Tool number 2

1. Guideline: getting an SME to join FbD

Maybe this document should have been called: How to get enough information from a first conversation to ensure we could bring an SME towards a concrete project - but that title would be a bit too long however. Moreover, it is a guideline from the JADS perspective. You are free to use the tools in any way you see fit. For us, the process of a first Intake with an SME takes the following steps:

Understanding	Inspire	Manage expectations	Describe next steps

We assume that after the October conference the first two steps should be within reach. The third step is mainly learning by doing (we also still make mistakes in this after 100 projects) and the final step depends on your intentions in the region. We focus now on getting towards a project.

1.1 Understanding

The main necessary condition of getting towards any commitment from an SME is that you ought to have a genuine intent to understand the company. This might sound trivial, obvious or even belittling to state here. However, most people claiming that "it is difficult to reach an SME" seem to miss they are talking with actual people who would love to talk with you if a) they feel heard; b) they assume you are (potentially) able to help them in their company goals (i.e. profit). Even if you have no data science skills, at the very least you can talk with an SME, find out their biggest pains and discuss with JADS (or data scientists in your neighborhood) whether or not we can help them – without overpromising on anything.

Setup
You can get an understanding in different ways and you should choose what suits you best. If you experience limited skills vis-á-vis data science, you can ask the SME to prepare:

1. The Data Maturity Scan
2. The Intake form (see Appendix)

And during the conversation you can together:

3. Fill in the Data Driven Business Canvas
4. Discuss the present data.

It is important to note these steps are making use of tools which might not all be necessary for you. In fact, the only thing and very least you should aim for in the conversation is to understand the company, its workflow, its pains/issues, its ambitions (with or without data) and the threats and opportunities they see within their market. If you choose to use the pilot version of the data maturity scan this could help in setting the expectations of the SME and also the expectation of the person interacting with the SME on what would be a realistic first step for the SME. From there onward, you could also plan a second conversation or session to fill in the Data Driven Business Canvas and start seeing if their pains or ambitions are something data science can be the answer to.

1.2 Inspire

Small business owners, like most people, have a tendency to prefer concrete stories they can relate to. A big factor in this, is that they ought to see they can make or save money when working on a data science project. Inspire them using the examples you have seen, or ask us for examples related to their company, business or industry (see Appendix for some initial examples).

Manage expectations

Another goal of getting towards a project with an SME is to make sure their expectations are managed: do not overpromise just to get their commitment. Since FbD is offering a service for free, it is especially important to manage expectations even better – for an SME, "nothing is for free" – so they ought to know they will have to commit at the very least some time and provide proper insights into their business in order to be helped to the next step. What we ask is therefore along the lines of:

1. Time of dedicated people involved with the problem or the data
2. Access to the relevant data for solving the problem

Even if it turns out that this particular SME might not be helped, it is good to have them understand they will need to put in effort.

Describe the next steps

At this moment, also to manage expectations properly, we would suggest to keep the next steps simple. Be open that FbD is still in the beginning and we are going to look on how we can help the SME's with

1. Quick wins: advice on how the SME could change things to get better insights
2. General wins: general tools will be developed which may help them further
3. Specific wins: some SME's will be helped in a particular manner – but we are not sure if they will be part of this set of companies.

Appendix A: preparation document Intake for SME's

Get started successfully with data in your company in 5 steps

Step 1: Describe a problem / challenge that your organization encounters

If you still collect little data, then it is of no use to start randomly collecting data from every business process. In these 5 steps you will receive tools to start collecting data.

Choose a specific domain that you want to get started with:

 • Marketing

• Staff

• Maintenance

• Capacity / logistics

• Financial housekeeping

• Domain of your choice, specific to your organization…………

Think of things that (manually) cost a lot of time, are difficult to estimate or predict, or simply cost the organization a lot of money.

Complete the following questionnaire

This questionnaire helps you describe the challenges in your organization. Only enter the parts that suit your organization. Ultimately, together with FbD, you determine which project is most suitable for the SME Data Lab.

1. Within our marketing activities, the biggest problem we encounter is:

2. The biggest problem we encounter with our staff is:

3. In terms of maintenance, the biggest problem we encounter is:

4. In terms of capacity and / or logistics, the biggest problem we encounter is:

5. With our financial management, the biggest problem we encounter is:

6. In terms of _____ (enter), the biggest problem we encounter is:

Step 2: Check your data

Which data is already collected on the issue and domain you want to work with? Is this data available on paper or digitally (for participation in the MKB Data Lab it is necessary to have relevant data digitally available)? Answer the questions below as completely as possible. "Not" is also a valid answer.

DATA QUESTIONNAIRE

1. Which issue do you prefer to get started in your organization?

• Marketing

• Staff

• Maintenance

• Capacity / logistics

• Financial housekeeping

• A specific challenge…………………..

2. You collect the following data within this domain:

3. You do this using the following software:

• ……

• …….

• …….

• …….

• …….

4. The data is accessible via [tick and fill in, multiple answers possible]

• A dashboard (such as Exact online)

• Specific software (such as Excel)

• The data can be exported in ... ……… ……………… .format (eg csv)

• The data is in a (local / cloud) database with the following login details:

5. What is the reason that you are currently collecting data?

Step 3: Involve your employees / colleagues

Now that you know what domain and what kind of issue you want to work with in the SME Data Lab, it's time to involve the right people in the organization. Discuss with your employees / colleagues what they think about creating value with data in your chosen domain.

Tip: For the success of the project it is crucial to involve the right people. The sooner you involve people, the better!

Checklist

1. I have spoken internally with (function is sufficient, names are not needed):

•… ..

•… ..

•….

2. Employees / colleagues see [yes / no] the need for solving the problem discussed.

They gave the following feedback:

3. Employees / colleagues are generally [skeptical / benevolent] towards the use of data to solve this problem.

They provide the following input:

Step 4. Discuss your plans externally: with customers, partners and competing colleagues

Suppliers, customers and competitors can have very valuable insights for your specific problem. Maybe they have experience with certain software, or knowledge of a certain way of working that can be very valuable.

1. I have spoken with outside my organization (relationship is sufficient, names are not needed);

•… ..

•… ..

•… ..

•… ..

2. My relations see [yes / no] the need to solve the problem.

They gave the following feedback:

3. My relationships are generally [skeptical / benevolent] towards the use of data to solve this problem.

They provided the following input:

4. I have collected the following tips as a result of the external input:

Step 5: Contact the HSKT hub

After you have applied 1) focus; 2) have mapped the current data; 3) internal; and 4) having gathered external information and insights, it is time to 5) continue to discuss your ideas with the HSKT Hub.

What do you need help with?

What steps do you see? Do you feel you have a long way to go? Or is it actually better? Is the crux in the further collection of data? Or do you think that a first project can already be started in the MKB Data Lab?

1. I need help with:

• collecting data

• digitizing collected data

• structuring data

• exploring the possibilities with the current data

Specifically, my question is about:

2. Internally I have found the following people willing to act as a contact person and help with a project towards a more data driven organization:

• ....

• ....

Interreg
North Sea Region
FBD
European Regional Development Fund

EUROPEAN UNION

FUTURES
BY DESIGN

Appendix B: Project examples

What is the influence of the weather on the revenue of a small bakery?

With Data you get a better understanding of external factors which are important for the business in the bakery. Moreover, when there's bad weather or a train delay you could for example decide to bake less croissants and schedule less workers

"Due to smart data we can – based on the weather prediction – make a better estimation on how many employees we need to schedule. That's beneficial for cost reduction and customer satisfaction."

Maturity level: Squirrel or gatherer

Entrepreneur's Value: Predicting Sales to better plan the employees and products to be produced

Technological solution: Finding the relation between weather data and the Sales of the bakery, so the bakery can (to a certain extend) predict his sales and bases his planning decisions on his predicted sales.

Calculating the margin per customer to optimize the financial bookkeeping as much as possible.

The margin per lease car is dependent on different factors like insurance, accompanying fee and or (potential) damage to the car

"Due to the large amount of records data Excel got stuck. Now we got access to professional expertise and automatization, in an accessible way without large investments"

Maturity level: Squirrel or gatherer

Entrepreneur's Value: calculating the margin per asset (car) as the amount of collected data became too large for excel to make the calculation.

Technological solution: Writing a script and making a small tool for the entrepreneur to fill out the license plate of the car and calculate its margin.

Predicting the end weight of head of lettuce as accurate as possible.

By getting deeper insights into the factors that influence the growing process of a lettuce plant, we can speed up or slow down the growth of our plants based on our incoming orders. This will eventually lead to less lettuce-waste.

"We keep a close eye on new technological developments. When we discover opportunities, we take immediate action. This is how we have made a very sophisticated and controlled production process"

Maturity level: Pirate or describer

Entrepreneur's Value: Predicting the influencing factors on the pace of lettuce growth (production).

Technological solution: Finding the factors influencing the growth of a lettuce plant by using ML models.

Predicting in-full & on time (and scrap & waste)

In the production of fabric, two elements are of the highest important: how much fabric of what I put in, also comes out as a full and worthy end product? And how much time does it take?

The better specific characteristics of a fabric can be analyzed affecting these two elements, the better actions can be undertaken.

"Our production process is very diverse; no cloth or fabric is the same. We are very proud of this, but it offers challenges as well. We aim to address these challenges by means of machine learning models."

Maturity level: Pirate or describer

Entrepreneur's Value: Predicting the input needed to get a certain amount of useable output.

Technological solution: Finding the design characteristics influencing the waste of material and later predicting waste based on the characteristics of a design.

How Tricorp sharpes their market strategy based on smart data?

Analyses shows that there are correlations between the characteristics of dealers and the revenue that can be revealed, when we do a little more research. "We are going to reinvestigate our sales" Tricorp said. "Our hope and ambition is to use smart data to distil for all the dealer skills, only the most important dealer skills to focus on for increasing our revenue."

Instead of trying to confirm what we want to see, we are actually learning to look at the data and make decisions based on the data.

Maturity level: Pirate or describer

Entrepreneur's Value: Segmentation of dealers and seeing what customers deserve more attention from account managers and what are the areas on which customers could improve to become a top customers.

Technological solution: Clustering the different dealers (customers) to see which dealers are generating the most revenue and knowing of each other customer what they lack to become a top customer as well.