waag society

Code for Eindhoven Evaluation

Date: 18 september 2017
Author(s):   Socrates Schouten, Ivonne Jansen-Dings

"I discovered how much data is available, what can be done with it, and how simple it actually is. How creative colleagues actually are."

"Positive experiences: It is possible to create a useful tool in short time. Not everything needs to be big and well planned. Rapid development can be very efficient."

"We didn't achieve any direct benefit for citizens, not yet. But we created awareness with civil servants, paving the way to providing better services for the public."

"My project became a success thanks to the Code Fellows - Without them this would not have been possible.."

Summary

The Code for Eindhoven program ran from april 2015 to april 2017. Three 'code fellows' worked on new applications within the City, where using *agile methods, co-creation, service design* and (re)use of *open data* where primary goals. This evaluation has been conducted by directly involved; the strategy department of the City of Eindhoven and Waag Society. We interviewed four stakeholders that actually worked directly with the Code Fellows as client and commissioner.

In this evaluation, stakeholders present pro's and con's of the Code Fellowship and present advice on how the Code Fellowship could add even more value in the future. The most important lessons learned:

- Code for Eindhoven created awareness on the possibilities of open data;
- Working with open data doesn't have to be hard, the Code Fellows proofed how simple it can be;
- The Code Fellows spark creativity in the civil servants;
- Code Fellows are valuable partners bringing technical knowledge into discussions and shortening "time to market";
- A Code Fellowship offers new ways to look at project management, faster, leaner;
- The Code Fellows need a solid counterpart within the City to manage "politics", progress and allow them "freedom";
- With strong stakeholders and commissioners, solutions can provide results quickly;
- Code Fellows have the greatest chance to succeed when they maintain an autonomous role within the City;
- Clients and commissioners need mandate to allow the Code Fellows to operate freely, seek internal partners and allow for success;
- Code for Eindhoven provides energy by bringing clear goals with a open, fresh approach;
- Success hasn't been celebrated as it should. Better (Internal) marketing is necessary.

Halfway down the fellowship, the City decided to join the Code Fellows with the newly erected Urban Data Center. Despite the overlap, processes turned out to be to diverse to result in synergy. Code for Eindhoven was most profitable when the Code Fellows operated autonomous en where able to bring their knowledge to a wide spectrum of complex tasks. They enhance internal knowledge and make people enthusiastic about data, co-creation and working agile. The Urban Data Center operated in a more traditional commissioner – contractor relation which side-tracked the unique qualities of the Code Fellows.

1. Introduction

Code for Eindhoven ran from april 2015 to april 2017. Three 'code fellows' worked on new applications within the City, where using *agile methods, co-creation, service design* and (re)use of *open data* where primary goals. The primary focus of Code For Eindhoven was to enable *citizens*.

The City of Eindhoven decided to work with Code Fellows as part of the digital agenda and the smart city strategy. Bij attracting *civic innovators* who operate from the citizen engagement perspective the City of Eindhoven wanted to innovate ICT development and give civil servants the opportunity to learn how to work in iterative methods and concepts like service design. The goal was to select topics that could solve social problems for citizens of the City of Eindhoven. The program started within the Strategy department and was moved to the Urban Data Center hoping to secure knowledge and methodology.

Code for Eindhoven impacted various processes within the organization. To map the impact and experiences, a short evaluation has been conducted by taking a couple of interviews. Four interviews of approximately 30 minutes where conducted on july 18th, 2017. The interviewees originate from the City of Eindhoven (3) and the municipality of Eersel (1):

Gerry van Aken   Projectmanager PlanLab (Planned work in the Social Domain)

Rianne van Lomm   Senior analyst public space & Data science competence centre

Frederique Marks   'Superhero' (internal entrepreneur with a variety of assignments)

Jeroen Weekers   Projectmanager innovation & Projectmanager village participation, of the Eersel municipality

2. Results of the evaluation

Content and processes

What was the content of the projects undertaken with the Code Fellows? In which context did Code for Eindhoven fall? To which concrete work processes was Code for Eindhoven related?

Case 1

The person concerned runs all kinds of projects regarding the future of the municipality, including digital participation and inter-municipal cooperation.

"Data is the common thread in the innovation strategy. The municipality has a data portal with various pilots, such as green policy and housing vision. The portal is now online, but what is the value of the data? What questions does it help answer? "

First, a "mini-data experience" took place for civil servants with the Code Fellows, as an awareness training for the possibilities of data.

Later, after formulating ten possible cases, two concrete processes were started:

1st app = getting a grip on waste tax - if I place 1 container less, what does that do with the tax?

2nd app = walking app, municipal data with, among other things, snowplough routes, clean air, greenery, beautiful / ugly areas.

Case 2

Case from the social domain: a reorganization had just taken place and it had not yet landed properly. High absenteeism, dissatisfied employees. The person concerned went looking for a tool to channel information in the organization and met a trainee who suggested the Code Fellows.

"We were already looking for a party that could realize our wish, but did not know exactly what we were looking for. When we heard about the Code Fellows, we thought: we need this. We also wanted to organize things in a different, faster way than usual. The municipal IT department has been overfilled, through them it would have lasted endlessly. "

Case 3

The person concerned tries to increase the municipal competencies in various domains. The Code Fellows helped to use the WCCD (World Council on City Data) indicators. They have also contributed their thoughts on providing insight into money flows in the neighborhood. They were often discussion partners (about technology and implementation).

Case 4

The assignment of the person concerned was: "do something with crowdsourcing". Does it work for the municipality or not? Does the effect deliver savings? For the person concerned it was quickly clear that there was a match with the Code Fellows: both parties were looking for a quick win (or within 8 months). Co-creation played a role not only in the nature of the project (crowdsourcing) but also in implementation (the person concerned and Fellows together formed one team). Consistent with the philosophy and appointment of the person concerned: no fixed job description, but doing where your

passion lies and which you think at that time could be of added value. Substantially different in terms of working method than the usual: a constant function for X years.
To find a case within crowdfunding, the person involved spoke to a lot of people from the organization, eventually a spatial case was developed (the improvement of the route between Eindhoven Center and Strijp-S for walkers and cyclists).

Conclusion: Two of the four stakeholders interviewed were connected within their daily practice with the Code Fellows on the basis of projects, which were based on the exploration of possibilities – open data and crowdsourcing. In addition, the Code Fellows made rapid prototyping possible – the quick and iterative realization of the desired technological solution. The other two cases looked for a breakthrough in complex cases. In all cases, "agile" working was a central strategy and raised expectations. Three of the four cases explicitly (ie consciously) revolved around the possibilities of data (to a lesser extent of open data). Co-creation played an emphatic role in one case.

Organisation

How did the Fellows Code and the municipal stakeholders work together? Who played which role? How was the collaboration experienced?

Case 1
Got in touch with the Code Fellows at a conference in May 2016 in Eindhoven. The Fellows were happy to set up a route in a small, manoeuvrable municipality (Eersel) after the trajectories in Eindhoven sometimes proved difficult.
The people involved often came from the innovation corner: Head of Development, the Platform Innovation (= collection of project leaders in different services), the Alderman for Innovation. An IT employee from the municipality was very involved and a communication officer.

Case 2
Contacting the Code Fellows was initially very difficult, emails remained unanswered. The Strategy department has mediated and from then on it went well. The fellows then only had a few months.
The client was the manager of the social domain. An important role was played by an external person, who himself had developed a co-creation method and was taken over in the municipality (social domain). He is well acquainted with agile and with automation. The fellows and these external parties cooperated the most. The other people involved from the municipality were only involved in consultations a few times.

Case 3
The person concerned found the Fellows because she was in the Urban Data Center with them. About the organization: "There was not really a team within the UDC, there was no guarantee from the Code Fellows or within the municipality."

Case 4

The interim HR manager was initially the (procedural) client, later it became the sector head of P&O. The substantive case came from a different sector. There were two interests: testing crowdsourcing (from HR) and getting the answer to the question from the content client.

About the relationship between the person concerned and fellows: "The question was whether the fellows were going to implement what I said, or whether they would be thinking along and sending them along? It became a project group of four, a real team, with me as the project manager. "

Division of roles within the fellows: Fellow A spent a lot of time on code, B on the interface and also wrote texts, and C contributed to thinking about 'putting it down' and the political aspect throughout the process.

Conclusion: the trajectories are often started from chance encounters. Many people from the municipality were often involved in the processes, but only a few people worked very intensively with the fellows (only in cases 1 and 4, to a lesser extent case 3). Regularly the most closely involved had a relatively "loose" position in the municipal organization: interim, external, "superhero".

Engagement

How was the collaboration with fellows experienced by those involved?

Case 1

"It gave me energy: it was concrete, clear, and refreshing. But it also cost a lot of energy: keeping control: making agreements, planning things. They were not around my corner. The fellows had to be kept in class, we had to keep pace. But that went well. "
"I realized how much data there is, what you can do with it, how simple that is. How creative colleagues actually are – civil servants are not dusty, they flourished completely, had a lot to offer. I saw that our organization is really open to it. "

Case 2

"Our fellow set to work very energetically and delivered an excellent app. We said: if we like it, we want to continue with you. And that has happened, he has his own assignment for further development. Fine cooperation, agreements were met. Gained positive experience: it is possible to develop a useful tool in a short time, which does not have to be large and long-term. Faster switching is possible. "

Case 3

"My feeling: it has not delivered enough results. I think that depends on expectation management and assignment formulation. We could do so much with Code Fellows within

the Data Competence Center. Too bad it has yielded so little. They could have positioned themselves much more in the departments, but were now sidelined. "

"They are handy guys, but I have not seen anything other than what we already have in the house, which made me warm. But I also got involved very late, so I never got through the process with them properly. "

Case 4

"The feeling that I have left: really great, very pleasant. The fellows were very nice as people (humor, fun) and in terms of position / working method (one leg inside, one leg outside the municipality). They were people other than the average civil servant, had a different dynamic. They did not have to take into account administrative processes, political games, a social task that was still somewhere. They have worked extremely hard, sometimes in the evenings and at the weekend, which you don't see happening so quickly with civil servants. They were very critical in a nice way. They had fun and put the experience at the center, not a process. "

Delivery

What did the process deliver for the people involved, for the organization and for the residents?

Case 1

"I have learned to see that there are many possibilities with data and that my colleagues are ready to take it up. It has not produced any immediate results for citizens. Even so: awareness first went to colleagues, but we could now make the move to citizens. "

"Unfortunately, the app did not go online after a server failure. We would need the fellows, or some other kind of follow-up to the process, to go live again and to develop further. "

Case 2

"Monitoring and controlling our processes has been simplified a hundred times. From endless Excel sheets to dynamic and fast. Many colleagues see it as positive, others are more neutral. But the application is appreciated and accepted. "

Consequences for residents: "At first, all civil servants did something, but lacked control. This is different with the new application. Everyone can see what is happening and who is involved. We want to further expand that functionality. So the citizen benefits in a general, indirect sense. Co-creation with citizens is also on our agenda, but is not directly linked to the things we did with the fellows. "

Case 3

"The fellows have provided good help to implement the WCCD indicators and to load the data automatically. But that was all. I have not gained any new knowledge thanks to the

process. The function of the fellows to pick up a question agile, creative, which might still be articulated? I have not seen that enough. "

Case 4

"I thank the success in my project, 'Ideapond (Ideeënvijver), to the Code Fellows – I couldn't have done it without them."

"I have become acquainted with open data thanks to the fellows, because of their enthusiasm I have also become enthusiastic. The website is unfortunately no longer live. The site is in principle suitable for expansion to answer other questions, but that does require capacity, which is no longer there after the termination of Code for Eindhoven. As a result, there is (still) no lasting impact for the citizen, but it could have been there. "

Conclusion: In most cases, clear positive results have been derived from the Code for Eindhoven process. Solutions and apps have been successfully developed in a short time. This also brought "mental benefits": those involved saw new opportunities and even got to know colleagues differently. The result for the organization was clear in case 2 in particular, but much more limited in the other cases. The promise then still had to be kept or guaranteed, and that guarantee was missing. No concrete result has yet been achieved for the citizen either, but according to most interviewees this is within the possibilities.

Lessons learned

What lessons can be learned? What are the wishes and recommendations regarding the future of Code for Eindhoven, whether or not in relation to the Urban Data Center (UDC)?

Case 1

"I would like to continue working with it, it was energetic and creative. There could be a bit more structure in the work process, with clearer agreements. A fellow may also be admitted, two were a bit small. The offer and structure should be clearer, certainly for other / smaller municipalities. As a small municipality, our municipality is quite far with digital innovation, but many others are not yet. Smaller municipalities also have no statistical service as Eindhoven has. "

"Missed parties: the residents. We were not ready for that yet, but involving citizens is certainly of added value. "

"Advice: show the successes more, put it on the display. Keep it at the core. For me Code for Eindhoven means: playful, discovering, flexible, opportunities. I don't see the link with the Urban Data Center (UDC) that way. UDC is more about answering social issues, larger lines, infrastructure, new work processes on the further horizon. "

Case 2

"I find it difficult to estimate how the fellows can be deployed further. We have not considered the Code Fellows phenomenon. New, innovative things always have an

enthusiastic effect. I don't really understand the UDC, I mainly see that little is happening now. It was the place where I met the fellows. "

Case 3

"We could really benefit from Code Fellows. But the gaps around locking should be closed. It would be best to let fellows run through the Data Competence Center. Everyone has a piece of the puzzle (data scientist, analysts, ICT specialists, privacy officers), but we are trying to work on the bigger picture. You have a policy question, translate that into data. A lot of processes go over it: who must do what, who do we need, how, what do we want to achieve. The added value of the Fellows Code would then lie in the autonomy. That broad thinking, that helps you, especially the critical note. It's not just about programming. "
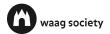
Case 4

"The fellows are autonomous and agile and must continue to do so, you should not burden them with all processes of the municipality. Realize that the fellows themselves do not feel like marketing their work, and prefer to focus on the core business. They also have little interest in the organization. "Gosh, I have an Eindhoven e-mail address, I don't actually use it," I heard. "

"Someone in the organization should be very proud and do the marketing work for the Code Fellows. A "connecting piece" in the municipality that has basic knowledge about data and so on, and with whom there is a click. Someone who will run in the municipality to ensure that it succeeds, that municipal projects with the use of the CF have added value (involvement, control of the inhabitants) for the city. "

"High expectations were created:" these people are going to change the organization. "But they were put in an office somewhere, go and do it. It is not strange that some high expectations that go beyond the concrete projects have not been realized. The question "we want something with crowdsourcing" directly to the Code Fellows does not work, but through an internal entrepreneur it would go fine. Such a person then feeds the fellows with the necessary information. My project has been successful because I was that (full-time, energetic) link piece. I have kept a lot of attention for the fellows and that worked very positively. There was no such person on many other projects. There, the job was simply transferred to the fellows, that doesn't work, you also have to put a lot in yourself. "
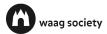
"I think the fellows were dissatisfied with the location of the UDC, it didn't offer them anything."

Conclusion: what makes the Code Fellows unique – their autonomous, critical status – also makes them vulnerable. Where they were surrounded by (usually young) enthusiastic people who really had time for them, the fellows achieved concrete results and new work processes were on the

horizon. Where the relationship was filled in more as client-contractor, more traditional, it often did not get off the ground.

The interviewees indicate that the fellows certainly have potential. The relationship with the Urban Data Center seems limited. Would such a link serve the interests of the organization and the resident, or in particular that of the UDC?

Appendix 1. Interview questions

Personal

1. What is your function and role within the municipality?
2. In what way are you (have been) involved in Code for Eindhoven?
3. How did you collaborate with the 'code fellows'?
4. How did you feel about the process?

Relevant knowledge / Is there something that plays a special role for you?

5. Are you familiar with, do you work with, what is the importance (for the municipality) of:
   a. agile working methods
   b. co creation
   c. open data
   d. service design principles
6. Are there other similar processes and projects that are relevant?
7. How do these influence each other?

Work processes / Questions about those directly involved and the processes

8. What did the cooperation with those involved in Code for Eindhoven look like?
9. What knowledge did you gain through Code for Eindhoven?
10. Have agile working methods, co-creation, open data, and service design principles played a role? Which?
11. How has Code for Eindhoven influenced the development of applications and digital services for citizens?
12. What were the important roles in this work process? And why?
13. How could the Code for Eindhoven work process be improved?

Stakeholders / Questions about indirect stakeholders

14. What did colleagues, supervisors and managers see during the process?
15. Which other parties were involved; what was their role?
16. Are there parties that we should actually have involved (who)?

Revenues, impact, and how to proceed

17. Who potentially benefits the most from a process such as Code for Eindhoven; what do they get out of it?
18. Would you like to work with 'code fellows' again (and why)?
19. Do you know the Urban Data Center; if so, what kind of cooperation with UDC would you consider possible / desirable?
20. Do you have advice as to what the next steps should be?

Additional

21. What has not yet been discussed and / or what else would you like to give us?