

Six Sigma in Administration

Six Sigma can help to improve services provided by the administration or to reduce costs and compliance with the budgets granted. Examples of measurable indicators can be: time of deliver of a service (example an approval of document of urbanism), time for fulfillment of some objectives, % of objectives fulfilled from total, time for invoices payment, etc.

For example: A Six Sigma project could be "Reducing the time of issuing the building permit." This process goes through several phases: documentation, studies, opinions, choices, options, deliberations. The key indicator which give the performance of the process and choosed to be improved is time for releasing the authorization (TEA).

For this, first we define the problem, identifies the process and team to work on the project. Specific tools of this phase (**Define**) for this case can be: Map process and collecting the Voice of the Customer.

Then we collect data and measure TEA and also the parameters that would influence it, x-s (**Measure** phase). Identifying of x can be done by one of the following methods: Brainstorming, Cause - Effect Analysis or Ishikawa, 5 Why?.



For example the TEA can be influenced by the correctness of the dossier submitted (G%), the area approved for construction (Sm2), the time of approval by the chief architect (TAA) and the number of partial signatures (Ns). These parameters are called potential causes.

Six Sigma Project : Reducing analysis time of a file and issue a construction permit
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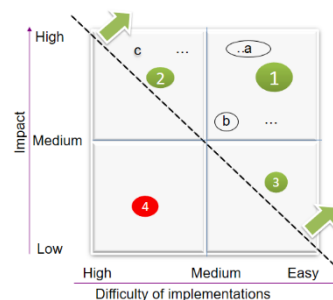
IPO diagram

| Input | Process | Output |
|---|---------------------------|--------------------------------------|
| G% - correctness of the dossier submitted Sm2 - area approved for construction TAA - time of approval by the chief architect Ns - number of partial signatures | Issue the building permit | TEA - time for authorization release |

If we demonstrate with data the influence, the potential causes become root causes (**Analyse** phase). Here, we can use more advanced techniques such as Hypothesis Testing.

After finding the root causes, in our example (TAA), it proceeds to identify solutions that implemented would eliminate or diminish the negative effects for which it was made the project (**Improvement** phase).

To find solutions we can use the following tools: Brainstorming, DOE (Design Of Experiment), Poka Yoke. Choosing the most efficient, those who consumed the fewest resources or those that are implemented as quickly is possible can be done using Prioritization Diagram and Cause – Effect Matrix (Pugh). In our case "Establish an office of public work" was the chosen solution. At the end of improvement phase we have already a pilot test conducted that demonstrate the effectiveness of implemented solutions. In this case TEA was reduced from 110 days to 30 days.



Now, in order to maintain the results, after some changes in the process, we need these changes to become a habit so to approach the **Control** phase. Documents of Quality Management System should be changed accordingly. In our case the procedure "Releasing building permit Cap 3.3" should be modify.

We invite you to Six Sigma courses organized by Effective Flux to reap the benefits of this methodology.