



My Digital Inspection Assistant

Smals

The BA Achievement Award is organised by



BA Achievement - My Digital Inspection Assistant

CONTEXT

Strategic goal

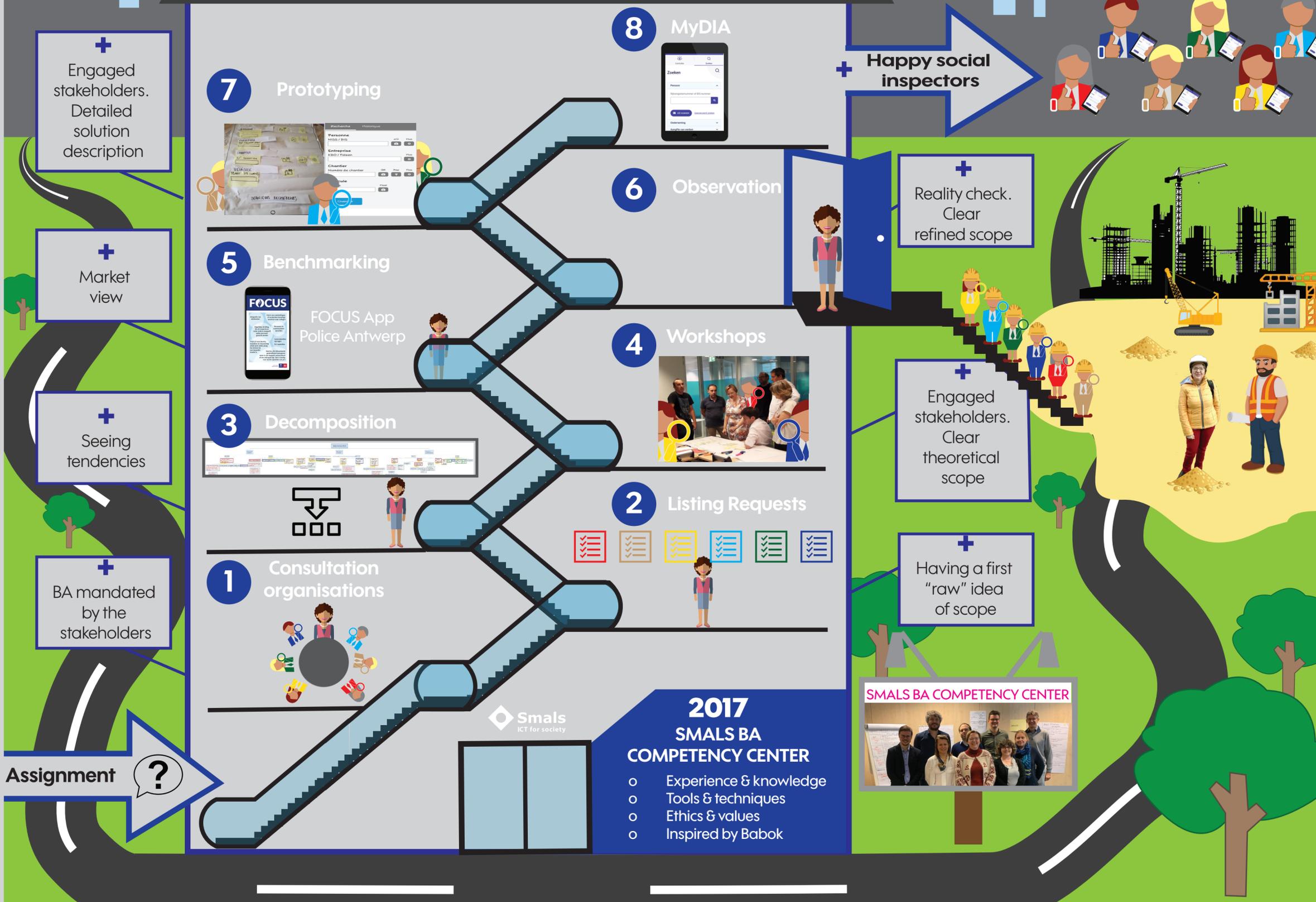
To defend citizens' (social) rights by combating social fraud and economic exploitation

Assignment

Determine how the social inspectors can be supported digitally in carrying out (joint) controls in the field.



Challenge



+ Engaged stakeholders. Detailed solution description

+ Market view

+ Seeing tendencies

+ BA mandated by the stakeholders

8 MyDIA

6 Observation

4 Workshops

2 Listing Requests

7 Prototyping

5 Benchmarking

3 Decomposition

1 Consultation organisations

+ Happy social inspectors

+ Reality check. Clear refined scope

+ Engaged stakeholders. Clear theoretical scope

+ Having a first "raw" idea of scope

2017 SMALS BA COMPETENCY CENTER

- o Experience & knowledge
- o Tools & techniques
- o Ethics & values
- o Inspired by Babok



Assignment ?

Achievement summary

What did you do?

"Within the Social Security in Belgium there are currently 6 different social inspections, each with its own scope of application:

- National Social Security Office (NSSO) (social rights of employed workers)
- National Institute for the Social Security of the Self-employed (NISSE) (social rights of the self-employed)
- National Employment Office (NEO) (rights and obligations of the unemployed)
- National Institute of Health and Disability Insurance (NIHDI) (rights and obligations of the sick and disabled)
- Federal Public Service Employment, Labour and Social Dialogue (application of labour legislation (e.g. working hours, working regime, etc.))
- Federal Public Service Well-being in the workplace (safety and well-being at work (sufficient safety measures, presence of sanitary facilities and a place to eat, etc...)).

These social inspections have an important strategic objective in common: to defend citizens' (social) rights by combating social fraud and economic exploitation. In order to do this as effectively as possible, these various organisations work closely together. Therefore, inspectors from the various organisations are regularly present when a control is carried out in the field.

Up to now, however, optimum cooperation in the field had been hampered by a number of stumbling blocks:

- Information, needed to carry out the control, had to be looked up before leaving the office. As a result, this information was not always up to date on site.
- Access to information from other organisations was very difficult (there was insufficient access to each other's data).
- Exchanging information between inspectors during a control was not always easy (especially in the case of controls being carried out on large sites).
- Registering information (on paper) during the control and exchanging it with each other afterwards, involved a lot of administrative work.
- Etc ...

The goal of this assignment was therefore formulated as: determine how the social inspectors can be supported digitally in carrying out (joint) controls in the field.

In view of the strategic objective and the goal of the mission, there were a number of important aspects to be taken into account:

- Digital support also had to ensure that cooperation between the social inspectors (whether or not from different organisations), who jointly carry out controls in the field, would become even more efficient.
- When choosing the final solution, we also had to take into account the physical context in which the inspectors carry out these controls, e.g. controls on construction sites - often without finished buildings to work in - or at night in the catering industry.
- In addition, we were also asked to look at how we could link digital support in the field to the preparation of the control and the processing of the results of the control afterwards in the office.
- Finally, we had to take into account that the success of this assignment would greatly depend on the extent to which the social inspectors themselves would see the usefulness of the solution. It would not be acceptable if the social inspectors had the idea that this was an innovation imposed by management without sufficient concrete added value for them.

Achievement details

Please explain the details of your initiative.

"In view of the goal of the mission and the different important aspects to be taken into account, a number of BA-challenges had to be faced:

- Firstly, the generally formulated problem statement had to be translated into a clear and concrete definition: what did the organisations want to achieve with this digital support? This definition had to be accepted by all stakeholders involved.
- The proposed solution had to be usable and useful for each of the organisations involved, despite their different scope of application. It was therefore necessary and important to avoid listening too much to certain organisations and too little to others. Stakeholder management therefore played an important role in this mission.

In order to meet these challenges head-on, the business analysis for this assignment was executed in several phases:

1. Document analysis

A number of organisations had already held meetings on the needs of their social inspectors in the field. At one of the organisations, a first version of a prototype for an app had already been developed.

Based on this information, we made a first list of requirements and needs. For the inspectors, the following aspects seemed to be of particular importance when carrying out a control in the field:

- having access to the relevant nearly real-time up-to-date data of the person/company being inspected
- simple and rapid registration of the facts established and the associated data.

2. Decomposition

The results of the document analysis were then presented visually in a structured decomposition.

Here we already made an initial subdivision according to the type of needs and requirements, including :

- Having access to relevant information :

- Having a contextualised view on the relevant data of the person/company to be controlled (i.e. information, available from all the different organisations, visible on one screen).
- Having access to documents, with information on previous controls carried out on the same person/company.
- Being able to manage information easily :
 - Quickly and easily register which persons have already been questioned during a control. This should also be visible to the other inspectors involved in the same control.
 - To be able to quickly register answers to questions in a way that this information afterwards can be easily used to draw up the inspection report.
- Use (new) technologies to make co-operation between inspectors and data processing more efficient.
 - Being able to identify the questioned person on the basis of his e-ID, QR code on an official identification document, etc ...
 - Being able to sign documents electronically
 - Being able to exchange documents electronically between inspectors (from different organisations)
 - Using speech technology (instant translate), drones, geo-tagging,
 - Etc ...

3. Workshops

During several joint workshops with the business experts of all the organisations involved, the requirements in the decomposition were completed and the priorities set (via root cause analysis and dot voting).

These workshops made it possible to identify more clearly which requirements the business experts believed would provide the greatest added value in the short term in the field and what they wanted to achieve with this project, namely :

- The social inspectors can quickly decide in the field whether the person being questioned needs to be checked more thoroughly or not (need for up-to-date relevant data).
This will allow more time and attention to be paid to the relevant cases, where now all persons are given the same amount of time (including those without problems).
- Cooperation between inspectors will be more efficient and the administrative workload of inspectors will be reduced (need for easy digital registration and exchange of information).

Now the inspectors fill in paper forms in the field, which are then copied and handed over to the other inspectors of the control, who then enter the information into their respective systems.

All the time being spent by the social inspectors on administration (though it is also necessary) can not be spent on their key task : performing controls to detect social fraud and economic exploitation. Reducing the administrative workload would therefore attribute to more time for the key task of the inspectors.

During the workshops, we consciously paid attention in a neutral way to reaching a consensus between all the business experts present.

If a business expert had a dissenting opinion, there was ample opportunity to argue this to the others. As a result, positions originally adopted were sometimes adjusted as well.

Remark : some of the original wishes seemed to be interesting, but according to the business experts they could be more interesting in the longer term (e.g. speech technology).

4. Benchmarking

In parallel with the workshops, the Antwerp police were contacted so that they could come and give a demo of a similar app that was created for the police force.

During this demo the business experts could ask questions about the app itself, but also about the way to get there: how did they proceed to determine the requirements, what were the stumbling blocks and points of attention?

5. Observation

Once the preliminary theoretical priorities had been determined, it was proposed to the various organisations that we, as business analysts, should go along with a number of social inspectors during controls in the field.

The aim was to answer the following questions:

- To what extent are the theoretical priorities in line with the daily needs of the social inspectors in the field ?
- What are the physical conditions in which the social inspectors have to carry out their controls ?
- How do the social inspectors themselves view the idea of digital support in the field (important in the context of change management) ?

Over a period of several weeks, we accompanied several social inspectors to all kinds of controls :

- With inspectors from all the different organisations (to see where the similarities and any differences between the different organisations were).
Indeed, it was clearly important for the organisations to take into account the specific characteristics of their organisation when making observations.
- Both in Flanders and in Brussels (to see what the possible regional differences were).
- In different sectors (to see what the possible sectoral differences were)
 - On large and small construction sites
 - In the catering sector
 - At large companies
 - Etc ...

The work of a business analyst therefore involves much more than just working in an office or behind a computer. For example, with safety shoes and a safety helmet on we stood beside the inspectors on construction sites to record the questions the inspectors need to ask. And during certain controls within the catering sector, the police went with us (just to be on the safe side).

During these observations, our attention was mainly focused on testing the preliminary theoretical results of the business analysis against practice in the field.

Interesting observations included the following:

- Certain things in which the business experts were very interested turned out to be more difficult in practice.
Example: identifying a person by reading the e-ID or scanning a QR code on an identification document. In practice, it often turned out (e.g. on construction sites) that people did not have these documents with them, but were only able to show a photo of them on their smartphone.
- Certain things that the business experts only saw the added value of in the longer term, turned out to be more useful in practice.
For example, when questioning foreigners who did not speak any of the national languages and who were unable to speak English too, the use of an instant translation tool could make it easier to question them.
Now, these people sometimes made a phone call to another person (who was not at the scene) and the inspector had to ask his questions by phone to an unknown person who was difficult to identify.
- The social inspectors indicated that they were really interested in more digital support in the field, on condition that they would be involved in the

elaboration of the concrete solution.

After all, in the past, similar initiatives had been less successful because they had been developed in consultation with people in the office and not with people in the field.

6. Prototyping

The results of the observations were then discussed with the business experts.

Following these results, it was agreed to make a design of the app : My Digital Inspection Assistant. The design was done in consultation with the social inspectors we had accompanied during the field controls.

The technique ""prototyping on paper"" was used, in which the social inspectors themselves were put to work to make paper mock-ups of the desired screens and functionalities.

The enthusiasm of these people to be able to participate in the design of an app that they would use afterwards on a daily basis, was very high. During the design sessions, you could really feel the energy in the room.

Thanks to this, our task during these sessions consisted mainly of :

- Ensuring that everyone was able to give their opinion during the discussions, and that after some time the decision was made.
- Monitoring the scope and the results to be achieved. Partly due to the great enthusiasm, sometimes wild ideas were suggested, after which it was up to us to challenge this. Our practical knowledge gained during the observations came in really handy here.

For the aspect of the user-friendliness of the screens developed on paper, we were assisted during the prototyping sessions by an experienced colleague from the Smals Usability team. He was then able to challenge the inspectors in that area and make suggestions to them.

7. Development phase

Once the business analysis was completed, the result was passed on to the functional analysts and the development team.

- In order to maintain the further involvement of the social inspectors, two social inspectors were found willing to act as Product Owners. Throughout this phase both the Product Owners and we were involved in ensuring the coherence between the developed solution and the scope as described in the

business analysis.

Regular meetings were held with the functional analysts and the developers to answer concrete questions and to evaluate the progress being made.

- Together with the Product Owners there was also given consideration on how to roll-out the new app to the whole population of social inspectors in the 6 organisations involved. In order to promote usage of the app in the field, it was then decided that a pilot group with real users would be put into place. They could convince their colleagues to use the app by showing them in the field how and when the app is most useful and by explaining choices and decisions that were made during the project.

This pilot group consists of two social inspectors per organisation who will test the app in the field, each time a new version (with new screens and functionalities) is ready for in-production. Based on their feedback, minor adjustments can then be made before rolling out this version to all social inspectors.

A first version of the app has been in production since the end of August and has already been very well received by inspectors from the pilot group. For example, during a control of a construction site, it was already possible to establish on-site that 3 of the 10 people surveyed were not in order with their compulsory Dimona declaration. An initial success has therefore already been achieved!

Key achievement

Why do you think you should receive the award?

We are very proud that we have succeeded in producing a valuable result that is supported by a very large group of stakeholders from 6 different organisations.

However, the circumstances in which the business analysis came about were not self-evident. The various wishes and interests of each of the organisations involved had to be taken into account. And previous attempts to arrive at a solution had proven unsuccessful.

From a fairly general goal-description of the mission, a plan of approach was drawn up and rolled out in which numerous BA-techniques were used to better understand the problem and the needs, to clarify the goals, to test various solutions but above all to get the stakeholders involved in a positive "vibe" of change.

Thanks to the presence of the BA in each phase, from idea to realisation, it was possible to make visible progress at all times. The result of each phase in the business analysis process served as a basis for the next phase. In this way, the result was expanded step by step.

As a consequence, there is a very good chance that the social inspectors will actually use the solution in the field. After all, we know that the app meets their real needs. The very positive reactions of the pilot group are already an important indication in that direction.

Finally, with this project, we are making an important contribution to a more effective fight against social fraud and economic exploitation. In this way, we are defending citizens' social rights and contributing to the protection of our social security, to the benefit of society as a whole.