Newsletter #6

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Interreg CENTRAL EUROPE
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ProsperAMnet

How artificial intelligence works from a company and human perspective

The opinion of the CEO from the Mortoff Ltd. Hungary-Zoltán Beke

Artificial Intelligence (AI) is now all around us, affecting many aspects of our lives, so our knowledge of AI is not only important and crucial for projects, including manufacturing companies, but also in our everyday lives. With this in mind, we asked Zoltán Beke, head of Hungary-based Mortoff IT Consultant Ltd., what is worth knowing and what to look out for when it comes to AI-driven technologies, their development and their spread.

How should humans relate to AI-enabled machines?

Zoltán Beke (ZB), CEO of Mortoff Ltd: I think that **some people are afraid of artificial intelligence**, **which may be because they have little information**. A lot of people are afraid that AI will take away their work, but what I see now is that AI will help us do our work. Basically, AI can play a role in two types of work: the work that people are already doing and the work that they have not been able to do because of the abundance or nature of the data.

Which areas of business use AI the most?

Use it where it "hurts". What do we mean by that? For companies, one of the sensitive points is the **quality of the product** and its continuous control, and the goal of producing as few rejects as possible from the product manufactured. The other key area is **ensuring machine availability**, i.e. recognising in time when a machine needs maintenance or is about to break down. Furthermore, occupational **health and safety** has also recently emerged as an area of use in industrial companies (e.g. cameras to check that all employees are wearing protective equipment or that people are not walking on the designated routes of automatic forklift trucks).

·What do you think are the most striking benefits of AI?

One of the biggest advantages is that the AI does not tire, so the quality of performance at the 10th or 12th hour is the same as at the first. Furthermore, AI can do tasks that humans cannot (as discussed earlier, e.g. quality control in 0.5 seconds, which humans cannot do).

Can SMEs afford to buy new AI systems or is it only for large companies?

As time goes by, more and more solutions will be available on the market, also for SMEs. The cost will be determined by whether the solution is based on a ready-made model (trained or built by others) or whether it is a start from scratch.

Accessible solutions for SMEs always use existing models. There are more and more existing models on the market and more and more professionals who can apply them, so the cost of entry is significantly reduced.

Picture:
Zoltán Beke (ZB), CEO of Mortoff Ltd

The whole interview you can find HERE.

An Overview of using Artificial Intelligence in our project

Artificial Intelligence (AI) solutions are getting prevalent, not only shaping our everyday life, but also making their way into operative business decisions. AI solutions can do a great favor of performing repetitive and time consuming tasks, during which they try to mimic human behavior and the decisions made by humans. The tools that we have developed and imrpoved substantially over the course of the project precisely aims at such autmatizations. For instance the RADAR is autonomously capable of identifying the business services offered by companies by investigating the contents of their websites.

In some sense, machines can be taught to perform a specific task similar to humans, via providing them examples. In order to make the process of analyzing company websites autotamed, we had to collect the results of thousands of human analyses of various company websites. The data collection was followed by the so called training phase of our AI models, the goal of which was to try to as closely replicate the decisions of a human inspection as possible.

Our data collection phrase revealed that the task of investigating entire websites of companies and looking for the kind of services they offer is indeed really time consuming for humans, as the average time our subjects spent with investigating a website was around 15 minutes, not to mention that humans performing this task can easily became unfocused by this highly repetitive task. By building an AI model for performing this task, we were able to reduce the time needed for processing a company website to less than a minute, without a noticable loss in the quality of the identified services compared to human labor! This considerable speedup allowed us to perform analyses over a large number of companies belonging to specific regions.

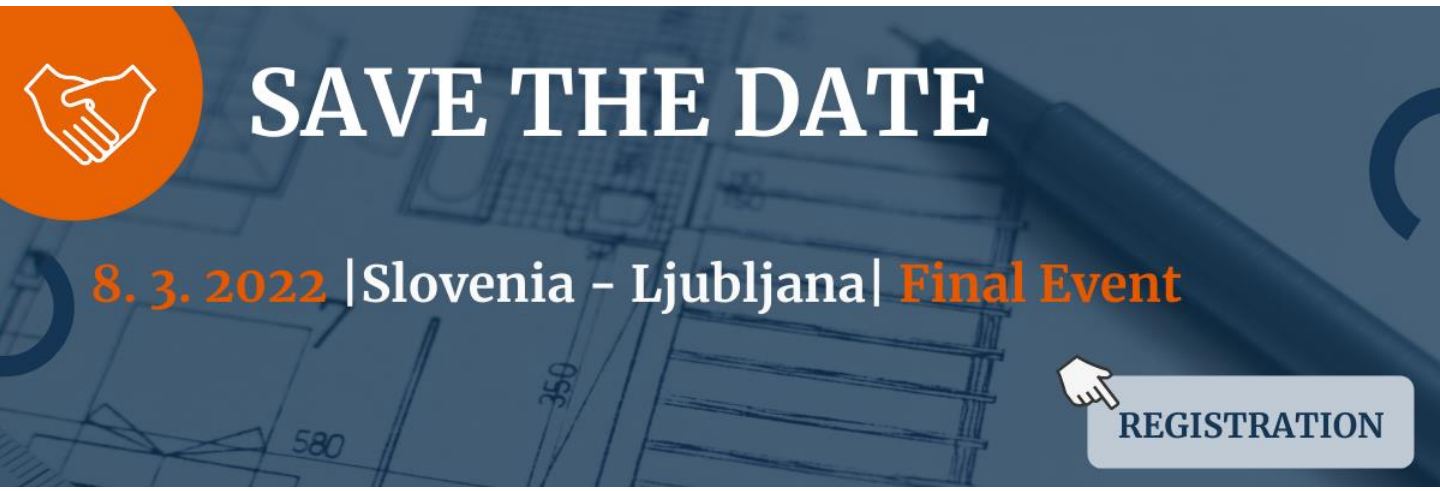
Source: Fotolia, iStock

CONFERENCE PARTICIPATION

Using the automation website analysis tool described earlier, the consortium members were able to conduct a large sample of websites of advanced manufacturing technology companies, broken down by region. Their comparative results were presented at two international conferences, ICMarkTech and QUIS17, in December 2021 and January 2022. The conferences focused on innovative solutions for marketing and digitalisation. The ICMarkTech organising committee awarded the paper written by the consortium members with the honorary title of the most innovative paper of the conference, together with the possibility to publish an extended version of the paper in the peer-reviewed journal European Journal of Management and Business Economics.

INVITATION TO THE CONFERENCE

How to Boost Service Performance & Service Export Trends in AMs



Read more:
https://www.interreg-central.eu/Content.Node/Invitation-letter.pdf

Prosper success

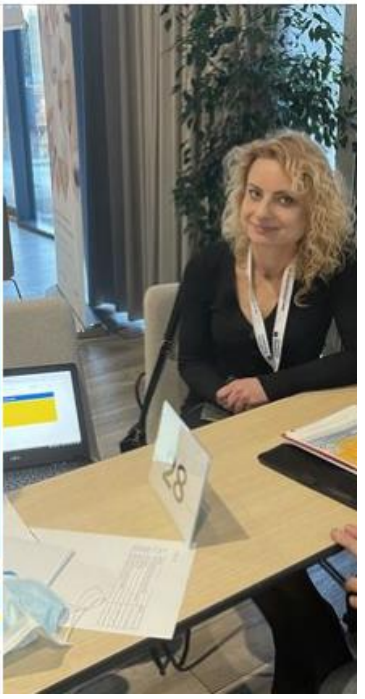
Great success at the ICMarktech conference! 😍

Current participation in the ICMArktech conference in Spain, Tenerife: Our paper "Find me if you can! Identification of services on websites by human beings and artificial intelligence" (written by FHOÖ, University of Passau and University of Szeged) was awarded as BEST PAPER among all submitted papers. 👏

➡http://icmarktech.org/index.php/en/

On 3rd and 4th November the 28th Polish🇵🇱-German🇩🇪-Czech🇨🇿 cooperation forum for Enterprises took place in Szklarska Poręba in Poland.

Bautzen Innovation Centre presented the project and especially the Service Export Radar to several German enterprises during the event in bilateral talks and at the exhibition booth. 👍



ProsperAMnet booth - Biz-up & FHOÖ

👉At the 'Smart Automation Fair' in Linz, we invited manufacturing companies to test the Service Export Radar and attracted interested participants for the Austrian online Round Table on 9.11.2021.

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WHO WE ARE

Group photo of the partnership at the ProsperAMnet kick-off meeting on 6-7 May 2019

ProsperAMnet in NUMBERS

Project Duration:
1.4.2019 – 31.3.2022

Budget:
1.9 m. €

ERDF Funding:
1.5 m. €

Our ***associated partners*** support us to implement the project successfully in each involved region by providing expertise of local AMs and know-how in export and export policy.

- Austrian Chamber of Commerce, Foreign Trade, International Technology Cooperation
- Technical University of Liberec, Faculty of Economics
- European region Danube-Vltava (ERDV)
- VDMA – Association of German Mechanical and Plant Engineering
- Slovak marketing association
- Regione Autonoma Friuli Venezia Giulia
- South Bohemian Agency for Support to Innovative Enterprising
- Faculty of Information Studies in Novo mesto
- Municipality of Székesfehérvár
- Ministry of National Development, Digital Economy and Innovation

LEARN MORE ABOUT THE PROJECT

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