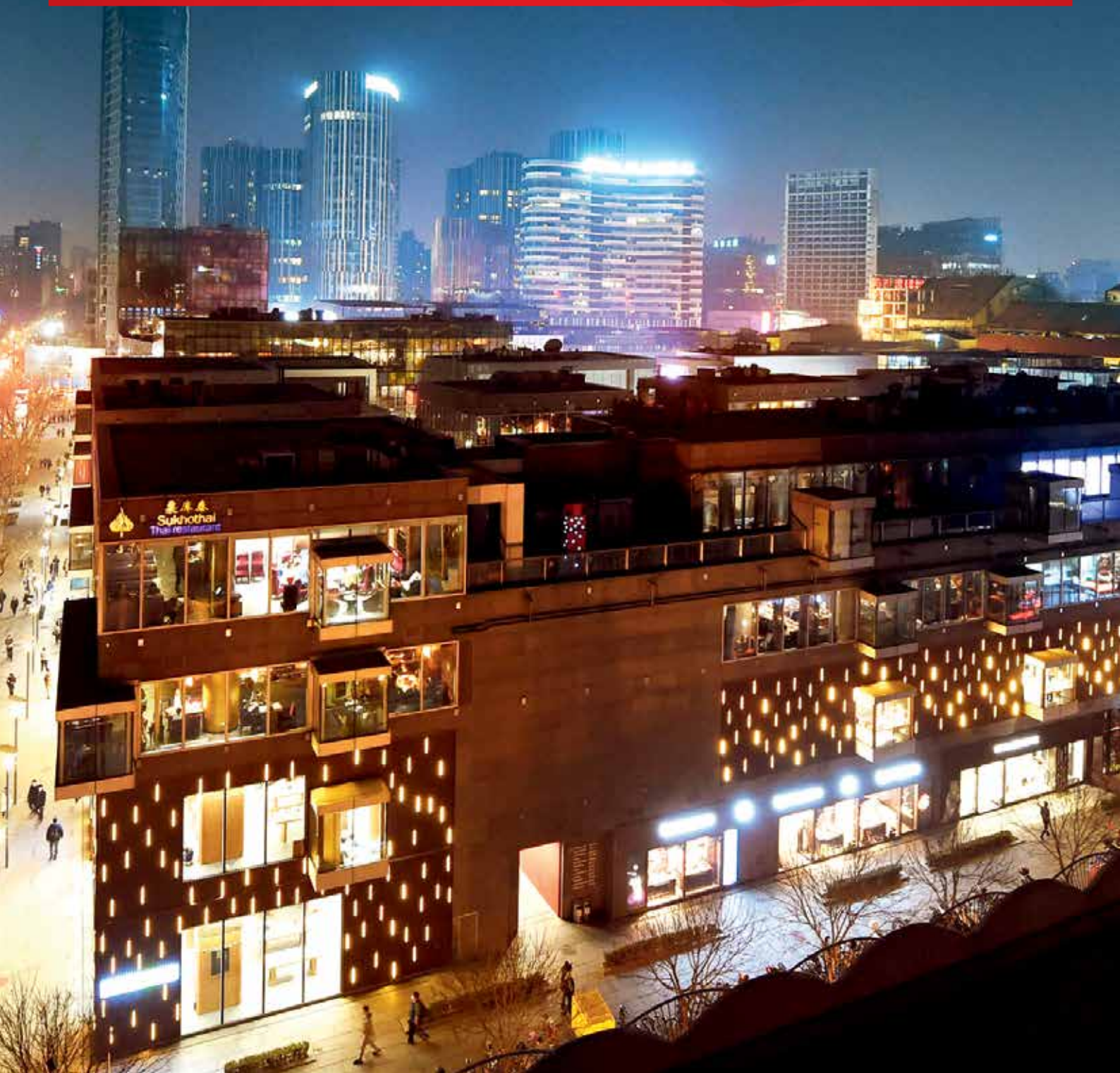
ENGINEERING
TOMORROW

Danfoss

Copenhagen Business School | 2017 Finance Competition

Unlocking the potential of the **internet of things through M&A**



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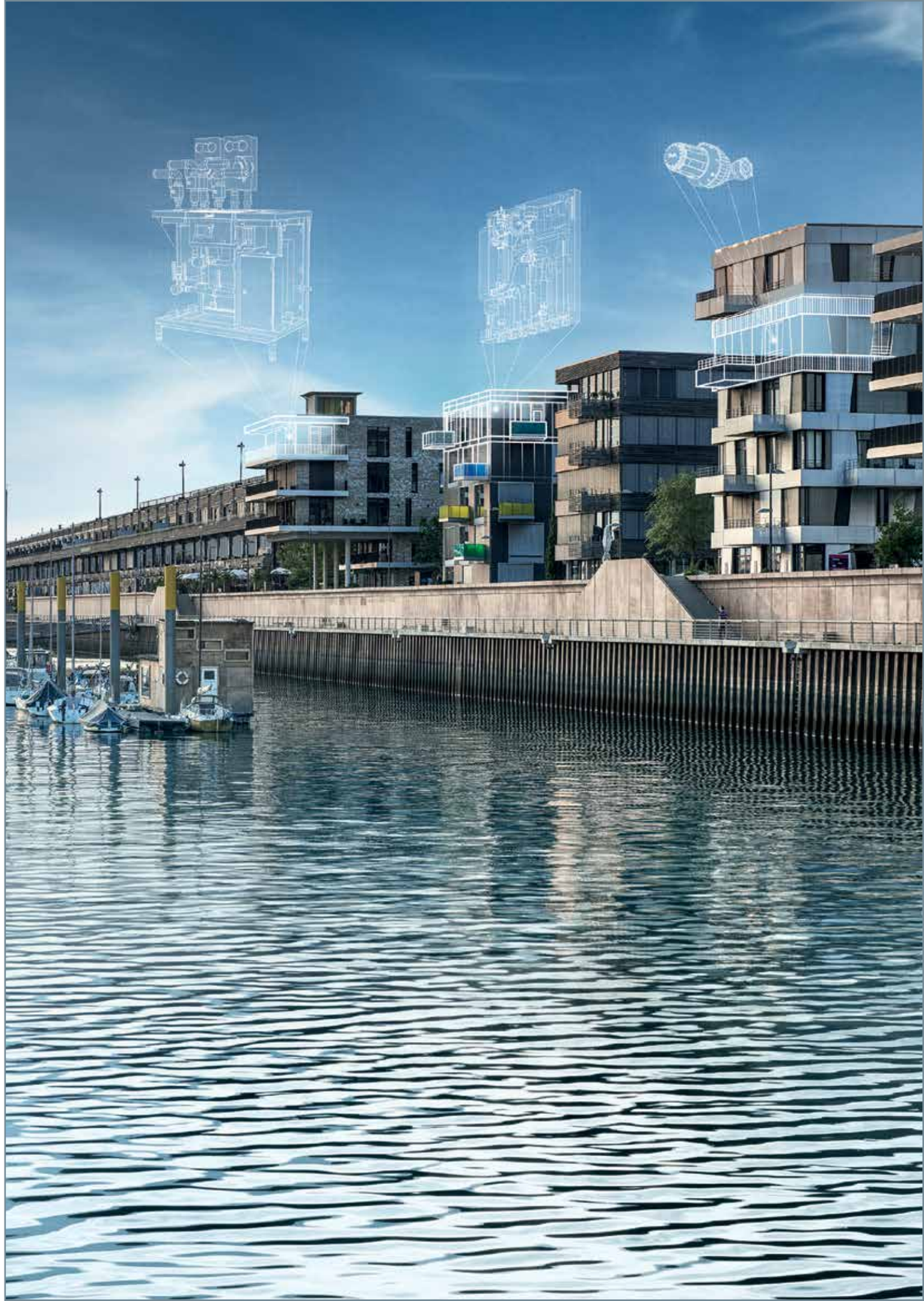
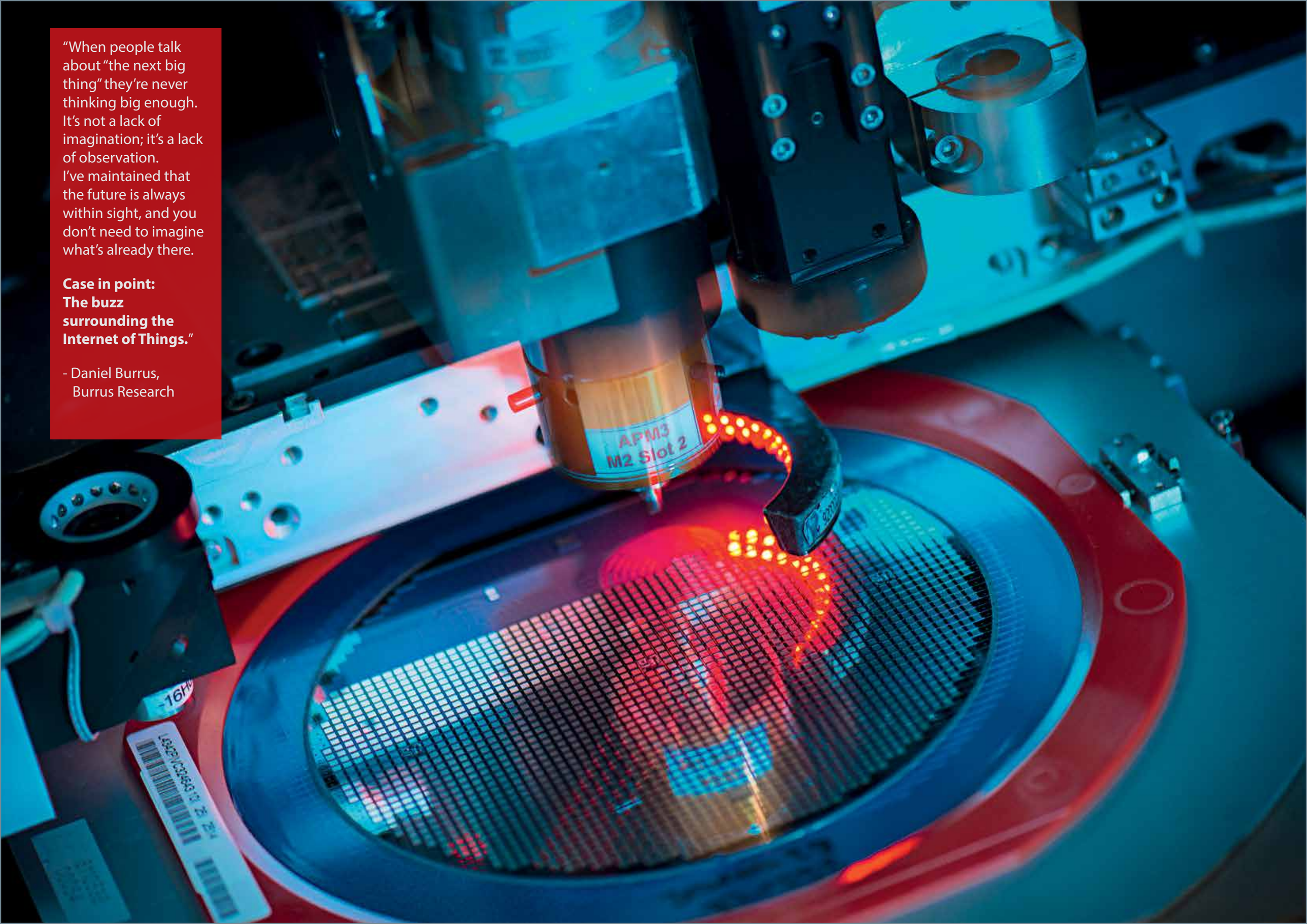


"When people talk about "the next big thing" they're never thinking big enough. It's not a lack of imagination; it's a lack of observation. I've maintained that the future is always within sight, and you don't need to imagine what's already there.

Case in point: The buzz surrounding the Internet of Things."

- Daniel Burrus,
  Burrus Research



Your client, Danfoss, is known for being

at the forefront of innovation. Since 1933, Danfoss has been engineering tomorrow by doing more with less. Today, Big Data, Cloud Computing, and the Internet of Things ("IOT") are all 21th century buzzwords, but how will they impact and change our lives and how do businesses go about it? These are some of the reflections that your client is dealing with today.

IoT defines the interconnection between devices and the Internet. Due to advances in technology, the devices around us have become more intelligent. Just like people, today's devices can intelligently sense and connect with each other. Using these devices, preferences and behavior patterns of users are automatically being tracked and analyzed, adding even more data to the digital universe of information.

The transition to a digital future is rapidly growing, which is indicated by the fact that 5 million new devices are connected to the Internet every hour. IoT is all about collecting and utilizing data and the more massive the amounts of data, the more useful the IoT. Generally, there are three things IoT will change in in our lives:

• Connecting the inanimate and the living

• Using sensors for data collection

• Expanding types of communication

One of the big applications of IoT that will change the everyday lives of many is in the home. Imagine delegating your chores like grocery shopping or controlling your heater to machines without having to monitor or be part of the process. This is where the future is headed.

IoT mergers

Companies within all sectors are investing to enter the IoT sphere. Companies not only build divisions and teams to try to develop connected devices, they also scout the market and acquire startups and SME's around the world to beat their competitors to develop "the next big thing".

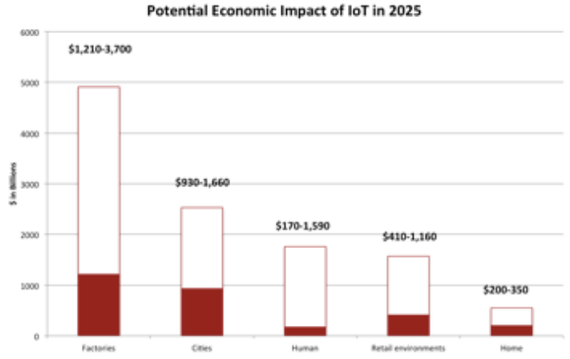
In 2015, the merger markets were at a record high, at almost $5 trillion globally. Although 2016 didn't perform quite at those levels, the deal value

within technology still managed to increase 3% to $323.5 billion in the US.

Cloud, cyber, AI and IOT all played their parts as the most sought-after segments. In 2015, Honeywell acquired Elster Group, a smart metering and cloud-based energy intelligence corporation for $5.1 billion at a 12.6x EBITDA multiple. Earlier in the same year, Acuity Brands Lighting bought Distech Controls, a provider of building automation and energy management products at a 17.9x EBITDA multiple. In 2016, General Electric acquired four different companies: Wise.io, a big data analytics company; Bit Stew, ServiceMax and Meridium, all three of which are software developers.

Also tech-giants see the large potential of entering the market for smart home appliances. Google expanded beyond computers and telephones when the company in 2014 acquired Nest Labs, a maker of smart thermostats and smoke detectors, for $3.2 billion. However, the acquisition in effect wasn't as successful as first anticipated. The acquisition is rumored to have created a harsh corporate culture at Nest, stymied product development and disappointing revenue growth.

This shows that is can be difficult to integrate smaller innovative companies into larger well-established corporations.



Your client, Danfoss, has as an experienced acquirer also ramped up its digital transformation. Danfoss utilizes four innovation routes:

• Internal innovation, e.g. within power solutions, Danfoss has created Plus +1 a software tool to help machines work better.

• Collaboration, e.g. in the Danfoss Telematics partnership to provide remote location and data analysis.

• Acquisition with full ownership e.g. in order to further strengthen its cooling segment, Danfoss has acquired Advitronic, which offers Internet based control and monitoring.

• Acquisition with partial ownership, e.g. most recently Danfoss has invested in the Finnish service-as-a-business corporation Leanheat.

As a strong global player within engineering solutions, Danfoss has come to you because they are contemplating how to penetrate the IoT market most efficiently and how to integrate targets into their large organization. Their recent position in Leanheat has emphasized Danfoss' question: "What should we do now to further strengthen our position and what are the next steps to ensure success within IoT?"

The intelligent home

The IoT has created a myriad of possibilities for businesses to apply sensors and Internet capabilities to everyday physical devices in a number of settings. One of these is the home setting, where the IoT enables the "smart home" and disrupts the way we live.

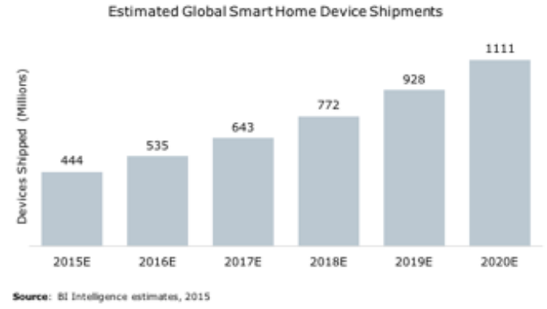
IoT application offers connectivity between everything in your house and these devices are being created within three main categories: security and safety, smart appliances, and energy management.

IoT devices within energy management not only save consumers money and time, but also efficiently decrease energy consumption and thereby CO2-emmissions and energy waste.

High potential areas in the connected home:

Intelligent buildings reduce environmental impact, improve indoor climates and deliver a higher level of operationally efficiency. In 2015, there were 17 million connected homes in the US. Today, having grown at a compound annual rate of 31%, there are 29 million connected homes. The reason for this immense growth is because the connected home allows your home to communicate across devices and perform tasks autonomously.

Users are typically offered a user-friendly interface device to observe and control the physical objects. The number of smart home devices shipped is expected to grow from 83 million in



2015 to 193 million in 2020.

Despite the benefits, promising sales projections and the fact that many companies are heavily investing in new smart-home devices, consumers do not seem to be adopting the technology as fast as otherwise expected. As an example of the low market penetration, only 6% of American households have a smart-home device, which is partly explained by the relatively high prices for smart devices.

On the other hand, the growth rate of connected homes is high and projected to continue in the future. Therefore, many companies are focusing on investing in external IoT solutions to better serve customers.

This also reflects a shift in business focus for many companies and calls for a development of capabilities as products moves from being very mechanic to more electronic.

Delivering tomorrow's efficiency through generations

The history of Danfoss began in 1932, where founder Mads Clausen stood with his first functional valve in his hand. This laid the foundation for what later became one of the world's first thermostats. Through continuous product development and improvements during the last 85 years, Danfoss has created a wide spectrum of energy and technology solutions for both consumers and businesses, where products and services maximize efficiency and productivity across countless industries. Danfoss is built on a strong heritage, and the privately held company is still controlled by the founding family through the Bitten and Mads Clausen Foundation. Danfoss employs more than 23,400 employees worldwide, serves customers in more than 100 countries and is among the world leaders within each of its four business segments:

Danfoss Power Solutions

Danfoss Power Solutions is highly specialized within mobile hydraulics system optimization and total machine management. The segment applies their technical knowledge to provide solutions for the construction, agriculture, and other off-highway vehicle markets.

Danfoss Cooling

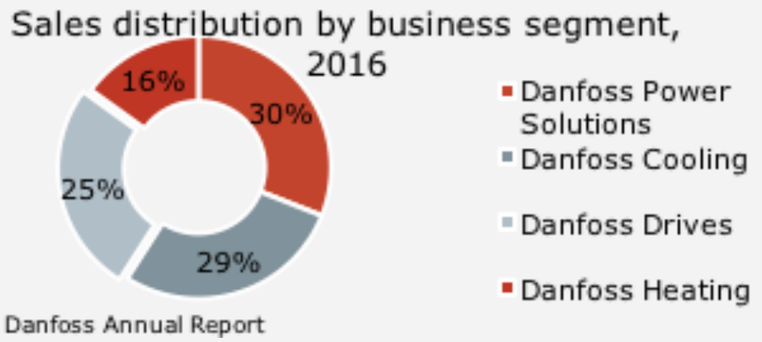
Danfoss Cooling has leading expertise within refrigeration and air conditioning, keeping food fresh and cooling indoor environments during warmer seasons. Danfoss' groundbreaking cooling solutions use natural refrigerants to keep CO2 emissions to an absolute minimum.

Danfoss Drives

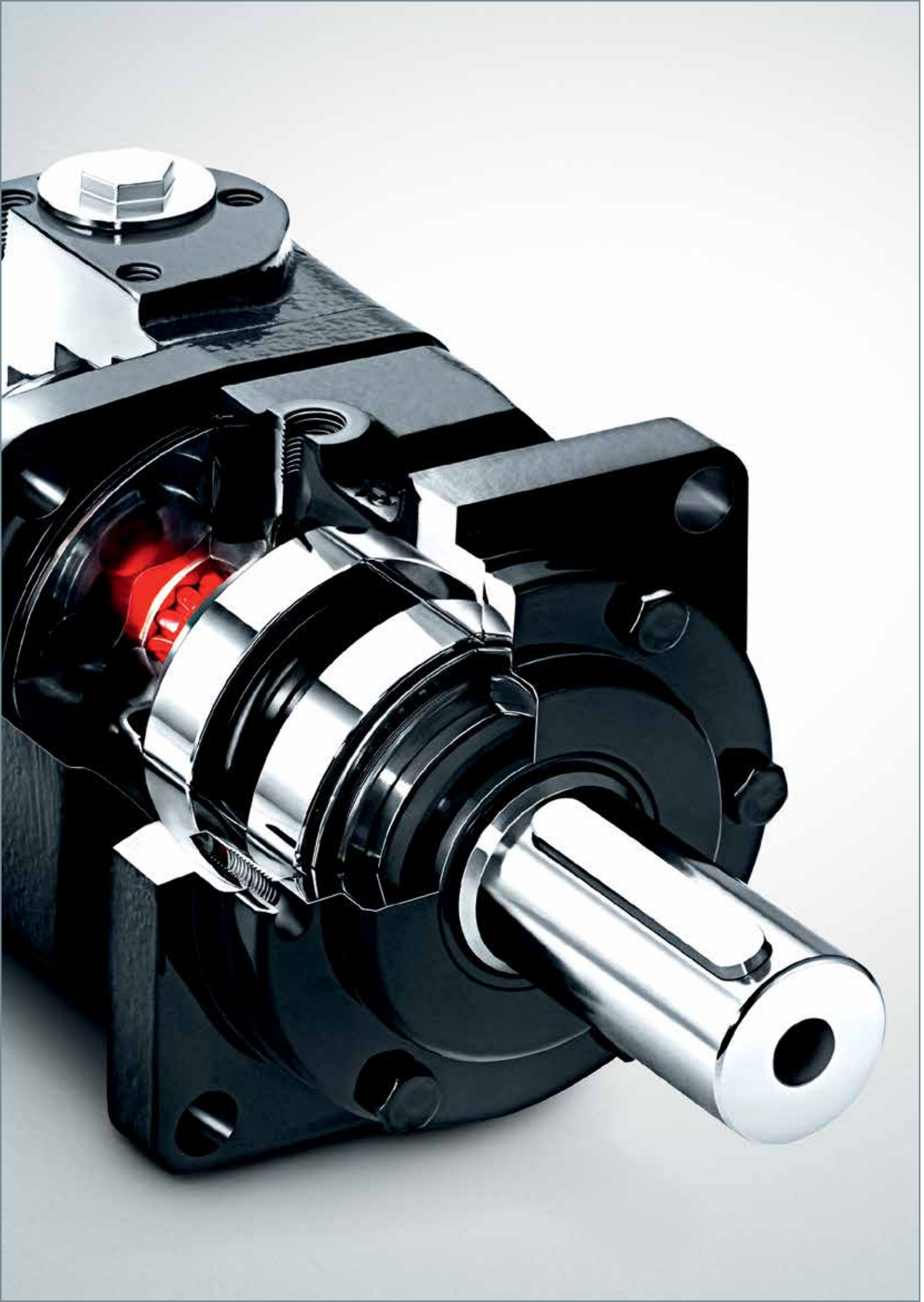
Danfoss Drives has a portfolio of application-optimized products that maximizes process performance, saves the most energy and minimizes emissions in multiple industries, such as automation and efficient motor control of processes in food and beverage industry.

Danfoss Heating

Danfoss Heating engineer new opportunities to efficiently heat entire cities and improving the indoor climate in buildings. The aim is to provide solutions to create greater comfort and lower energy consumption.



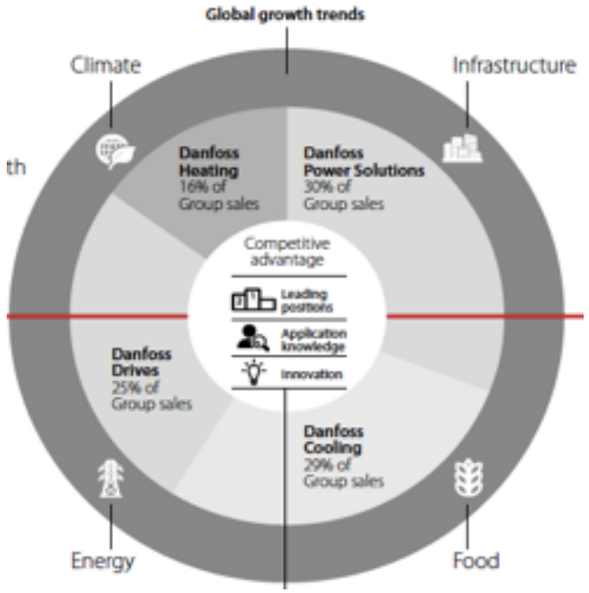
Source: Danfoss Annual Report



Engineering a heritage and core competency

Danfoss' competitive advantage is achieved through a combination of its three distinct core competencies: Leading positions, application knowledge, and innovation. Altogether, this creates a business model to drive Danfoss' sustainable, long-term value creation.

These should be applied to Danfoss' identified themes expected to drive future global growth: climate, infrastructure, energy, and food.



Fueling digital development through investments in new technologies

With the ambition of being number one or two within each business segment, Danfoss has to constantly stay on top of trends to maintain its competitive position in the long run.

According to Niels B. Christiansen, President & CEO at Danfoss, "A part of the Danfoss strategy is to add new digital elements into our core product portfolio to enable us to offer more energy efficient solutions and enable new preventive maintenance services to our customers."

Danfoss' transition to a digital future is taking place as we speak. With a solid and scalable foundation, the company is currently in a transformative process, where the following four points are vital in stimulating future progress and accelerating profitable growth:

- Digital customer experience
- Connected products and services
- Speed and capacity in innovation
- One common IT architecture and one ERP

In 2016, Danfoss invested a record-high DKK 1,645m in research and development, corresponding to 4.2% of sales. A particular focus has been on digitalization and new innovative products utilizing technologies within connectivity and big data.

Danfoss has also sharpened its competitive edge by investing in external IoT driven companies. Within the Danfoss cooling segment, Danfoss acquired Advitronic Engineering B.V. in 2015. As Advitronic Engineering has developed an enterprise management system that enables the capture of data from different products and control systems in supermarkets, the investment equipped Danfoss with capabilities related to connectivity and IoT.

The same year, Danfoss purchased shares in LineStream Technologies Inc. to provide Danfoss Drives customers with advanced but intuitive control software for industrial and motor-controlled products.

To strengthen its position within energy optimization services for multi-family homes and district heating systems, Danfoss acquired 23% of Leanheat, which enables Danfoss to access Leanheat's specialized software technologies.

Danfoss Technology M&A principles

When firms are considering an acquisition target, it is important to consider the acquisition target's stage in the venture capital cycle and how the acquiring company can add or extract value from that point. Typically, when investing in startups or SME's the company should consider the riskiness or uncertainty of the company versus its own capabilities and experience within the market or technology.

For example, when investing seed capital there are typically low/no earnings and chances of success are low. Therefore, companies should only enter if they have strong capabilities

Key figures

Free cash flow before M&A / DKKbn	Free cash flow before M&A / EURbn	Leverage ratio	NIBD to EBITDA ratio	Equity ratio
3.4	0.5	55.2%	1.6	42.6%

here and understand the technology or market well, and they should diversify their investments by acquiring different but competing technologies.

However, in the expansion stage there is revenue and a proven record for the business model. Here, the acquirer can take more risk in terms of market knowledge because the financial risk is lower.

Your client has until now set some overall principles for investments in technology to ensure lower risk and easier post-merger integration. Firstly, Danfoss is only to some extent familiar with services and software business models; hence, in these fields, later stage investments should be targeted.

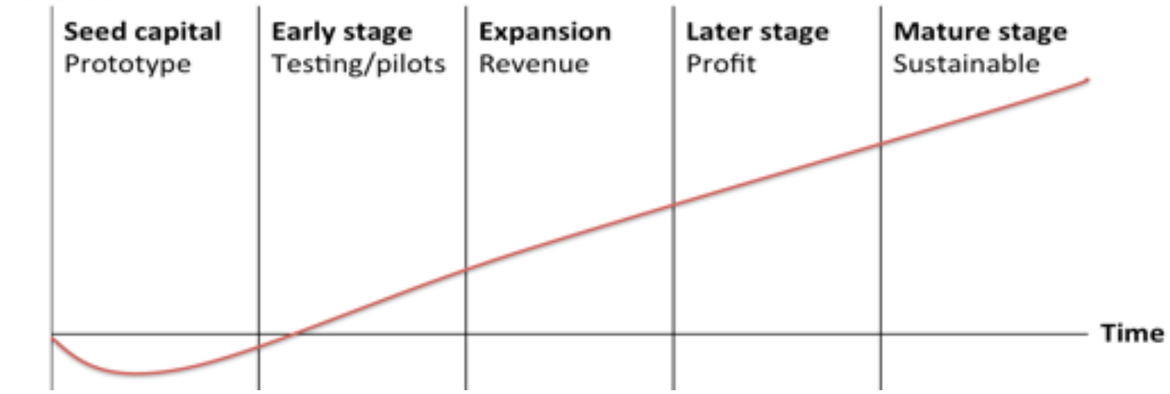
Secondly, investments must have a strong link to Danfoss' core business and value propositions, as well as a potential to create a competitive edge.

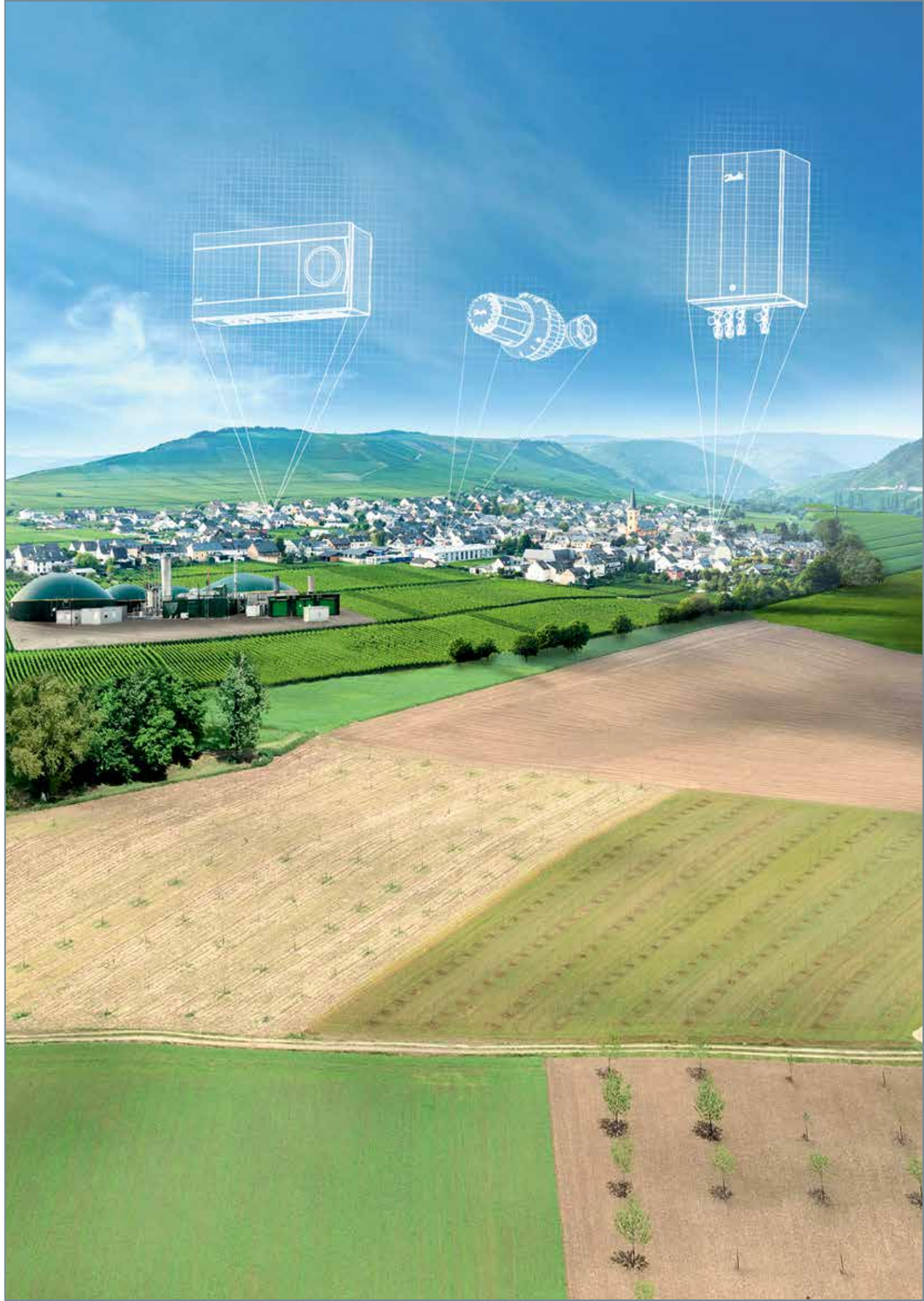
Thirdly, Danfoss aims at flexibility on ownership; this is key in securing Danfoss' IPR ownership.

Lastly, technologies should be applied on Danfoss platform within short time horizon in order to reap benefits on synergies.

Currently, Danfoss is already present within areas such as intelligent products, flow control, sensing and engineering. Potential future areas are user experience, connectivity, 4.0 manufacturing and new heating technologies.

Venture curve





Residential Heating in Europe

The EU calls for energy-efficient and reliable heating solutions

The climate challenge is fuelled by growth in demographics and wealth increasing energy consumption, which will grow by more than 30% towards 2035. It is also estimated that by 2050, 70% of the world's projected 10 billion inhabitants will be part of the massive urban networks.

The EU countries have agreed to a 2020 Energy Strategy with three main objectives:

1) Reducing greenhouse emissions by 20%

2) Increasing the share of renewable energy by 20%

3) Improving energy efficiency by 20%

Heating and cooling accounts for half of the EU energy consumption and 79% of the final energy use for households. Two-thirds of the EU's buildings were built before energy standards even existed and the renovation rate is only around 1% yearly. This reflects the massive influence of the industry of public energy targets as well

as consumer expenditures. Understanding the demand for heating and cooling in Europe is complicated. The development is determined by a variety of factors.

Outdoor temperatures

The most influential driver of heating and cooling demand is, of course, temperatures - or more simply, the weather. This variable explains daily and annual demand variations. Europe can be split into three tiers on account of weather condition. The first tier includes the coldest countries, e.g. Finland, Iceland, Russia. The third tier includes the warmest, e.g. Spain, Italy, Greece. The highest potential for improvement is found in the second tier of countries with moderate winters due to their less efficient use of technologies for insulation and heating systems compared to very cold first tier countries, yet a higher demand than for the warm third tier countries. These countries include Belgium, Denmark, Germany and Ireland.

Demographics and Infrastructure

The demand is also driven by changes in demographics and infrastructure in the countries. Number of residents per household, amount of living space per capita and age demographics all affect

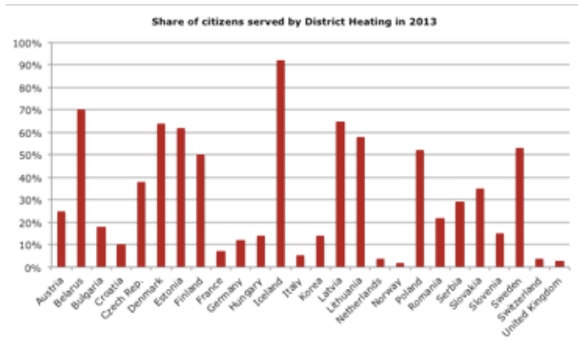
eating consumption. In Europe we see a trend towards more, but smaller (lower number of people) households, which will increase demand. Furthermore, infrastructure and urbanization both affect energy consumption. The part of the population living in urban areas greatly varies across the European Countries, ranging from 50% to 97%.

Buildings

The size and age of buildings and their geographical distribution affects the amount of energy needed for households. The presence of thermal insulation has a great effect on demand as well as the design and residual lifespan of buildings.

Technology

Efficiency and technology adoption has a great impact on heating demand. Efficient heating technologies reduce consumption and conversion losses. This has led to a reduction of 0.2% per year in Europe from 1990 to 2005. New technologies allow consumers to save energy without sacrificing life-style patterns.

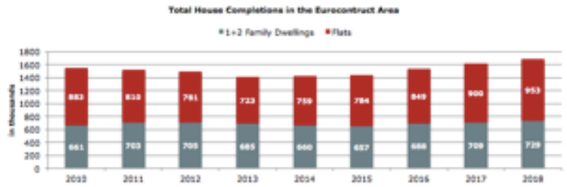


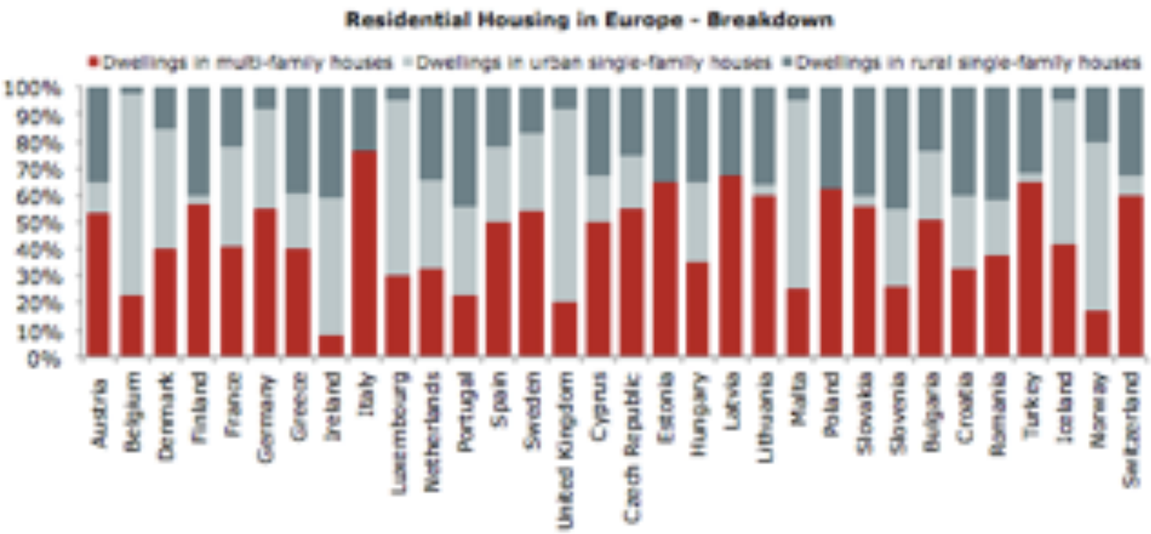
Different buildings demand different modern heating technology

The household heating demand depends on the residential sector. The sector is subdivided into single-family homes, multi-family homes and high-rise buildings. The subsector breakdown not only has an effect on the demand but also affects the impact of solutions, as these must be tailored to the needs of the specific subsector.

In Europe, 53% of households are single-family homes, 37% are multi-family homes and 10% are high-rise buildings. The split varies greatly across the region, calling to the individual markets to find the best solution for their specific composition. Single-family homes have a larger space heating consumption on average due to the larger wall and roof space – on the other hand there might be a larger incentive for consumers in these homes to replace technology as transparency of consumption is higher than in multi-family homes, where heating is often centralized. However multi-family houses have lower account management costs and lower customer acquisition costs as the decision making process is centralized with the building managers.

Source: EUROCONSTRUCT (81st Conference)





Source: Ecoheatcool, The European Heat market 2005-6

Danfoss Heating Segment

Danfoss' heating products covers the entire supply chain of district heating and cooling to intelligent home solutions for optimal comfort while reducing energy consumption. They thereby offer district heating solutions and residential heating solutions for both single-family and multi-family homes.

Customers and markets

Danfoss Heating offers solutions for generating, distributing and adjusting heat by providing an efficient green infrastructure which contributes to achieving optimum indoor comfort and energy savings in residential and commercial buildings all over the world, with key geographic markets being Western and Eastern Europe, Russia and China.

Danfoss' customers are generally in the business-to-business segment within new-build and renovation of buildings: Installers, Wholesalers, Specifiers, OEMs, building owners and utilities.

District Energy

Danfoss is working with national and local governments worldwide to engineer District Heating systems that not only deliver superior performance and value today, but create a sustainable platform for tomorrow.

District heating infrastructure enables city planners to vastly improve energy efficiency in their cities, while creating a viable channel for capturing waste heat energy and accessing renewable energy sources. District heating technology makes use of a wide variety of energy resources that include:

- Boilers using conventional or renewable fuels such as biomass
- Heat from power generation such as a Combined Heat and Power plant
- Waste heat from industrial processes
- Energy generated from municipal waste incineration
- Natural heat sources such as solar, geothermal or wind

A district energy network is extremely flexible and can be used to connect as few as 30-40 houses and up to entire cities. This allows cities to grow an existing network as funding, planning and other opportunities become available. Efficient operation of the district heating network requires the entire value chain from generation, distribution and usage is designed and maintained to be optimum balance.

Danfoss is enabling municipal planners worldwide to modernise their existing District Heating networks.

The basic principles behind District Energy are remarkably simple. At one end of the network is an energy source (often a multi-fuel Combined heat and power plant). Heat is then distributed via a network of insulated pipes to residential, commercial and industrial buildings across the city.

At the end-user level, individual buildings are connected to the District Heating network. In the building a substation with heat exchangers efficiently transfer hot water for room heating and domestic hot water (DHW) purposes into a building's HVAC and DHW systems for both single and multifamily houses.

Danfoss District Energy has been at the frontier of defining District Heating technology for more than 30 years and is now the world's biggest supplier of complete advanced substations, heat exchangers and automatic controls for heating, district heating and cooling applications within any building type.

Intelligently regulating heat consumption in multi-family homes through the ECL portal

ECL controls the central unit in multi-family houses. It controls the pressure between the different units, and balances temperature and flow. The building manager can monitor and control the system through an app or interface.

Danfoss has a large portfolio of products to support this product, both backend and frontend. This includes line valves and radiator thermostats.

Residential heating

Develops, produce and sell heating equipment like radiator thermostats (mechanical as well as electronic), electric room controls, floor heating controls and systems (water based- and electrical floor heating), equipment to oil burners and heat meters. So, a large portfolio of products that are sold to control temperature and save energy in buildings

The segment is split up between the single family and multi-family segment.

In single family homes, heating costs are not shared and the owner has full control over consumption of heating. This creates an incentive for single-family homes to use Danfoss' smart heating and energy management, e.g. the smart thermostat and floor heating controls to reduce energy costs. In the multifamily segment Danfoss products are also installed to reduce energy cost however the setup is more complex as several stakeholders such building owners, Landlords, tenants etc. are involved in the decision process.

Home heating of tomorrow – simple, efficient and remote

Danfoss is increasingly integrating digital technologies into their products and services. As an example of this, Danfoss introduced Danfoss LinkTM to the Danish market in 2016 to strengthen their position as a key player in the smart home solutions market. Danfoss LinkTM enables customers to track and control home heating from anywhere using their App control via a smartphone or tablet.

This enables customers to both save energy and achieve an exceptionally comfortable indoor climate.

The Danfoss LinkTM family consists of various products that provide solutions for single-family homes with radiators and/or rooms with hydronic or electrical floor heating, where different rooms can be controlled individually with a simple touch.

Leanheat

Business Model

Leanheat offers complete solutions for remote optimization and smart control of heating in multi-family homes. Leanheat's sensors transmit valuable HVAC data to Leanheat's cloud system, which optimizes consumption using algorithms. This can help buildings lower energy consumption and transform district-heating production by utilizing load shifting to improve efficiency of energy production. Leanheat has installed devices in almost 15,000 apartments and over 300 buildings under constant control and maintenance using advanced mathematical models and algorithms.

From 2014 to 2015 Leanheat's sales almost tripled. The company is expecting to break even on net income by 2019. In 2016 they met estimated revenue with EUR 1.6m. The product has received positive feedback from building owners, building maintenance and end-users (inhabitants).

Market demand and development

Buildings consume a lot of energy around the world; in the EU they consume 40% of final energy produced and in China they account for 28%. Not only are governments putting their efforts towards a less polluting economy, but the public's attention is also being steered towards energy efficiency.

The market for controlled heating and energy optimization is huge and growing at a rapid pace. Northern Europe and Northern China alone have more than 9 billion m2 of centrally heated buildings, and these markets are growing fast at a CAGR of 5% and 12%, respectively. The market for potential consumers is expected to grow, as cities get more populated and urbanization continues to shape the modern world.

Today, wireless sensors and connectivity amongst things is becoming very cheap, creating an opportunity to automate monitoring of indoor climates at low costs. This creates disruption within two areas:

• Disruption caused by utilizing big data tools to control and maintain HVAC automatically, minimizing the need for manual labor

• Disruption caused by the rise of renewable energy and the change in the energy production mix, which will require technologies that can enable building energy load shifting

Leanheat's value proposition is to enable energy management for multi-family homes while reducing costs and risk, and improving safety and convenience.

How the system works

Each apartment in a multifamily building is equipped with a wireless temperature and moisture sensor. Leanheat's self learning algorithms combine this data with other data sources such as weather forecast and energy pricing information. Leanheat then creates a predictive mathematical model of the building and it's behaviour. This model is used to constantly control the flow temperature of the heating system to ensure optimal energy efficiency and peak power level hour by hour, day by day - always without compromising climate conditions.

While constantly controlling building HVAC systems Leanheat creates smart observations and action proposals for better building maintenance on a fully automated basis. These observations and proposals are used to maintain buildings in a predictive and efficient way. One example of this comprehensive process is fine-tunings that can be done by Leanheat staff or local building maintenance company to further reduce imbalance between apartments and therefore lower energy consumption.

Potential applications

• By buying Leanheat real estate investors and housing associations can remarkably lower their heating expenses without compromising climate conditions and always with good ROI.

• By partnering with Leanheat energy companies can use Leanheat for demand response of district heat. We call it load shifting. With Leanheat load shifting buildings can be used as virtual power plants. The energy provider can optimize production efficiently using hundreds of geographically dispersed virtual power plants.

• By partnering with Leanheat building maintenance companies can rethink their processes, gain cost advantages and invent new service products to the end customers. Predictive maintenance is already a standard in many industries - real estate is next!

Products and services

CloudControl

Leanheat's products are offered as a software-as-a-service subscription. Leanheat equips buildings with wireless sensors and gateways connecting the buildings' HVAC-systems to their remote control. Using weather forecasts, artificial intelligence and probability modeling, Leanheat can adjust the set-point. This optimization of HVAC-systems allows saving 10-20% of energy costs and usage. Additionally, peak power requirements are cut by 20%, allowing district-heating producers to serve 25% more customers at the same capacity. Leanheat uses service-level agreements (SLA) to take control of the building based on climate targets. This ensures that Leanheat not only manages end-user satisfaction, but also has a low risk of not realizing energy saving targets.

CloudMaintenance

Leanheat equips the customer's building with long battery life sensors. Using mathematical models, they detect and predict potential underlying issues that could reduce end-user satisfaction. Furthermore, they offer customer services to fix those problems. The owner of the building will only have to deal with real incidents. In the case of issues or real incidents Leanheat offers:

• Problem detection as widely and early as possible

• Pinpointed fixing-instructions for building maintenance

• Investigative services to unclear problems

Leanheat do not produce hardware themselves which means that Leanheat can be integrated with any available HVAC unit or remote control platform, e.g. Danfoss''ECL portal'.

Customers and Suppliers

Customers & revenue streams

Leanheat's customers are in majority multi-family homes and buildings with distributed heating. Leanheat does not offer high end-user control, but relieving some of that control allows inhabitants who are already in centrally controlled buildings to achieve savings in both cost and pollution.

The sources of revenues are threefold: First, Leanheat profits from an upfront investment in the hardware needed to monitor and control the heating. This includes wireless sensors, a central unit and installation costs, summing to around €160 per flat. Second, Leanheat receives recurring income, on a subscription basis, €0.37 per m2, for managing and optimizing energy consumption. Finally, Leanheat receives recurring income from servicing and maintaining the buildings, which will vary depending on the customer. Leanheat's service partner predominantly provides this service. The model can be investment heavy or financed through multiple years based on segment and geography preferences.

Distribution Channels

Distribution and sales is in majority through sales partnerships with key industry players, who already have access to the customer base:

- HVAC device providers
- Building maintenance providers
- Energy producers, especially district heating
- Energy efficiency consultancies
- Building managers

Organization

Leanheat's team consists of 15 people, of which 6 software developers, data scientist and experts in machine learning AI, 5 experts in HVAC systems, energy management, IoT and district heating, 4 in management and sales. Key individuals in the organization are:

Key competitors within energy management solutions

The competitive landscape for IoT heating in multi-family homes

The market for smart heating in multi-family homes is relatively new. The market is still fragmented and there is no dominant player in the field yet.

The direct competitors are Noda, Fidelix, Ouman, eGain and Leanheat.

However, many types of corporations are moving in on this market due to its high potential and low competition.

Players from industries that are adjacent are moving in on the market and utilizing their capabilities and market access within either IoT or heating.

Utility companies are using their access to the customers to add on IoT services.

Component producers like Danfoss are bundling their products with new smart solutions for additional value add.

Traditional building managers offer it as part of their end-to-end service offerings.

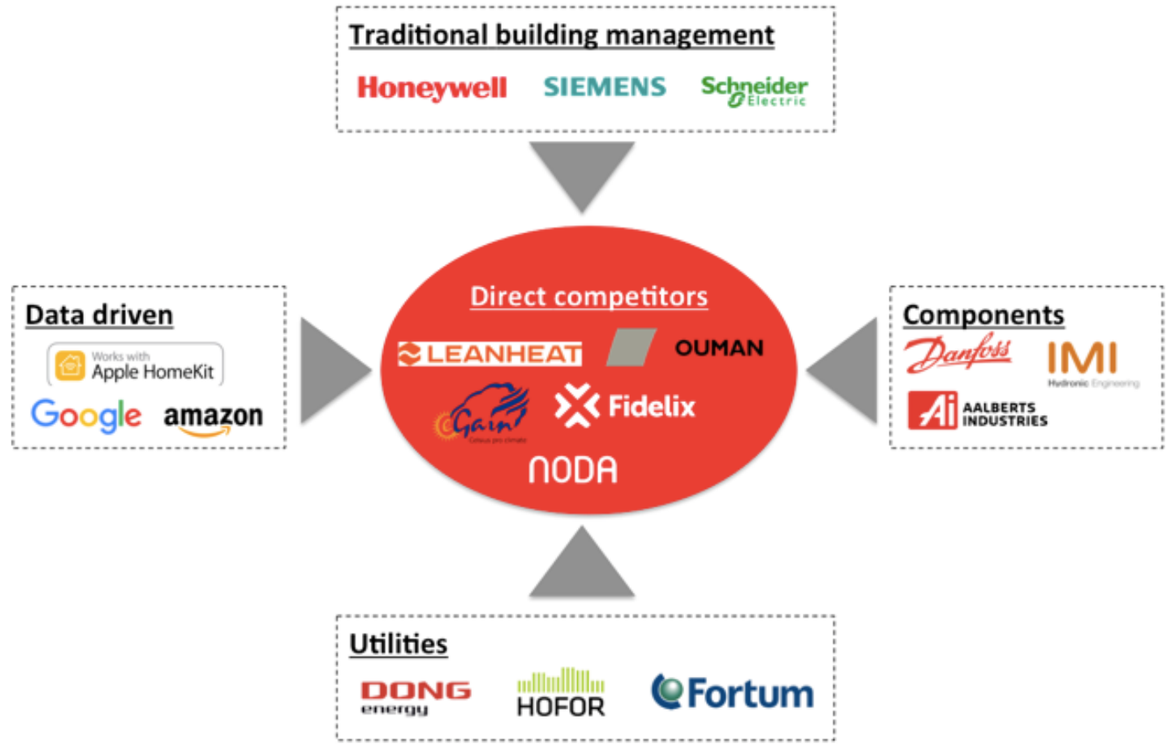
Data collectors like Google and Amazon use their knowledge of IoT and smart products to offer high-tech products and collect massive data amounts.

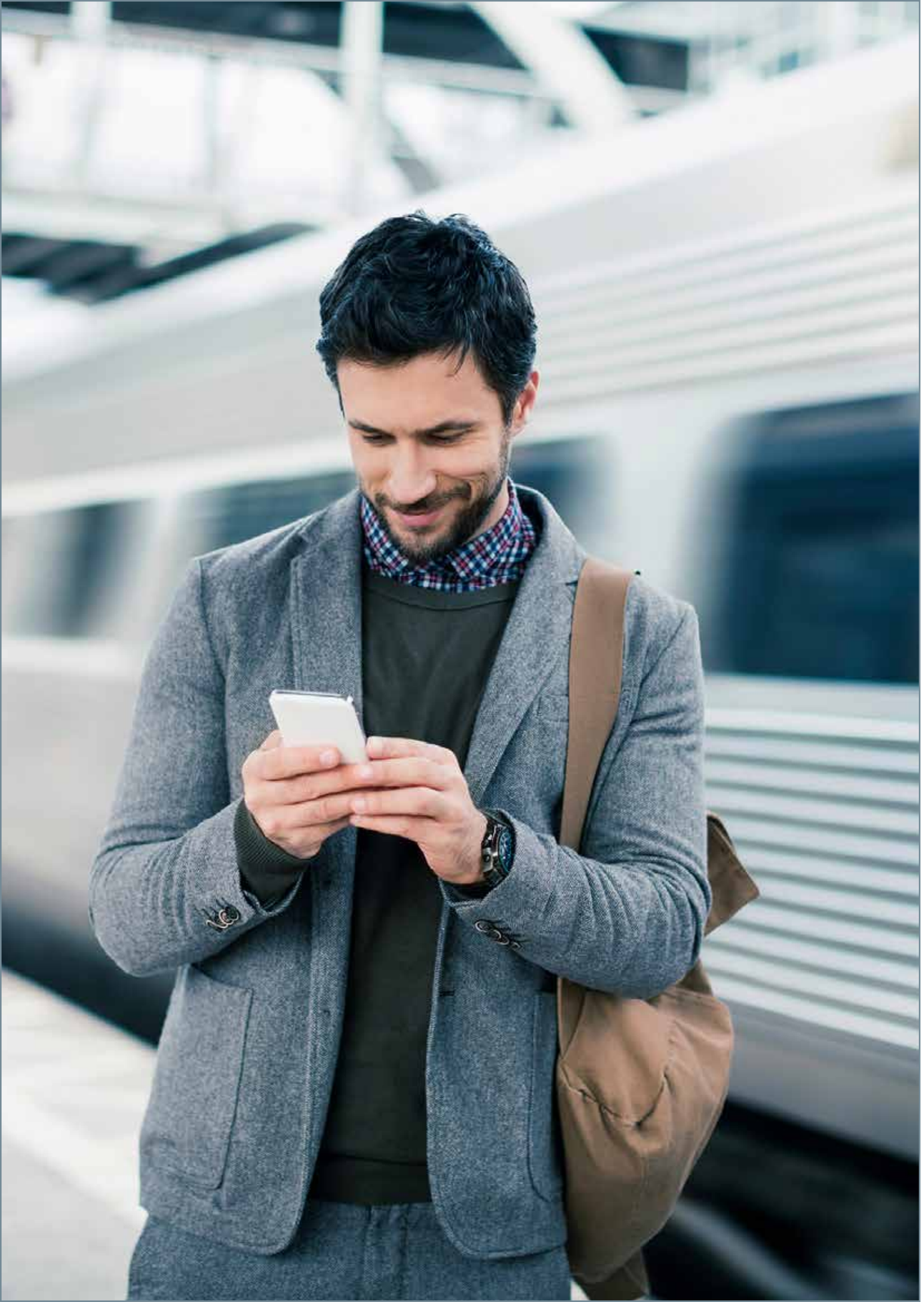
Finally, there are several indirect players who have connections and access to the market, like security firms, energy metering, light/ventilation providers.

The combination of a component producer and a data collector

Danfoss is amongst the component producers who are trying to seize the market. Therefore, collaboration with a direct player offers certain synergies: Strategically, Danfoss Heating sees a great fit between Leanheat and its Multi Family House strategy as it would allow Danfoss to over time integrate the Leanheat offering into a component offering. In the pilots planned Leanheat utilize the ECL controller from District Energy and ECL portal as gateway. Over time we see the sensor information being integrated into new ranges of Danfoss electronic room controls. When that happens Leanheat will have even more data with which it can optimize room comfort and heat usage with. And Danfoss would as well create a recurring service business that ties customers closer and opens for other commercial discussions – like heating equipment upgrades etc. The knowledge on heating equipment performance, which can be seen in Leanheat system, will help develop new preventive maintenance service to reduce operational costs. Leanheat work further on utilizing data to improve indoor air quality that can reduce e.g. mold in buildings (high cost to a housing association) and help optimize ventilation systems to prevent that.

Furthermore, Leanheat's offering within peak power reduction and peak load optimization fits well with the strategy in District Energy to broaden its solution offering and help customers optimize their business. And going forward it is likely that utilities may fund installation of Leanheat/Danfoss equipment in the buildings they operate (or part of them) to allow better optimization automatically of demand. This would enable them to connect a better supply optimization (plants and network) with demand optimization (buildings). Digital products and IoT is a key enabler to do this.





Epilogue

IoT and increased connectivity is going to change the world as we know it. As this evolution is well on its way, Danfoss must make a strategy to maintain their strong position as market leader, helping people do more with less. Furthermore, the heating and cooling industry is becoming increasingly more essential to countries around the world as people become more environmentally aware and urbanized.

Now, corporations from a variety of industries enter the energy market using IoT; tech giants, engineering old-timers and start-ups everywhere. The rise of smart home appliances and technologies is becoming the way to win market share, as families begin to invite automation and IoT into their homes. Danfoss has always been on the frontier when it comes to technology innovations and they are eager to make the world a better place by inventing and investing in energy management in connected homes.

Although Danfoss is spending a lot of resources on innovating within all their segments, they acknowledge and benefit from the fact that good ideas also arise outside of their organization. For this reason, they also invest in startups and SMEs that offer groundbreaking products and services. Danfoss is always looking for companies that match and can benefit from their platform, but they must concurrently manage the investments they have already made.

Due to the massive attention that IoT has garnered, competitionis fierce among big players – strategic and financial – who are constantly on their toes for technology-driven startups and SMEs that are available for sale, and are willing to pay a high price for them.

In order for Danfoss to stay competitive within the IoT market, they must therefore constantly manage their portfolio to optimally invest their capital.

They know that finding new acquisition targets is not the only challenging task; finding the target at the right time, getting the right price and realizing synergies, especially in terms of merging different platforms, is also essential.

Therefore, they have contacted you and your team, and they are excited to get your advice regarding the future strategy for their newest investment, Leanheat, and how Danfoss should invest in IoT going forward.

The challenge

Provide Danfoss with a recommendation on their M&A investment strategy with regards to IoT.

Develop and overall investment strategy and recommend how Danfoss can pursue it.

Danfoss' management and M&A team expect your proposal to include;

• An analysis of the benefits and challenges, including a description of optimal ownership structure, the strategic rationale for the suggested solution and how it can create value for Danfoss

• Determine the breadth and scope of the investment strategy in relation to capabilities and venture cycle

• A valuation of Leanheat based on suitable valuation methodologies to determine the total value, and fit to the overall investment strategy

• Important legal and financing aspects to include in the due diligence process of your recommendation

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