

# DUSTBUSTER

PROJECT INITIATION AND PLANNING



# **DUSTBUSTER**

Your company wants to build a new robotic vacuum cleaner.



Consumer market is quite saturated. But there are other segments (pool cleaners, industrial cleaners, etc..) with more relaxed cost pressure.









The purpose of this module is pretty specific, you **are not going to build the actual vacuum**, your job is to estimate the viability of the project. Nevertheless, all the aspects of the project need to be considered.

## What's your mission?

Your company wants to launch a new product. You are asked to planify all the steps from project idea to product launching.

Obviously, investors need intermediate steps:

- ✓ Proof of concept
- ✓ Prototype
- ✓ Industrialisation

Your managers (or investors) need to have **delay**, **cost** and **risks** of the project, in order to be able to give a go/no-go at each step.

Obviously you don't have all the skills to perform these steps, so you will need to setup a team, and/or to find subcontractors.



#### **Project definition and viability**

You will have to hold a **brainstorming session** with the rest of your project team, which will let you list all the elements you need to take into account for the project.

Especially you will have to define the product, according to a (quick) market survey (for instance: high end or entry market?)

Your team is in charge of having the project completed on time and with a satisfying level of quality. You're in charge of:

- ✓ Scheduling the different steps;
- ✓ Managing tasks completion;
- ✓ Allotting resources;
- ✓ Present a budget proposition;
- ✓ Guarantee risk containment;
- ✓ Identifying relevant skills and profiles;
- ✓ Reporting and communicating about the project.



#### Global project planning

You probably already have some standards about project quotation. Here we insist on a 2 folded project with some sort of recursivity in it:

- ✓ Managing or, more specifically, scheduling and staffing the construction project (this project will imaginarily take place outside of the T-CEN-500 time period);
- ✓ Managing your work as a team for the set up of the construction project (this part of the project is totally included in the T-CEN-500 time period).

Recursivity is a keyword here because you are asked to take the time to adapt your hand-ins any time it is relevant, so you'll need to regularly amend the versions your documents.

If at some point in the project, you spot something you forgot to take into account, and since the construction phase has not started yet, you'll have to add it to your previous plan, budget etc...

This is why you will have to select a project planning tool that will let you do just that. The expected format, in any case, is a **Gantt chart**.



You may want to make sure that you don't mistake a Gantt chart for a mere timelime. In which case, you'd probably better go find out more about it!



#### **Gantt Chart**

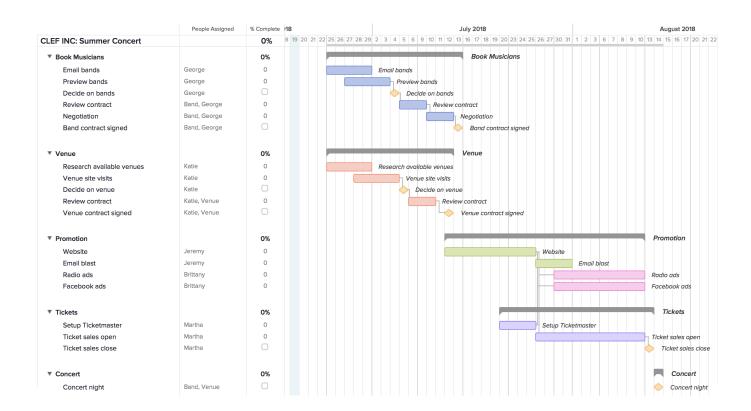
In the corporate world, people like when things can be foreseen, even if they know way too well that it is not enough to guarantee that things will happen this way.

If not more, a Gantt chart lets the company with a mile to follow, in order to set things up for budget, resources, workers, pitfalls.

#### What you are expected to hand in on this task

We ask you to identify all the steps that are relevant to the construction project and to create a Gantt chart with them. Your first version is expected to reflect this brainstorming explicitly and the unfolding you readily suggest. Of course, this version will need to be amended in the course of the 4 weeks to come.

#### Document name: groupname\_gantt





## Identify the skills needed on the construction project

Proper resource management is a critical skill for project management. Who do you need for the job, and how will they best contribute? Whether you're assembling a new team or utilizing an existing one, your team will need differing skills and mindsets.

#### What is it that you need?

Once you have brainstormed the steps you'll have to go through, it is high time you got down to business. Which skills are needed in order to complete the project? Take the time to closely consider all the aspects of each task and to sort them in categories, to the fullest.

#### What you are expected to hand in on this task

Now that you have a list of skills and knowledge to browse through, you are able to write down the profiles you will be looking for. This is called a **persona**: it will be useful when you will start the recruitment process, in order to make sure that all the skill needs are covered. You are expected to hand in 1 unique pdf file with one persona per page.

#### Document name: groupname\_skills



Reading carefully the last paragraph may already bring to your attention a step that you potentially forgot to take into account. Remember to update your Gantt chart if need be.



## Identify the resources you need on the project

#### Which resources are necessary for the construction project?

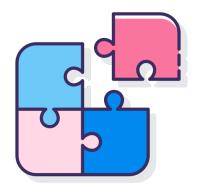
Now that you know who you need to hire, brainstorm and write down the blueprints, materials, devices, technologies, trainings, meetings...

#### What are you expected to hand in on this task

Hand in an Excel table listing the material needs (and quantity when necessary). Remember to amend the Gantt chart with the info related to resources.

Not all resources are available without delay.

Document name: groupname\_resources





## **Budget proposition**

Now you have the set of skills (and relevant profiles to be hired), and also the list of things you'll need to purchase. It's time for your team to prepare a budget proposition. Find out the various prices on the net, create categories of budget.

#### What are you expected to hand in on this task

You are expected to hand in an enhanced version of the list of resources you handed in the previous exercise. Remember to amend your Gantt with the deadlines for material purchase.

#### Document name: groupname\_budget



### **Risk management**

You can improve your project in many ways, but one thing you cannot control: unforeseen events. Take the time to identify what major risks threaten the success of the project, and how to tackle them.

#### What are you expected to hand in on this task

Write down 3 major threats your team identified and a possible solution for each (if money is involved, do amend your budget proposition, if time is involved, do amend your Gantt chart, if skills and materials are involved, do amend whatever is needed).

For each risk you should evaluate the **probability** and the **impact** of occurrence.

#### Document name: groupname\_risks



#### Communication

Communication is a milestone in each and every project. You definitely need to master it if you want to successfully manage a project. The interlocutors are varied, but we'll focus on 3 of them: someone from the inside, someone from the outside and someone from above.



#### What are you expected to hand in on this task

Hand in 2 pieces of communication (email, letters, brochures, requests, info videos... as you like) directed to:

- ✓ The members of your team in order to present the various aspects of the projects and how you're going to handle them, basically explaining your management methods.
- ✓ A member of your company board, to inform him/her of the budget request you are asking, explaining why you need this ridiculously high amount of money.

**Documents names:** groupname\_communication1, groupname\_communication2



Remember to amend your Gantt chart with these tasks!



## Delivery

The delivery consists in a **review** of your documents with your academic tutor, as a group.

You'll have to explain the pitfalls you encountered and how you managed them.





