live-map their presence on the city map: thus, the managers can send the adequate team when there is an emergency.
3. All the employees (office staff and field workers) will be equipped with an electronic device (tablet) so that they can report instantly their work/needs/requests to the Central. It should make reactions faster than driving back to SWAG warehouses every time they need something.
4. Drones will be used to make surveillance in the various neighborhoods, in order to check up on the state of garbage collection and cleanness of the streets.
5. The trash cans owned by the citizens will be changed: they will be smaller, but equipped with captors that will send a signal to SWAG when full. This should let SWAG offer a more customized service to citizens.
6. An application will be setup to the public to report incidents and ask for sanitation services.
7. A monthly reporting of the performance will be organized in order to checkup on the various teams and be able to make up quickly for under-performing personnel.

## Change 1: use of the time manager application.

**Technologies :**

Introduction of a new application, used by HR, managers in charge of planning management, and employees who must enter their working time

**People:**

Training plan, for proper use and understanding of the application. The training must be adapted to the use of the employee

Adapting time

**Tasks:**

**HR**: Analyze data from the application, be able to make the right recruitment/dismissal decisions or make staff reassignments.

**Planning manager:** Analyze employees working times, and develop a balanced schedule on the application

**Employees**: Enter their daily working time and view their past and future planning

**Service provider:** deployment and configuration of the solution, technical assistance

**Service IT:** check installation on devices, in relation with the service provider, first level maintenance

**Organization:**

Promote an enthusiastic manager for the assistance and the control of the good practices of this new protocol of time and planning management. => User Referrer

Promote an IT department manager to monitor the deployment and acceptance of the solution. => IT Referrer

Promote an HR to be the referrer on this application for the HR department

The new goals :

* for HR is to relieve overworking employees.
* For the managers in charge of the planning must be able, ultimately, to generate balanced plannings in advance and anticipate emergencies.

Change 1 resume:

* Training plans for employees concerned
* After an introduction to the basics, select from the competent and enthusiastic people the referent managers
* Define new goals

## Change 2: Trucks equipped with GPS tracers.

**Technologies :**

Equip trucks with GPS, need two hours of immobilization of the truck, for the installation of the equipment and carrying out the tests

**People:**

Training plan (during installation for maintenance and IT), for proper use and understanding of the GPS Hardware installation and data visualization on software. The training must be adapted to the use of the employee

Adapting time

**Tasks:**

**Team manager:** get the emergency information, **retrieve the location of trucks**, notify the emergency to the nearest truck adapted to the situation

**Employees**: Get the emergency notification from the team manager (link to change 3), check if the GPS is on before start service

**Service provider:** deployment and configuration of the solution, technical assistance

**Vehicles maintenance department:** check installation on trucks and learn how to install it. In relation with the service provider,

**IT Department:**  Regularly check the compliance of trucks location. In relation with the service provider.

**Intern Project Manager:**  global coordination and reporting

**Organization:**

Hire an experimented project manager to oversee the transition.

Define a referent in the maintenance department, and in the IT Department to assist and resolve complex bugs (with the help of the service provider) , and develop a preventive maintenance plan.

Define a super user in team manager.

Need to defined an emergency process (what is an emergency, how to react rapidly and effectively

Identify at least two capable service providers, take the advice of an expert external consultant first.

Installation made by a service provider, with passing knowledge so that the maintenance department can install a GPS independently. Same for the IT department, be able to setup the software to get trucks location.

## Change 3: All the employees equipped with an electronic device (tablet)

**Technologies :**

Equip all employees with electronic device. All equipment must enter in the IT park management pool for centralized update management and settings

**People:**

Training plan for proper use and understanding. The training must be adapted to the use of the employee

Adapting time

**Tasks:**

**Team manager:** use this new device for : receive emergency alert, and communicate with right employees to solve it, set their working time, define planning for employee,

**Employees**: Use this device for : get the emergency notification from the team manager, send needs to central, set their working time, get their planning

**IT Department:**  enter all devices in the IT park manager software, set centralized configuration, technical assistance, preventive and curative maintenance

**Intern Project Manager:**  global coordination and reporting

**Organization:**

Hire an experimented project manager to oversee the transition. (the same hire for change 2)

Define a referent in the IT Department to assist and resolve complex bugs, and develop a preventive maintenance plan.

Employ 2 IT technicians to ensure maintenance and support

## Change 4: Drones used to make surveillance

**Technologies :**

Deploy drones to monitor street cleanliness

**People:**

Training plan for proper use and understanding. The training must be adapted to the use of the employee

Adapting time

**Tasks:**

**Team manager:** get emergency alert from drone pilot supervisor.

**Employees**: get the emergency notification from the team manager, (see in change 3)

**Maintenance department :** keep drones in right flight conditions, preventive and curative maintenance

**Drone’s pilote:** control round, anomaly report to team manager, definition of flight plan coordinate with garbage collector’s route

**Intern Project Manager:**  global coordination and reporting

**Organization:**

Hire an experimented project manager to oversee the transition. (the same hire for change 2)

Define a referent in the Maintenance Department to assist and resolve complex problems, and develop a preventive maintenance plan.

Employ 2 drone pilots, they will integrate the fielad teams, under the responsibility of the team managers. They need to know what kind off anomaly to report

**Environment:**

Explain the project to the municipality, define rules of respect for private life, and validate the charter by the municipality, define hover zones or not

Request for authorization to fly from the municipality

Maintenance contract with supplier / after sales service

Damage insurance

## Change 5: Citizen ‘s trashes change by trashes equipped with sensor

**Technologies :**

Deploy new trashes in the city

**People:**

Training plan for proper use and understanding. The training must be adapted to the use of the employee

Adapting time

**Tasks:**

**Team manager:** get notification when citizen’s trashes are full => adapte garbage collector’s route.

**Employees**: receive collect plan changes in real time and fallow this new route. Report sensor failure

**Maintenance department :** change the sensor if it is defective, ensure that the new bins are usable by trucks

**IT Department:** ensure the continued operability of the sensor information collection service, in connection with the service provider.

**Intern Project Manager:**  global coordination and reporting , define district order.

**Organization:**

This change will be made by a service provider coordinate with the intern project manager

**Environment :**

Citizen will be informed of this changes (explain why, when, how it’s work, what’s will be the difference etc…)

Change will take place step by step, discrict by discrit. Given the team’s adaptation time, we will start by easy discrit (who generated little wast in order to limit uncomfortable situations), when teams are ready we will move forward in the more sensitive neighborhoods.

Question / Response support hotline and information page on web site

## Change 6: application for public report incident and ask sanitation service

**Technologies :**

Deploy a new online public app, to receive citizen’s requests

**People:**

Training plan for proper use and understanding. The training must be adapted to the use of the employee

Adapting time

**Tasks:**

**Team manager:** get notification from hotline, and alert drone pilot to check effective anomaly. If effective, alert the nearest garbage collector.

**Drone pilot:** get notification from team manager to check anomaly and return information to team manager

**Employees**: get notification from team manager in real time to change route

**IT Department:** ensure the continued operability of the online app.

**Intern Project Manager:**  global coordination and reporting

**Organization:**

Develop the service hotline, hire a call receptionist who can send response to citizen requests and alert team manager if an anomaly is reported

**Environment :**

Citizen will be informed of the existance of this new app (explain why, when, how it’s work, what can they do on it etc…) (this communication must be after the deployment of drone and GPS trucks)

Question / Response support on app, FAQ , Changment in SWAG explaination

Change 7: Monthly reporting

**Technologies :**

Monthly reporting, analyse performance data

**People:**

Fill in employee gaps. Mentora system.

Training plan for employee in difficulties

**Tasks:**

**Department chiefs :** write performance report and analyze it

Take decision, if an employee in difficulties must have an additional training.

**Organization:**

Mentora system, create group with heterogeneous level, the best must bring the whole groupe to the top.