

Questions Webinar- AI in Manufacturing

- How can AI help companies to plan for unexpected events, i.e. to be more resilient?
 - *First we need to define what is an “unexpected event”. There's a difference between events unexpected to humans and events unexpected by the data. Events that we can see historical patterns of (machine breakdown due to poor maintenance etc) can be solved by AI. But “black swan events” that have no historical representation are very hard to solve with AI. In theory, if you find good metrics of output from your business/industry etc, that you use to represent “normal operation” and what input data that would point to that output; then you can train an AI model to make continuous predictions for future output and monitor how that output performs against the actual operations output. When the prediction output starts to differ from the actual output, that can be a sign that reality (for some reason) starts to change.*
- What is Sweden's USPs when taking Swedish AI in Manufacturing-solutions to an international market?
 - *Sweden has a great AI landscape, both in terms of skills and funding. What is needed is cross-breeding between AI and manufacturing innovators. So by ticking the box of AI skills, the USP:s more comes down to innovative solutions in cross-breeding of AI and manufacturing expertise. The USP could therefore be said to be just the fact that we have both good AI skills and a long and innovative tradition in manufacturing solutions. The competitiveness comes from the fact that we have a great foundation for combining these. Better than most countries.*
- What is your advice to innovative companies regarding risk assessments for AI based solutions?
 - *The most significant difference when assessing risk in AI-solutions is that you have to assess also what a faulty prediction (a bad guess by the AI-model) can cost, and how likely they are to happen. I would advise everyone to give some thought into the different evaluation metrics to learn how to deal with false-positives/negatives. Another topic to consider is bias, it is very easy to be impressed by cherry-picked scenarios but with biased data you could have a really severe down-side and thus, a big risk.*
- When you talk about AI value chain do you include end user experience?
 - *I'm sorry I don't fully understand the questions enough to give a good answer.*
- What is licensor of tools a legal person or Group of experts? How do we get data or inform about malfunctioning in AI logic? Who can be contacted for answers?
 - *I'm sorry I don't fully understand the questions enough to give a good answer.*
- Is there a list/proposal of recommended sensor suites for different applications that should/could be used for training AI in predictive maintenance cases?
 - *It could be, but I don't know anything specific. It probably depends if you're looking to buy an “off-the-shelf”-solution for specific machines (then the sensors would be included) or if you plan to build up your competitive edge and train your own AI-model (then sensors would be bought separate)*
- What is your experience regarding what technical readiness is needed to work with AI?
 - *To start: Very little; some upskilling into what AI can do, someone with good business data intuition and then find a tool suitable for your skill-level. When you've reached your first proof of concept/prototype then consider more serious upskilling, and when you plan to productionize you probably need to hire experts.*
- What needs to be in place from a technical perspective to get started?

- *See above, a tool suitable for your skill-level (like a no-code AI platform if you don't have Data science expertise) and data at hand in a spreadsheet or similar.*
- At some point different sectors will reach a tipping point at which enough 'competitors' have begun to experiment and implement AI solutions and others will follow suit in quick order so as not to be left behind. So adoption will at some point suddenly begin to take off. I guess an AI could use historical data to identify when this point will occur for different sectors?
 - *In theory, if all sectors follow similar patterns, or if patterns can be extracted from previous industry transformations - And a dataset can be created to represent this data, then yes. But in practice this seems a very complicated task to solve.*
- How can AI help companies working with medical device? In addition, there are different classes of medical devices, is it possible AI can make it easier for the intended use?/Thank U
 - *I'm sorry I don't fully understand the questions enough to give a good answer.*