

Exercise 2. SYSTEMS USERS AND FUNCTIONS

Or who is going to use it

In a vision of systems, the "conflict of the user" corresponds to a confused and ambiguous system when it is defined in natural language, and sure simplified more and precise after turning it "problem".

The "conflict" is solved by means of a service, normally through one or several objects, products, devices..., that will provide the "system solution" with their own and different classes from users.

Moreover, the system solution, as well as the devices that compose it, it has its service life as well, forming part of many other systems.

The "project" must give sufficient satisfaction to all the possible users, but primarily to the user "reason of being". In addition, it is had to have a special consideration with the "operating users", since on them it depends the reliability and effectiveness of the system. For that reason, it is necessary to assign tasks to them that can learn and fulfill.

The exercise has to cover the following points:

1. Approximated description of the service to provide
 - Needs of the main users
2. Approximated description of the system solution
 - Functional Analysis: Tree of functions
It must explain the role of people and machines on the first step
 - Table of functions of the "device", indicating measurement criteria and parts of it.
3. According to your project system life cycle solution, knowing:
 - Border of the system and main relations of dependency with other systems
 - Other systems of the service life

Write the SWOT of your project (Strong, Weak, Opportunity, Threats)



4. The well-being of the users of all the systems
 - Different types of users:
Operating user, consumer user, owner user...
 - Losses and gains for the all kind of users

5. The operating person before the exigencies of the system:
commitments and responsibilities
 - Actions
 - Decisions
 - Instructions of performance
 - Dangers for the person

6. Ergonomic judgment of the tasks to make
 - Physical Demands: movements: frequency, effort, amplitude
 - Mental Demands: interpretations, decisions,...