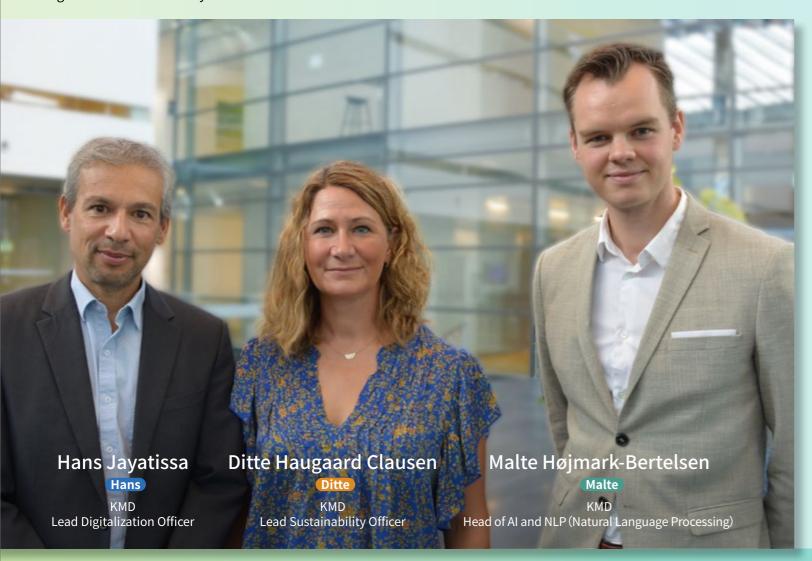**NEC's Business Model**
Employee Roundtable

Creating New Social Value through KMD Digitalization

As governments around the world focus their attention on digitalization, NEC acquired KMD Holding A/S (KMD), one of Denmark's largest IT companies, in December 2018. KMD has overwhelming strengths when it comes to providing solutions for government and local public institutions, such as those involved with social security, taxes, policing and defense, as well as financial institutions and city infrastructure. We asked three members of KMD to talk about the advantages of the company, to give us an update on its collaborations with NEC, and to tell us about what the future holds in terms of the digitalization of government and society.

Hans Jayatissa
Hans
KMD
Lead Digitalization Officer

Ditte Haugaard Clausen
Ditte
KMD
Lead Sustainability Officer

Malte Højmark-Bertelsen
Malte
KMD
Head of AI and NLP (Natural Language Processing)

Q. What made you want to work for KMD?

Hans

If you include my previous employment, I have been involved with digitalization in the public sector for almost 30 years. In my previous position I was involved in setting up several core systems for the government and introducing new digital technology into the public sector.

KMD saw my involvement in public sector digitalization and reached out to me with perfect timing, just as I was really starting to feel like I wanted to do something that had more social significance. The reason I like working for KMD is that its IT systems give people more access to social security and other benefits of the public sector; their business helps society.

Malte

Over my career I have been driven by the idea of using technology to benefit society, and I decided to join KMD because I was convinced that KMD has a unique ability to help actualize that idea. I am currently involved in developing solutions for the public sector that utilize AI. We are using the power of IT to improve operations in the public sector, which optimizes society as a whole and creates a better life for all people. The fact that we are developing technology and software that provides major value for society, and the knowledge that our work directly benefits society, are the most appealing points about working at KMD and give me great motivation.

Ditte

KMD is a well-known and trusted company in Denmark, thanks to its earnest efforts to help digitalize the public sector. I was interested in using my area of expertise, communication, to help KMD express how digitalization could help support the green transition, since this connection is still not entirely clear to society.

Q. Denmark is ahead of the curve when it comes to digitalizing the public sector. How has KMD contributed to this success?

Hans

I think there is a mix of factors.

First is the fact that the effort was led by the government itself, via two state-owned IT companies that have since gone private. In fact, one of these companies was KMD. The government initiated its digitalization efforts in 1968 by introducing a unique ID for every citizen. Denmark is a country with a small population, meaning there are few civil servants, and higher personnel expenses. This makes it difficult for administrative work to proceed smoothly, but this problem can be solved by IT. The Ministry of Finance was key to this transition and pushed government agencies to digitalize to ensure that no citizens would be left behind.

The second factor ties in to Ditte's point—trust. People in Denmark tend to trust their government and public sector institutions. This trust, or the lack of it, is the biggest barrier to digitalization in countries like Japan and Germany. Yes, they have central registries, but trust is still lacking. Despite the high tax rate, Denmark has a strong welfare system that is grounded by the idea of fair distribution for all. It is exactly because of this social infrastructure that there is mutual trust between the government and its people.

Ditte

In addition to trust, the high level of education, good Internet access, and politicians who envisioned a digital society all played a part.

When digital technology was not commonplace, KMD already had a great deal of technological strength and knowledge. It took advantage of both to make an active effort to advise public organizations on matters of policy making for digitalization. To this day, we are still a member of a large trade organization and offer regular advice and other essential drivers of digitalization.

Hans

In addition to taking advice from the industry in general, the government will also turn to KMD for opinions on new systems and drafts for regulations regarding digital technology. Feedback from the industry (and us) then gets reflected in tenders for new systems as well as regulations or legislation.

In addition, KMD has also provided the government with solutions such as a citizen portal site and digital mailboxes. The government has since taken over these services, but these ideas devised by KMD have formed the basis of Denmark's digital social infrastructure.

When building a system, usability is of the utmost importance. For instance, the portal was designed so that

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necessary information could be accessed within three clicks and sections are ordered and displayed by frequency of use.

One notable case in recent times is the MyHealth app, which was updated to become much easier to use during the COVID-19 pandemic. The app is linked with a person's national ID, so it can be used to receive and display COVID test results quickly. Since this app needed to be useable by all citizens in a short amount of time, KMD placed a particular focus to make it easier for elderly people to use.

Malte

We are also transparent about personal information protection, which is one of the biggest roadblocks when promoting digitalization. For example, the law stipulates who can access personal information and under what conditions, and you can see who has access to your personal information and why. It is also possible for a person to choose not to disclose their address or personal information for whatever reason. I believe that making these considerations and properly informing people about how their personal information is handled has served to break down these roadblocks and accelerate our drive toward a digital society.

The key to future services is "usability," as Hans pointed out. We recognize that KMD needs to create software that is intuitive and easy to use, since that is what spreads the use of digital solutions.

Q. What matters of interest do you see going forward, and how do you address them?

Hans

I think the next big digitalization driver is the transition to a green society. To create this new society, we will need to make full use of IT in roles that include managing power production and consumption while also working to move away from our dependence on fossil fuels. That is one major area where we should focus our energies over the next 50 years. We also still have yet to resolve the issue of too few civil servants in the public sector, so we need to use IT in these fields to automate and increase operational efficiency further.

Malte

As things are now, there are several examples within public institutions that require work to be checked in ways that require many people doing repetitive, manual tasks. We could use KMD's various technologies to tackle this issue and others like it, and improve efficiency by leaps and bounds.

Ditte

Like Hans said, our next task is supporting the transition to a green society. KMD prides itself on its digitalization capabilities, especially when it comes to understanding electricity and water consumption and similar information. We already manage and analyze data for a large portion of

electricity and digital water meters, and we already have solutions to optimize consumption ready to go. Current regulations impede our ability to take advantage of these services, but the technology has already been developed and has been proven to actually reduce consumption by 10% to 15%, so we will keep ramping up our efforts to create a sustainable society.

Hans

I expect great things to come out of our work with NEC, particularly in promoting the transition to a green society. NEC's advanced sensors, digital twin platforms, and AI-related strengths, all of which are an integral part of energy management, synergize well with KMD's solutions and data. Together, we have succeeded in developing AI and platforms that contribute greatly to this green transition.

Q. What effect would you like digitalization to have on Denmark as a country?

Hans

The ideal society would be one where digital technology is a natural part of people's lives that makes things more efficient by helping them make the right decisions at the right time. To put this in the context of a green transition, making IT a part of people's lives will make it possible to consume water and electricity in a way that is easy, efficient, and requires less of a conscious effort, and that will help drive efforts across society.

Ditte

I would like us to create a "smart" society, with humanity at its core. It would be a great thing if AI and robots could handle routine or simple tasks—anything that could be automated—so that we could concentrate on coming up with new ideas and communicating with one another, the sorts of things only people can do.

I would like Denmark to be a country that is highly flexible when it comes to energy use, and one that is driven by 100% renewable energy. I want KMD's solutions to help make Denmark a trailblazer in these efforts.

Malte

I completely agree with Ditte and Hans. I want Denmark to become a flexible country that takes advantage of new

technologies as a way to resolve problems in every area. I also believe that if we move the public sector toward data-driven operations, we will become more effective and produce better results, and this applies to sustainability too. KMD has a wealth of technology that will help Denmark become a better society, so I would like to appeal to the country to take advantage of it more.

Q. What are your expectations of NEC?

Hans

KMD and NEC are good partners that share the same vision of the society that we would like to create. Together we can create and offer overwhelming services, incorporating KMD's knowledge and products with NEC's R&D capabilities and global network. A good example of this is one of KMD's key products, WorkZone, a flexible document and process management system that can be configured to meet the regulations of markets where it is implemented. This product has already been proposed to customers in Singapore, Japan, and Australia through NEC's global network. We would like to enhance our alignment with NEC so that more citizens around the globe can benefit from KMD's products.

Ditte

"Trust," as we have borne in mind over the years, is essential when you are involved in digitalization of government and society. Likewise, mutual trust is indispensable between KMD and NEC. NEC is highly regarded by society not only for its technological expertise but also because of the trust that NEC has earned over the years, something that is embedded in its corporate philosophy. This trust is something KMD values as well, and we will make the utmost effort to maintain this trust together.

Malte

KMD and NEC working hand in hand could create a digitalized society in a more sophisticated manner than they could on their own. On the journey toward becoming digitalized and data-driven, advice from NEC from a technological perspective could be a key factor. We would like to harness the synergies that arise from our great partnership to create more useful and innovative services to better benefit society.