Interreg North Sea Region FBD
European Regional Development Fund

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FUTURES BY DESIGN

EXTERNAL NEWSLETTER

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Contributing Partners: Provinsje Fryslan, Anglia Ruskin University Higher Education Corporation, Open Manufacturing Campus & Blenders, NHL Stenden, atene KOM, Alexandersoninstitutet

Provinsje Fryslan

Futures By Design has one main aim: to help 300 Small and Medium Enterprises across the 6 regions to achieve sustainable increases in growth, productivity and innovation capacity through their better uses of data and data tools. Thereby we hope to demonstrate that for 120 SMEs across all regions use of HSKT tools has led to a 5% increase in growth; use of HSKT tools has led to a gain in productivity measured by FBD 'before and after' metrics; and use of HSKT tools has led to a gain in innovative capacity measured by FBD 'before and after' metrics. For each result we have more precise definitions, agreed upon with the NSRP as a fair means to measure success of the project.

When we devised the project we had the idea that SMEs tend struggle 1) to predict the future and 2) to effectively use data to help them cope with this. Our research showed the following problematic areas with data:

- Retaining and storing
- Making sure it is clean and safe
- Using data to make predictions
- Fear of technology
- Access to broadband
- Financing data projects
- Having the cash-flow to nourish strategic investments

We were also aware that the capacity of any SME to understand the market, the changing forces of economics, the impacts of technological changes, the consequences of new legislation and so on is dependent to a considerable degree on time, cash and the 'bandwidth' of managers to engage with less immediate demands. The current health crisis has tended to accentuate these factors. However, there are millions of SMEs in the region and our target is to

work with 300. Our project still adheres to the June 2021 Operations Phase completion date, and in some ways (e.g. use of SME time) the restricted capacity for 'real' meetings and the switch to online meetings has been beneficial. The Horizon Scanning and Knowledge Transfer (HSKT) hubs are now configured and consist of 6 regional sub-hubs, operated by the six regions, and one central hub. The Central Hub has been built and is hosted by the Jheronimus Academy of Data Sciences (JADS) in Den Bosch, Holland. The hub is accessible at www.futuresbydesign.net and has four components:

A range of tools to help SMEs gather, retain, store, clean, make safe and use data to help them innovate, improve productivity and drive growth;

A store of information, guidance and links to helpful organizations, tools and support for SMEs seeking to understand the impacts of developments in technology, economics, laws and so forth for their futures;

A tool for SMEs to use to establish their position in the market in relation to their competitors and to find improvements in supply chains / sales avenues;

Store the progress data for the 300 SMEs through the Futures y Design project.

As we enter the Operations Phase of the project we are confident we can deliver on the role of the HSKT system for:

a. sourcing, storing and analysing business knowledge digitally;

b. developing tools for SMEs to innovate, grow, increase productivity

c. applying the tools and supporting target SMEs

d. transferring knowledge via the partnerships

e. re-applying and evaluating success

f. developing a learning network

The HSKT hubs are based on the needs of the target companies and identify the knowledge SMEs need to help them research new approaches to existing data and new sources and refine the tools to enable data-driven SMEs.

The first half of Futures By Design was planned for the development of the concept and the tools. This included working with SMEs in the early stages to learn more about their needs and demands, then working on the tools throughout the pilot stages.

The Tools

Data Jumpstart + Data Report - SME self-evaluation

This scan consists of a set of 40 questions that dive deeper into various aspects of data maturity. For example, we look at the infrastructure, tools and culture within the organization. Every company that starts with FBD process completes this scan. When the Data Jumpstart has been completed, you will receive a report in which we break down the results and benchmark them against the reference group.

Preparing for FBD project – guide for SMEs and FBD Partners

To support you in the best possible way on your journey to becoming a more data-driven company, it is important for us to get to know you and your company a little better. Therefore, we created this assignment with several questions about your company: What do you encounter in your company and where do you see opportunities with data? What do your employees and customers think of your ideas?

Data inspiration booklet – for SMEs' motivation

In order to give the SMEs participating in the FBD process a better picture of what is already possible in the field of data science, we have created a booklet in which some examples of projects within SMEs are illustrated. The Data Jumpstart tool provides a level of data maturity for your company. The examples in this inspiration folder are also divided into these 5 data maturity levels, hence you can easily see which example projects are feasible for your data maturity level.

How to determine focus guide – for FBD partners to work with SMEs

Most entrepreneurs who want to start the transition to a more data-driven company run into the problem of where to start.

This guide has been created with the aim of helping you determine your starting point. You decide on which part of your company you want to focus, gain insight into your main motivation, define your ambition and challenges, and ultimately work towards the challenge that requires the least effort and represents the most added value for your company.

Data structure guide – for SMEs' data development needs

Before we move on to the cool predictions, it's important to know if the data is ready. This data structure manual explains how a company can best check whether the data has been collected correctly. The most important aspect here is consistency. For example, there are many ways to write down a telephone number: 0612345678, +31612345678, 06-12345678. In all cases the same is meant, but notated differently. For further analysis it is important that the data is clean and consistently structured.

Data Explorer – for SMEs' data development needs

Many SMEs are unfamiliar with the quality of their data. The Data Jumpstart shows where the organization stands in the terms of data maturity. Part of this is the data quality. For example, there may be a lot of empty values in certain columns, or a negative number for an invoiced

amount. The Data Exploration tool has been developed to determine, as an organization, where data quality can be improved. The data can be uploaded in a simple manner and the company will receive a report containing the various findings in the data.

Zipcode Explorer – tool to establish locations of suppliers, customers

Various projects have shown that many organizations need insight into their demographic customer distribution. The Zipcode Explorer tool has been developed for this purpose. It provides insight according to which city and zip code the customers come from. By using this tool, for example, marketing can be more targeted.

Footprint tool – tool to establish locations of suppliers, customers

Do you want to know how fast your website is? Or what similar websites are? With the footprint tool you immediately get an overview of your website. This contains information about your social media accounts, contact information, the website's most important keywords, a short content summary, comparable websites and the loading speed. This allows you, for example, to compare how well your website scores compared to the competition.

Data sources checklist- for SMEs' data development needs

A data sources checklist has been developed to check the quality of your data sources. The available data sources are mapped and described according to relevance within the organization by using the 4 Vs of Big Data. For each data source, questions are asked such as: Is it an open data source? Is it sensitive data from a privacy perspective? How was this data collected? The answers to these questions help you anticipate whether you will run into problems with a data science project.

Data Brainwave - for SMEs' data development needs and project set-up

The Data Brainwave is a tool which helps a company identify specific and feasible projects in the field of Data Science. By filling in the twelve boxes in the canvas, it becomes clear where the opportunities and challenges lie with regard to working with data. The filled canvas provides a data scientist with the necessary information to eventually define a project. The Data Brainwave distinguishes between three main categories: knowledge infrastructure, preconditions and expectation management. The twelve subtopics on the canvas have been determined based on more than fifty Data Science projects and scientific research. The research shows that it is difficult for companies to start with Data Science. This Data Brainwave can therefore also be used as a stand-alone tool. However, some partners also offer the option to complete this canvas together.

- Knowledge infrastructure: The extent to which various software is currently used, the expertise in-house, or collaborations with IT parties.

- Preconditions: Prior to a project, consideration must be given to the commitment from different (management)layers, the available budget and the application of regulations.
- Expectation management: By considering the expected results and ongoing challenges in advance, the chances of the project succeeding are greater.

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Data Booster - for SMEs' data development needs and project set-up

The Data Booster was developed to convert the results of the Data Brainwave and Data Jumpstart into actions. A brainstorm session is organized with the affiliate partner. The insights from the various used tools are discussed and used to start with a first specified step. During this session, we look at what else the company needs in terms of tools or support to achieve the formulated goal. After this session, the company or another commercial party can immediately start a project. In some cases, the partner can also support in the implementation of the project.

Data Ethics - for SMEs' data development needs

The Data Project Ethics Assessment (DPEA) is intended as a decision-making tool to help data (science) students, practitioners and entrepreneurs start a data science project. The DEPA consists of a series of questions covering some, but certainly not all, important ethical considerations. Filling out the form gives a global picture of the ethical impact of the project. This could then affect the choice to start the project, make changes, or stop it altogether and abort it.

Data Security - for SMEs' data development needs

Whether you are working with the data within your own company or working together with another party, it is very important to also consider how to handle data safely. This is small checklist for you with several tips on how to handle data in the safest possible way.

FBD takes SMEs through a 12-step process with 4 distinct phases:

- Registration and Self-Evaluation
- Tools Demonstrations: how FBD tools can help with SME data journey
- Data Project Identification and Results Targets: SME Project set-up
- Data Project Execution, Results and Evaluation: supported by FBD partner

There is a need, as we knew, to work with groups of SMEs online to engage them with the project. Such things as Datalabs also help. They need to see both the problem and the way we can help with a solution. The self-evaluation is very helpful and needs proper interpreting of outcomes to help the SME think about a possible project. The tools we have developed with SME inputs and they are much more about small data (e.g. cash register, CRM, etc.) than big data.

The covid-19 impact has the downsides of its impacts in SMEs but the upside of doing a lot more online and therefore impacting less in precious time.

It's time now for the Operations Phase, and we plan to complete this by end of June 2021.

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Anglia Ruskin

The ARU team has made major progress on SME engagement. We are planning to directly approach 50 SMEs who we have established links with to get them signed up and working on their self-assessments. We are planning to host a series of webinars on the Tools from November on and expect the first SME projects to start in January. We are using our links with local business networks to reach SMEs, and have found that the best way to approach companies is through intermediaries who they know and trust, unless we already have direct links with them.

The SME Barriers report is now available for publication on the Futures By Design project website, and we will be promoting it via Linked-In and sharing with local research institutions to get their feedback before we start the second report. We are also planning work on our two data projects so that we can share knowledge from our work with the Cambridgeshire and Peterborough Combined Authority on Digital Inclusion and the Grow-In 4.0 Interreg project.

Blenders and OMC

We held 2 digital info sessions as a kickoff for our FBD-campaign on October 13th and 22nd, and we have been featured in the regional press:
https://www.madeinkempen.be/nieuws/blenders-en-omc-begeleiden-kmos-naar-meer-data-maturiteit/
Made in Kempen is the platform with the most important daily company news from our region with approximately 20,000 subscribers, of which 80% of the readers are business leaders, senior executives or professionals.

For us this digital environment is definitely an environment in which we are still learning! How do we strike a balance between the informative and the activating (call to action); how do we deal with technical malfunctions; how do we best fill 45 minutes, and how do we keep the

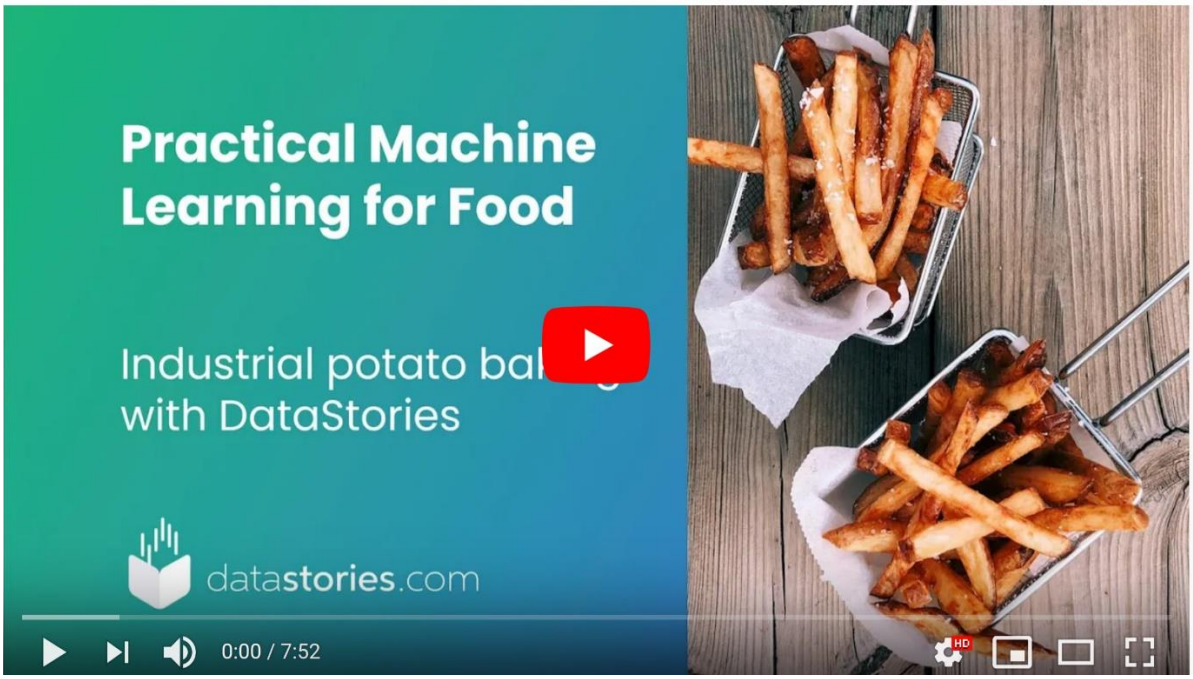
attention, etc. We noticed strong progress in our approach during session two—concise info, more to the point, an accessible video and better textual preparation!

Although these information sessions are a good start, extra communication efforts will have to be made in the coming months. For example, we plan to inspire through our social media channels on the basis of concrete cases, linked to a call-to-action towards the maturity scan.

With a view to our guiding function as HSKT hub, we are also setting up a data ecosystem to make the FBD project more sustainable in the long run. In addition to the previous local stakeholders Absolem & Agoria, we have made interesting links with additional organizations, namely DataStories and Netropolix.
- DataStories, based in Turnhout, is a company that specializes in process analysis tools based on data and wants to make its expertise in data science in this process available through inspiring cases for SMEs;

- Netropolix, based in Geel, is a company that provides ICT support and expertise to companies. In this process it offers a free Security Audit to detect possible security and / or reliability problems. The report of this audit can be a first step towards a plan of action to store data quickly, securely and centrally.

As a really nice case, both to our fellow project partners as to the broader FBD-public we would like to share one of the DataStories cases on the topic, Belgian fries - Data & Industrial potato baking:



NHL STENDEN

The Futures By Design Team from NHL STENDEN, in close cooperation with the other parties from the North of the Netherlands are very active in planning the workshops in November 2020, December 2020 and January 2021. The workshops we plan are the operation phase of the project and we are happy to cooperate with the REGIODEAL Drenthe and SPOEDHULP DIGITALISERING MKB for acquiring SME's that will participate in the workshops. This cooperation – when well evaluated – might turn into something structural as well.

We will deliver a round of three workshops. In the first workshop, we pay attention to 'Why data-science?' and is a 2-hour seminar. The second is a one-day workshop is on 'data organization', with a seminar in the morning and one in the afternoon, and assignments in between with help by telephone. The third workshop is on 'data management' and is similar in set-up to the second, except it is only in the afternoon. Workshops 2 and 3 are developed and given by JADS.

Furthermore, workshop one on 'Why data-science' will also be offered to two groups of SME's organized by SPOEDHULP DIGITALISERING. Here all sort of SME's can participate, not only the ones from our specific target groups.

For the beginning of 2021 we are planning another round of three workshops in the province of Friesland, and also a conference on data-science is to be organized for actors in this province.

atene KOM

On November 10, 2020, the Promotiedagen, the Netherlands' largest annual conference for enterprises and SME's was held. Due to the Covid-19 pandemic, the conference was exclusively virtual and held online per live stream. The event drew approximately 1,500 participants, who had the opportunity to visit virtual booths and watch presentations. Booth visitors were able to directly contact the exhibitors per chat or video chat, through which more than 2,500 individual meetings and networking opportunities between visitors, enterprises, and exhibitors took place. The Network Carousel, a special event during which participants rotated video chat partners every five minutes in a type of network speed dating, proved particularly fruitful for creating contacts with new potential business partners.

The atene KOM participated as an exhibitor at the conference with a booth for Futures By Design, with a focus on the project region Northwest Germany. Project partners from the University of Gronigen North West Germany (UGNWG) joined the partners from atene KOM as booth exhibitors.

Furthermore, the atene KOM is also entering the operational phase of the project. SME's are currently being recruited for workshops in January 2021.

Alexandersoninstitutet

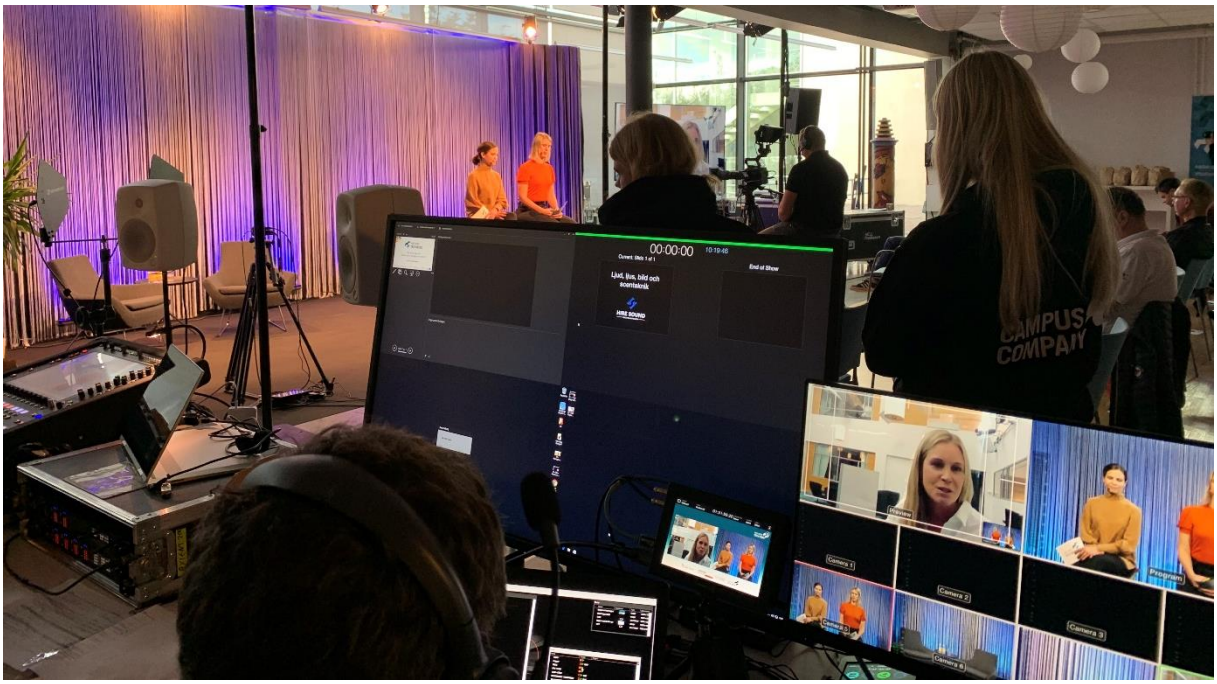
Our regional conference Halland Tech Week 6-9th of October

During the first week of October, the Alexandersoninstitutet conducted the first ever Halland tech week, a 4-day event focusing on AI, data and technical innovations. With the help of organizations and stakeholders all over the region, the event managed to become the success we had hoped for with good marketing for our HSKT-hub. With 24 events over 4 days and 1,200 entries, the Halland tech Week is definitely a part of the Swedish tech scene.

The first two days were focused on the north part of Halland and the city of Varberg. The events focused on data, cyber security, and digital transformation in the production industry with contributions from local businesses, stakeholders and other organizations.

The last two days were more focused on the southern part of our region and the city of Halmstad where the events had a strong focus on healthcare, data and AI.

With the ongoing pandemic, the organizers decided to stream the majority of events. Now the Alexandersoninstitutet is working on creating a video-library with all the events for people to be able to re-watch their favorite or find new interesting topics they missed during the week.



Halland Tech Week, 6-9th of October