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North Sea Region
Growin 4.0
European Regional Development Fund



DIGITAL TRANSFORMATION & HRM TOOLS FOR MANUFACTURING SME'S

June 2021

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OVERVIEW PRESENTATION

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About GrowIn 4.0

About Industry 4.0 and SME's

About the development & experiences of the HRM 4.0 portfolio

An example of one of the tools: the competence based management tool

GROWIN 4.0 THE PROJECT

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North Sea Region – Netherlands, Belgium, Germany, Great Britain, Denmark

Partners

Our challenge:

If the manufacturing industry in the NSR is to remain competitive, we need to capture the potential for productivity and growth that Industry 4.0 appears to offer. There is a profound need for an experience based and smart gathering of efficient methods, tools and knowledge to guide SMEs in their transformation towards Industry 4.0.



INDUSTRY4.0 — SMART INDUSTRY TECHNIQUES

Since 2011 – Concept of Industry 4.0

Driven by technological (digital) principles:

Cyberphysical Systems

Industrial IoT

Big Data Analytics

Cybersecurity

Augmented Reality

Autonomous Robots

Additive Manufacturing

Simulation and Modelling



OPPORTUNITIES & BARRIERS FOR SME'S

Obstacles for SME's to enter Industry 4.0:

Lack of Business Support

Overcautious to invest in Industry 4.0

Lack of standards

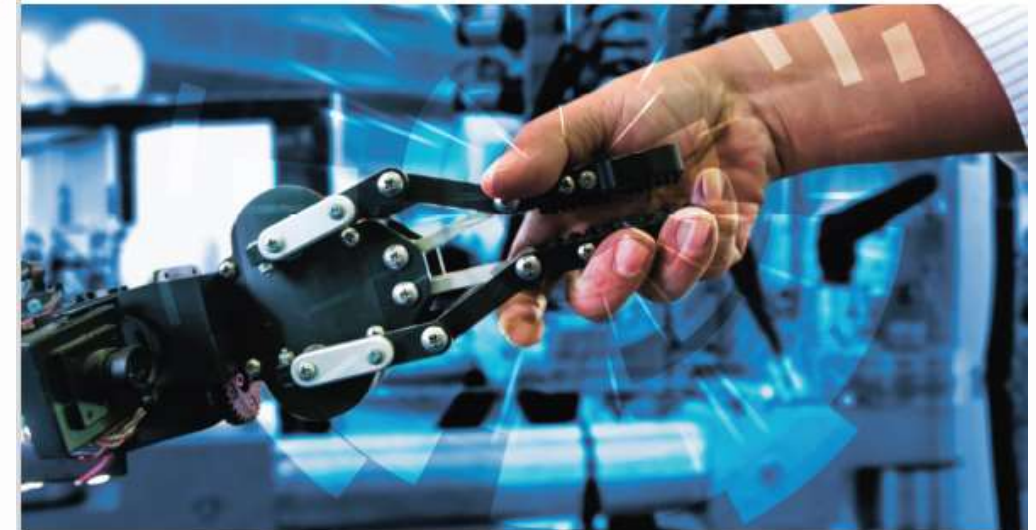
Workforce

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**Industry 4.0 – opportunities and challenges for SMEs
in the North Sea Region**

Desk study - December 2018



SITUATION IN THE NORTH SEA REGION



- Most SME's are in the first stages of development to Industry 4.0
- All regions are interested in helping companies with the transformation.
- All partner regions have a good starting position
- A common and frequently mentioned problem is preparing and finding personnel for this transition.

TOOLS FOR SKILLS



Project technological, business and HRM tools.

In this presentation focus on the HRM tools.

Existing tools and tools developed in the project.

Tested these tools – maturity assessment tools, tools to measure competencies, tools to work with Data, tools for change management.

Not all tools were adequate.

We compared the results with the results of the maturity assessments.

EXPERIENCES TESTING HRM TOOLS 1.

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SME's are very interested in “tools” that will help them with HRM.

Overview of the current workorganisation is difficult

Future workforce is hard to imagine

The field of Smart is very abstract

No single tool that we tested was at his own suitable for the goal of helping the SME's with their Smart Industry related HRM uncertainty.

EXPERIENCES TESTING HRM TOOLS 2.

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A lot of various technical skills for different aspects of Smart Industry.
So what technical skills a company needs is not easy to determine.
Change is a constant factor – so dealing with change is very important.
Also critical thinking and problem solving skills.

MATURITY STAGE AND HRM PORTFOLIO



We incorporated the experiences in the HRM 4.0 workshop. It is a combination of tools and the starting point is a Maturity assessment.

We look at the phase a company is in based on a maturity assessment

(Aimtec model)



PORTFOLIO SUGGESTIONS

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A combination of tools is needed.

There is a relation between maturity of the organisation and skills needed.

It is very hard for a company to think about the changes in workforce if they have no clue of the I4.0 technologies.

It was also very hard for SME's to imagine the future and relate it to the workforce.

SME's want to "do something" with competences in the company.

THE RESULT: HRM 4.0 PORTFOLIO

Introduction

1. Assessment (Awareness, ADMA, Made Different. ROSF etc.)

2. Information about I4.0 Technologies (Ostfalia catalogue)

3. Fill in **Competence Based Tool (CBT)** and (choice) Big 5 and/ or Watson Glaser

4. Transition Workshop (change)

5. Discuss results with employees/consultant

Closure



EXAMPLE: COMPETENCE BASED TOOL

Registration of the tool

1. The organisation needs to sign up with the organisations' name and contact email address.
2. After this short registration the organisation will receive a link for the survey.
3. The link can be distributed within the organisation and spread among employees.
4. After the required amount of team members have completed the survey and after the set end date, the survey will no longer be open for employees to fill it in.
5. After completion, the organisation will receive a report with the findings of the tool.

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Scan the QR-code
to start the registration

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GROWIN 4.0 PRESENTS

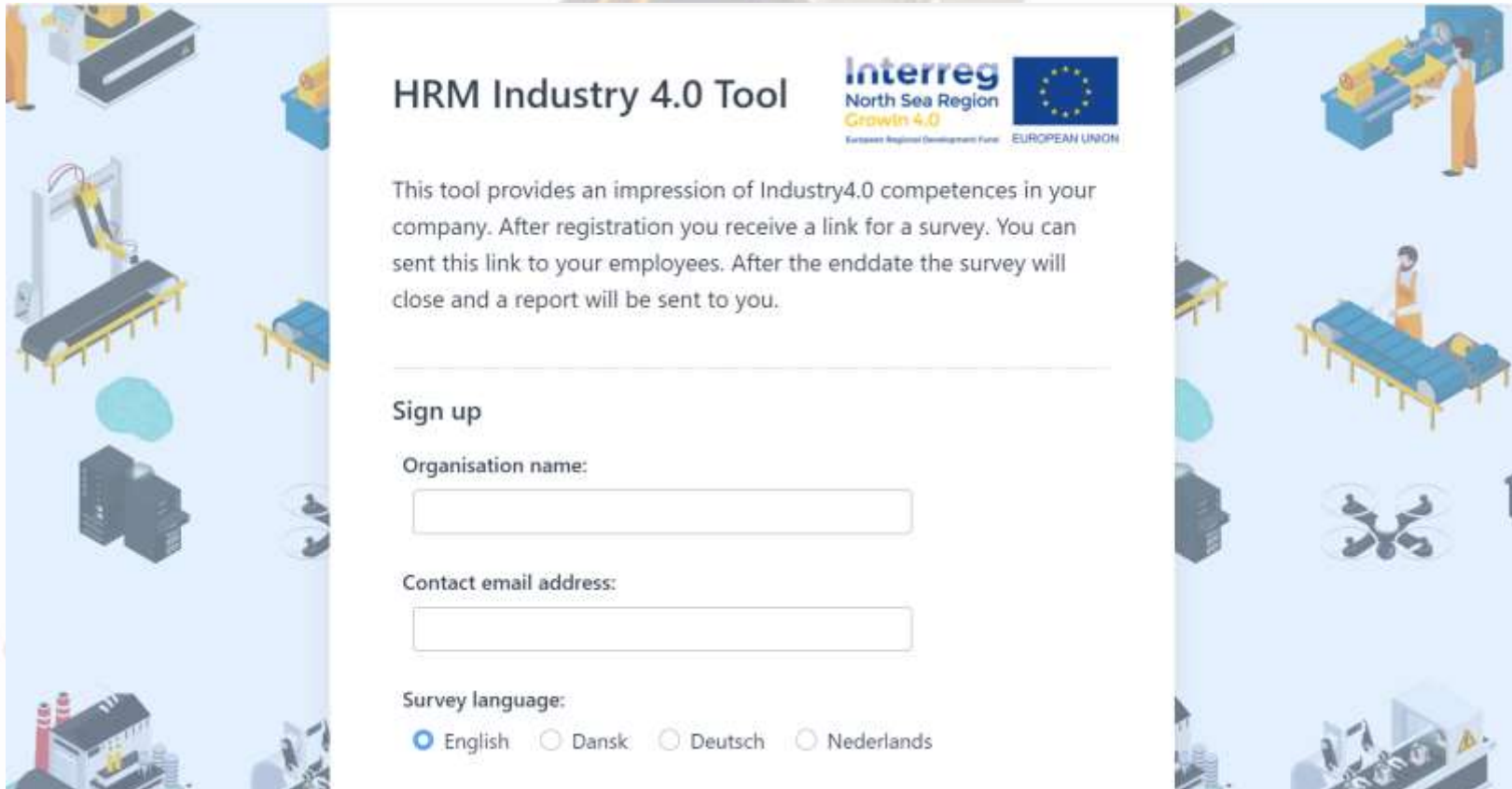
HRM + Smart Industry 4.0 tool brochure

This tool provides organizations in the manufacturing industry with an impression of the Industry4.0 competences within their company.



<https://northsearegion.eu/growin4/>


[HTTPS://GROWIN.WEBENAPP.NL/SURVEYS/60AEA4DDA2AAA](https://growin.webenapp.nl/surveys/60AEA4DDA2AAA)



The image shows a registration form for the 'HRM Industry 4.0 Tool'. The form is set against a light blue background decorated with various isometric icons representing Industry 4.0 concepts, such as robotic arms, conveyor belts, drones, and factory buildings. At the top right of the form, there are logos for 'Interreg North Sea Region Growin 4.0' and the 'European Union' flag. The text explains that the tool provides an impression of Industry 4.0 competences and that users will receive a survey link after registration. The form includes three input fields: 'Organisation name', 'Contact email address', and 'Survey language'. The 'Survey language' section has four radio button options: English (selected), Dansk, Deutsch, and Nederlands.

HRM Industry 4.0 Tool

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 **EUROPEAN UNION**

This tool provides an impression of Industry4.0 competences in your company. After registration you receive a link for a survey. You can send this link to your employees. After the enddate the survey will close and a report will be sent to you.

Sign up

Organisation name:

Contact email address:

Survey language:
☒ English ☐ Dansk ☐ Deutsch ☐ Nederlands

EXAMPLE REPORT

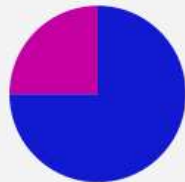
HRM Tool Industry 4.0

R E P O R T

In this report you will find the results of the GrowIn4.0 HRM tool. This will give you an impression of the changes in the field of work and competences in the next years. This can be the starting point for a future step in the digital transition.

Organisatie:
Respondenten:

Vraag: Wat voor werk doe je binnen de organisatie?



- **75%** Geen van bovenstaande opties
- **25%** Mijn werk heeft vooral te maken met management (Overall management, Proces Management, Project Management)

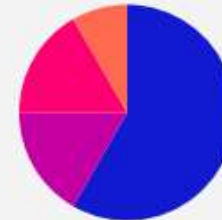
Vraag: Hieronder staan verschillende kwalificaties die relevant kunnen zijn voor een Management functie. Maak steeds 2 keuzes: in hoeverre beschik je over deze kwalificaties én hoe relevant vind je deze kwalificaties voor de nabije toekomst (binnen 3 jaar)?

Top 5

"Ik heb deze kwalificatie niet"

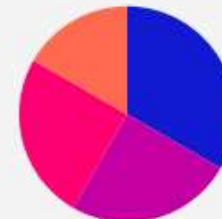
1. Technische opleiding op HBO/WO - Hoger onderwijs niveau (2 / 12)
2. Kennis van nieuwe technologieën (bijvoorbeeld 3d printen, augmented reality, Machine learning) (2 / 12)
3. Kennis van Agile werken (2 / 12)
4. Andere opleiding op HBO/WO - Hoger onderwijs niveau (2 / 12)
5. Management opleiding op HBO/WO - Hoger onderwijs niveau (1 / 12)

Vraag: De weg naar Industry4.0 gaat door verschillende fasen, in fase 1 is er weinig geautomatiseerd en wordt nog veel handmatig gedaan, in de laatste fase is alles geautomatiseerd en worden beslissingen genomen door slimme machines. Waar in deze transitie zou je je eigen organisatie plaatsen?



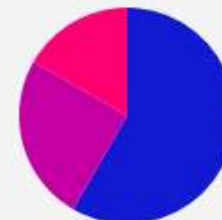
- **58%** Fase 2 Iets meer geautomatiseerd - ERP systemen
- **17%** Fase 1 Weinig geautomatiseerd - traditionele fabriek
- **17%** Fase 3 Redelijk geautomatiseerd - Aantal slimme onderdelen
- **8%** Fase 5 Helemaal geautomatiseerd - Slimme fabriek

Vraag: Hoeveel ervaring heb je in het vakgebied waar je nu in werkt? (het gaat om totale werkervaring in het vakgebied - dus het hoeft niet bij dezelfde werkgever te zijn)



- **33%** Tussen de 10 en 20 jaar
- **25%** Minder dan 5 jaar
- **25%** Tussen de 20 en 30 jaar
- **17%** Tussen de 5 en 10 jaar

Vraag: Denk je dat je baan in de toekomst zal veranderen als gevolg van Industry4.0?



- **58%** Ja, ik denk dat mijn baan de komende 5 jaar zal veranderen, maar niet erg drastisch
- **25%** Ja, ik denk dat mijn baan de komende 5 jaar drastisch zal veranderen
- **17%** Nee, ik denk dat mijn baan de komende 5 jaar hetzelfde blijft

REFLECTION



A lot of uncertainty - both for companies, but also for the testers. We don't know how it will turn out. What do the developments mean for my company, what do the developments mean for my employees, what knowledge do I need, who will give me the answer? These questions are not easy and it is not easy to give an unambiguous answer.

They are complex developments. Every company is different, every technology is different, not every technique suits every company. It is too complex to summarize "just" in a workshop, assessment, game, course.

What we noticed is that companies experience the tools as a first step, an introduction, an aha experience, a first look outside the box.



THANK YOU FOR YOUR ATTENTION

More information about our project and our tools at our webspace:

[GrowIn4, Interreg VB North Sea Region Programme](#)