



The role of automation in energy trading

Power and Energy Transition Lead at HC, finds out how tech-driven energy trading company Danske Commodities is adopting technology across its value chain, from the use of machine learning and algorithms on the trading floors, to the automation of post-trade processes using robotics.

When Danske Commodities (DC) was acquired by Norwegian energy major Equinor in February 2019, automation played a large part in DC onboarding a 20 TWh downstream gas storage portfolio. By focusing on the potential of automation, DC was able to onboard new business without bringing on more people to handle the massively increased activity level.

Capturing the full potential of modern technology calls for innovative thinking. For some time, Danske Commodities' gas trading team has welcomed individuals with different educational backgrounds. For example, some employees have studied cosmology or physics. Jenita Riat, EMEA Gas, Power and Energy Transition Lead at HC, speaks to Sebastian Stadler, Head of Gas Trading and Optimisation, and Tobias Basse, Head of Gas Systems and Automation, both at DC, to find out how automation is solving complex processes at the organisation, and why DC strives for a diverse workforce.



Jenita Riat: What does your role at Danske Commodities involve?

Sebastian Stadler: After completing my studies in Energy Economics & Engineering, I joined a large Austrian utility, where I was heavily involved on the gas side, mainly focusing on their large power plant fleet and customer portfolios. Since 2017 I have been working in the gas team at DC and since the start of 2020, I have had the pleasure of heading up the commercial arm for the roughly 23 gas markets we are active in across Europe. After DC was acquired by Equinor in February 2019, I've been involved in onboarding Equinor's downstream storage portfolio to DC, which has definitely put us on the map as a flexibility trader.

Tobias Basse: After studying physics in Aarhus, where I completed a PhD in cosmology, I joined DC in 2014 as part of the company's graduate programme in the IT department as a software developer. My studies provided me with a packed mathematical and statistical toolbox and exposed me to complex problems where the answers cannot be found in a textbook. It was my curiosity that drove me to cosmology and it's still what drives me in my work today. DC's graduate programme gave me a wider exposure to the gas trading, power trading and risk management activities, and

after completing the programme, I joined the gas team as a trading analyst. This position exposed me to the best of both worlds as I was trading and doing a lot of analytical work. In 2016, we increased our automation efforts and I was able to lead that for the gas team. Last year, I became Head of Gas Systems and Automation at DC. I'm responsible for setting the direction for the digitalisation of our gas team.

JR: What effect do you think digitalisation has had on your business?

TB: Digitalisation facilitates the automation of manual processes, for example some elements of trade execution, creating a more efficient setup and freeing up resources. It also helps to automate decision-making based on data of either a fundamental or technical nature. These decisions can be combined with automated execution. Digitalisation has also impacted the way we organise our business as we strive to bring technical experts like software developers and business intelligence specialists together with traders, effectively rubbing shoulders every day to create a common understanding, efficient alignment and to share the successes.

SS: Tobias and I strongly believe that the commercial side of the business and automation link very well together, so we are looking to harness this symbiosis to strengthen our integrated value-chain approach, bringing all parts of the value generation closer together. Process automation, for example, has a lot of potential - freeing up time for our employees to focus on value-adding tasks, addressing things like; how can we optimise our product portfolio, developing trading strategies and identifying new markets.

JR: Did automation play a part in aiding Equinor's acquisition of DC?

SS: When Equinor acquired DC, we were ready to scale up very easily, with limited adaptations required to our setup. Automation allowed us to transfer assets smoothly and efficiently. Since our tool environment was built in-house, anything that needed changing could be done quickly and in a very customised way. Automation can help in many ways, the biggest time savers are of course repetitive tasks that can be eliminated, freeing up time and improving execution quality.



“Process automation has the potential to free up time for employees to do something else, to think about how we can enter a new space for example, maybe a product or market.”

JR: Do you think digitalisation gives you competitive advantage?

SS: It is a hot topic right now and I think we have the agility and speed to be successful in developing our business in this direction. We sometimes see larger companies struggling with more rigid setups and processes, so we believe in our approach of digitalisation. In our team, we encourage everyone to challenge each other, not only in regard to the commercial tasks, but also in terms of processes and how we get things done – really leaning on this entrepreneurial spirit to think about digitalisation as part of our success.

TB: Our constant drive to challenge the way we operate as the business grows, to look at our business and help it to move forward enabled us to see what technology and digitalisation can offer us. We are constantly looking at how we can improve our business.

JR: Do you think your competitors should adopt automation?

SS: We have come up with a solid understanding of what it is we need to do and what automation means in that context. It is not our place to say that if our competitors do not innovate and automate then that will be the end of them. We feel it is the right fit for us to achieve what we want to do. We of course want to keep our competitive edge and we want to continue expanding on it and creating a strong foundation.

TB: The traditional role of traders is not disappearing. It is changing and it has constantly been changing in the time that I have been with DC. I think digitalisation has been a key driver in the change that I have experienced, and I believe digitalisation and automation will continue to drive the future of energy trading.

JR: How has Covid-19 affected the way you trade?

SS: We were able to move to a home working environment very quickly. In the gas team we have a 24 hours a day, 7 days a week shift setup, so that needed extra attention as we moved in to remote working. From the commercial point of view, we did not need to change much of how we conduct business or our approach to the markets. We have been able to maintain our strategy. We have seen some impacts on the market side, for instance less liquidity at times and the way we engage with brokers is different because they have to shift between two different locations. We had a strong foundation already in place, which helped us run our operations smoothly and our systems are at a high maturity level.

JR: What is important to you when finding the right talent?

TB: I value a diverse background. For example, I studied physics and others have studied economics or engineering and building on that diversity with people from all backgrounds and nationalities will provide different points of views. We look at universities for people with PhDs or master's degrees. We also look at people who are more experienced in the wider financial domain so they can transfer their knowledge.

SS: Some degrees are better suited, but we have a very diverse background, even in front office roles, and I think that is amazing. Diversity is something that we pride ourselves on. It is the blend of different people and different thought processes that enables us to solve problems quicker, be more efficient, and more profitable. We therefore look to be open-minded when hiring.

JR: What does the future hold for DC?

SS: The future looks bright for our gas trading business. We have built a leading IT and systems setup and with Equinor in our corner, we have the necessary financial strength to break down the door to new markets, increase risk taking with stronger credit lines and gain unparalleled access to assets. And as a company, DC is strengthening its position as the preferred route-to-market partner for renewables and expanding its business model on a global scale.



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