

Bravida brings buildings to life

With thousands of knowledgeable members of staff in the Nordic countries, we here at Bravida look after our customers' buildings in a sustainable way. Efficient maintenance and operation of buildings' technical systems is a large part of the service we offer. No building is too small for us – we work on everything from complex hospital systems and data centres that place great demands on reliability, to innovative wooden buildings and regular residential buildings.

Utilising the working method 'The Bravida Way', we make the job simple and efficient, with short decision-making pathways. Together with the customer, we take a holistic approach for sustainable solutions for the entire useful life of the building.

We keep the buildings' nervous system running by providing services within ventilation, heating, sanitation, building automation, electricity, fire protection and security.

Working in a climate-smart way is also something that permeates everything we do. Thanks to one of the company's innovation projects, GreenHub, we are also implementing fossil-free and customer-centred services in major cities in the Nordic countries. Availability is of course an important factor, which is why we work for our customers around the clock.

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100 years. What a milestone!

Hoorah, hooray, hooray! Turning one hundred years old is just incredible. We are now looking back in order to learn as we move forward. In this magazine we highlight our proudest moments, our most difficult experiences and important lessons we have learned. We are also celebrating our jubilee this year with a historical film, a fun event and inspiring lectures. Let's continue for another 100 years!

One hundred years is a sizeable amount of time to put into perspective in just a few sentences. But in order to summarise it briefly Bravida has, in a century, transitioned from a construction company to an installation specialist. We operate throughout the Nordic countries and service and now do pretty much everything when it comes to installation in buildings. There is no type of building or facility in which we are not involved. Every day, we come across dripping taps, uninsulated hot water pipes or old systems that are wasting energy. Our society is becoming increasingly dependent on electricity, at the same time as it is becoming more important to minimise electricity consumption. Here at Bravida, we help the customer in all situations. In both small and large projects, regardless of whether it involves houses, tunnels or hospitals. And we do it in all of our countries: Norway, Denmark, Finland and Sweden. This makes me so proud. And this has to be acknowledged, celebrated and embraced this year!

Our success story is being celebrated in ways including highlighting Bravida's history in a lovely film. In addition, we will be celebrating and acknowledging our history together with our customers and local employees throughout the Nordic countries! It is also especially great that no other than Måns Zelmerlöw held our big digital event in early May.

The corporate culture that has been cultivated over the last century and which I am convinced has also contributed to our great success will of course also be acknowledged during the jubilee year. Today we are a large company that really feels like a family. Bravida is nothing without you. And that is how it should be. That is 'The Bravida Way'.

Let's celebrate!

Mattias Johansson, CEO

800 Just over **training sessions held each year in the Bravida School.** The courses are often held by employees at Bravida who are experts in their fields. 499,290 We are not talking about followers on Instagram but about actual service orders in the last 12 months. Well done to us!

> **O2/O2/22** The date when CEO **Mattias Johansson** celebrated 24 years as a Bravida employee

65,000 The number of Bravida customers throughout the Nordic countries

is the number of employees working at Bravida

We are never satisfied but proud!



2004 The year when Bravida became exclusively an installation company. The strategy has the internal working title 'from WC to PC'. Two laps around the moon is the length of cable we have installed so far. That is 10,921 km times two! Incredible.

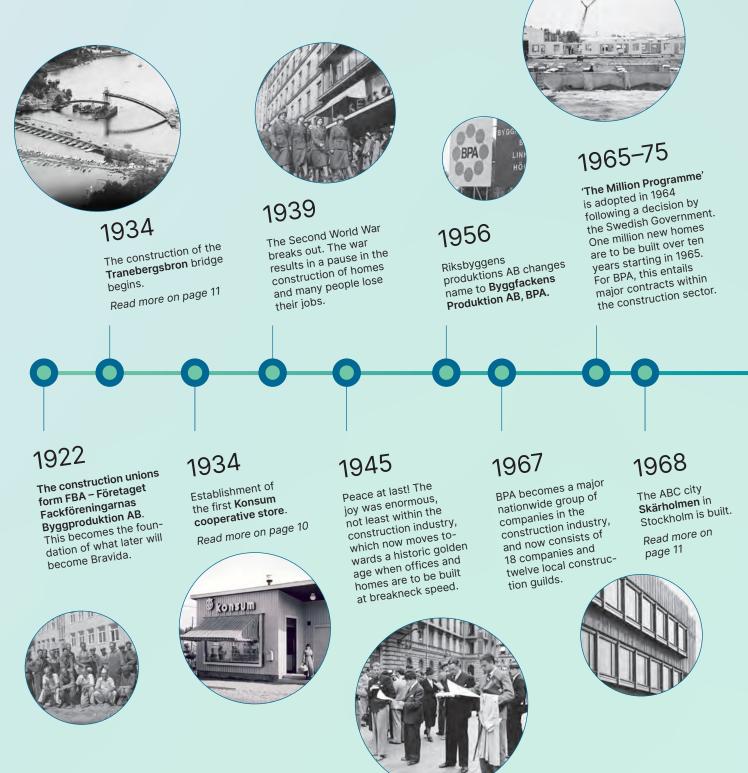
What do you know about Mattias Johansson?

- ... Started at BPA in Växjö as an estimator on 2 February 1998
- ... Was 26 year's old when he became head of department at BPA
- ... Has played elite level ice hockey and football
- ... Was involved in establishing Bravida in Finland
- ... Dislikes the word lazy

... Prefers a regular bike to an electric bike

- ... Is very much a morning person. Early in his career, he was often at work early, around 06:30. To this day, he can feel that he is late when he comes in at the start of office hours, around 07:30
- ... Describes his own management style as kind but stubborn

Our history



Archival photo references: 1922 Karl Josefsson-Björk, Bohuslän Museum 1932 Oscar Bladh, Stockholm City Museum 1934 John Kjellström, Svenska Dagbladet, Stockholm City Museum 1939 Unknown, Aftonbladet, Stockholm City Museum 1945 Unknown, Aftonbladet, Stockholm City Museum 1956 Unknown, Linköping University 1965-75 Jonas Ferenius, Stockholm City Museum 1968 Rolf Dahlström, ArkDes Cover, construction workers: 1928 Karl Josefsson-Björk, Bohuslän Museum 1930 Svenska Dagbladet, Stockholm City Museum 1945 Arvid Ridner, Västerås City Archives 1958 Åke Lange, Stockholm City Museum 1967 Gösta Nordin, the National Museum of Science and Technology. Örebrokuriren, Örebro County Museum





1980

Intercity becomes a new concept when new rail connections between cities are started. Thanks to the new X2000 train, the journey is completed at record speed.

Malmö residents get a new shopping destination. The shopping centre **Triangeln**, which becomes the biggest in the city, is inaugurated.

1989

1999

BPA shares are delisted from the stock exchange.

2003

The acquisition of Danish Semco A/S opens the door to establishment in Denmark.

1986

BPA becomes a public limited liability company when it is listed on the Stockholm Stock Exchange. That same year, construction begins of Stockholm's new landmark **Globen** (now **Avicii Arena**) – which also becomes BPA's largest project.

1993

BPA becomes a nationwide installation company within electrical, plumbing, heating and ventilation systems. Modern buildings need an increasing amount of fixtures and fittings. 2000

BPA becomes Bravida in connection with the company merging with the Norwegian company Telenor's installation business.



2004

Bravida sells Telekom, IKT and Geomatikk in order to streamline its business. There is an increased focus on the installation of electrical, plumbing, heating and ventilation systems.





2009

Bravida acquires Norwegian company Siemens Installation A/S and reinforces its position in the Norwegian market.

+

Stockholm prepares for the future. Stockholm City Line is a six kilometrelong double-track railway tunnel underneath Stockholm city centre. This will be the city's largest infrastructure project ever.

2012

The largest multifunctional arena in Scandinavia is inaugurated in Solna, Stockholm. Friends Arena becomes Sweden's national stadium for the men's national football team. Bravida had a turnkey contract for electrical installation while construction was taking place.

+

Two large hospital projects begin - the new University Hospital in Aarhus, Denmark and Östfold's new central hospital outside Oslo, Norway. Read more on page 24

2014

Bravida Norge wins a contract when Oslo's airport Gardermoen gets a new gate pier. Read more on page 13

+

The sporting goods chain Stadium, with 118 stores in Sweden, chooses Bravida, which is awarded overall responsibility for the operation and maintenance of electrical, plumbing, heating and ventilation systems. This is managed by Bravida's 90 local offices around Sweden.

2008

From work to school. The Bravida school is started and staff are given the opportunity to hone their skills through continuous professional development and specialist training.



2011

Facebook builds Europe's first and largest data centre in Luleå. Read more on page 12



2013

The modernisation of the Danish rail network's signalling system begins. The new standard then spreads to Sweden, Norway, Denmark, Germany and all the way down to the southern tip of Italy. This is considered one of the world's largest modernisation projects to date.

2015

Two companies in Finland are acquired by Bravida. This becomes the first breakthrough into the Finnish market.

+

Bravida is listed on Nasdaq and Mattias Johansson becomes CEO.





2015

Things keep spinning in Denmark. Wind energy produces large quantities of electricity but the electricity grid cannot cope. The electricity grid in Denmark must be expanded and Bravida steps in to help out.

+

A new large multi-sport facility, Serneke Arena, Änglagård, in Gothenburg is inaugurated. Covering 45,000 square metres under one roof are handball courts, crosscountry skiing tracks and lots more. Bravida had a turnkey contract for all fixtures and fittings.



2019

The cars of the future require quick charging. We take care of the needs of the future by installing ultrafast charging stations. It feels good to contribute to the climate transition with our knowledge.



2021

The construction of the highest skyscraper in the Nordic countries, Karlatornet in Gothenburg, is coming along. Read more on page 23

2016

On Hisingen in Gothenburg is where we find the home ground of BK Häcken. Bravida Arena is a meeting place for all football enthusiasts. The whole world meets here to share their love of football. The stadium has a capacity of 6,300 people.

2020

The installation of all technology for the Opera House in Oslo was completed. Since then we have always ensured that the property comes to life through our technical solutions. Read more on page 22

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10

The green model GreenHub is launched in Oslo. Read more on page 26



2022

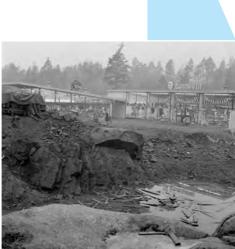
Yea

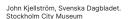
Much has happened over all the years Bravida has been operating. However, there are some events of which we are particularly proud, for different reasons. That is why we want to give these events particular attention in our magazine. Join us on the journey!

It started with a Konsum cooperative store

When the union ran the construction company BPA, they were starting with a blank slate, as the saying goes. The first construction project was a Konsum cooperative store in Stockholm – Svedmyra – which was completed in 1934.

The store was built of wood and BPA had the carpenters that could complete the whole job. Compared to today's complex – and in terms of floor space, gigantic supermarkets – Svedmyra was like a corner shop, the main focus of which was to sell milk over the counter. A bit more modern but still functionally similar to the old-fashioned village shop. It reminds us of the enormous scale of property development that has taken place over the course of Bravida's 100-year history. The first Konsum cooperative store Bravida built was at Herrhagsvägen 1 and served small cabin owners in Svedmyra, primarily with milk deliveries. Konsum, which today has been renamed Coop, remains one of Bravida's most loyal customers.







Unknown, KF's archives



Unknown, Coggs bildbyrå U. Simonsson, Stockholm City Museum



Stockholm's largest suburb is built

When Skärholmen Centre was inaugurated by Prince Bertil in 1968, Stockholm's largest suburb was complete. An 'ABC area' with workplaces, homes and a town centre.

For Bravida (BPA at that time) the Government's investment in the million programme became an enormous project when several thousands of homes were to be built. The programme continued for several years and the first of BPA's new homes was ready for its new residents on 1 September 1965 at Ekholmsvägen 79-91. The large shopping centre built in connection to the homes was meant to serve the 250,000 residents living south of Stockholm. This was in the car era, when carbon emissions was an unknown concept. The city planners estimated each family would have 1.5 cars. That is why an oversized garage with space for 4,000 cars was built. It became the largest multistorey car park in northern Europe. The entire Skärholmen project encompassed an area of 189 hectares.

Bravida builds bridges

Over the years, Bravida has become an expert at building bridges. An expert in connecting people and neighbourhoods.

This began as early as 1934 with the prestigious Tranebergsbron bridge project in Stockholm. This was the first bridge Bravida helped build. At that time, Bravida was a construction company called BPA and was responsible for construction work. Tranebergsbron is 450 metres long, 27 metres wide and 32 metres high. At the time it was the world's longest concrete building, with an arch that spanned 181 metres. The longest arch that had been cast in concrete at the time.



V. Lundgren, Stockholm City Museum

Bravida makes Facebook's data centre more efficient

One of the world's most high-tech and energy efficient facilities is in Sweden. With hundreds of millions of global users every day, the social media company Facebook must manage and store the data traffic that is created.

When Facebook was looking for a new place to build a hyper-modern data centre in Europe, Luleå was chosen. The cold climate of the north was utilised in an efficient and sustainable way in order to cool the facility. Bravida was entrusted with building and operating installations such as electrical, plumbing, heating, ventilation and sprinkler systems. Bravida has been involved since the start in 2011 and has subsequently been awarded general contracts.

Since the start, Bravida's team has also managed to rebuild the installations in the facility a number of times. The data centre is a large customer that employs around 50 installation engineers and technicians from Bravida. The comprehensive contract also includes producing construction drawings and plans.





Hotel with sustainable luxury

A total of 19 floors of sustainable luxury and glitz is what is now being offered in the four star conference hotel Alsik in Sønderbor in Denmark.

Bravida's team in Denmark was responsible for the important installations of plumbing, heating, ventilation, sprinkler, cooling and fire safety systems. The focus throughout the construction project has been on sustainability and energy efficiency. A unique energy efficient cooling system was therefore installed, the Danfoss Turbocor system, the first of its kind in Denmark. The 25,000 square metre hotel with a 4,500 square metre spa was completed in 2019 with installation solutions for a sustainable future.

Airport and city in cooperation



A new city with workplaces for 25,000 people was the vision when breaking ground on the construction of Arlandastad in the late 1980s.

When Price Bertil officially opened the project, it was for the construction of the shopping centre Eurostop which was inaugurated in 1992. Subsequently the expansion has continued at great speed, with new event and meeting places in the form of hotels and shops. Eurostop has gone under and been incorporated into what is now Arlandastad.

During the years of construction, Bravida's various teams have carried out a variety of installation projects as Arlandastad has grown and become an international arena where people can work five minutes from the check-in desk and within a comfortable distance from Stockholm city centre. Arlandastad is now the gateway to the Nordic countries and a stimulating business environment.



The renowned Valtakulma receives a sustainable face-lift

Situated in a prime location in the centre of Helsinki is an architecturally and culturally valuable building.

The Valtakulma building was completed in 1952, is now owned by SOK and houses the department store Sokos, Hotel Vaakuna and several restaurants within its generous 39,850 square metres. A major renovation of this renowned building was conducted recently, which included extending hotel Vaakuna to five floors with 100 new hotel rooms. Changes were also made to other floors in the building, as well as to the restaurant on the tenth floor. The renovation was carried out in order to meet modern needs and requirements.

Bravida Finland replaced the ventilation system with a modern and energy-efficient system – material from the old system was also reused wherever possible. The new modern solution recycles heat and the air is now fresher. New automatically controlled radiator valves that make heating the building more energy efficient is one more of many other installations carried out by Bravida Finland.

The purchase of ORAS was a huge success

On 8 May 2017, Bravida acquired ORAS, one of Norway's largest pipe and ventilation companies.

With ORAS's 700 employees and ten departments around Norway, as well as a turnover of NOK 1.2 billion, Bravida Norge quickly became the country's largest supplier of technical installations. The merger also opened up opportunities for major market synergy effects. Before the acquisition, ORAS had less good results, but by steering the ship in a different direction, ORAS gradually achieved the same operating margin level as Bravida. An incredible result.



ordic Office of Architecture

Cross-border meeting place

Gardermoen Airport is being expanded in order to create an efficient Scandinavian hub for travellers.

A new arrivals hall also became a meeting hub. Five Norwegian and Swedish departments within Bravida worked together to install all new electrical systems, as well as all computer and telecommunications networks. The work was carried out while the daily air traffic was running, which placed greater demands on the safety management during the installation period. The 17 new gates in the new North Pier Terminal serve 28,000 new travellers and were completed in 2016.

Bravida at sea

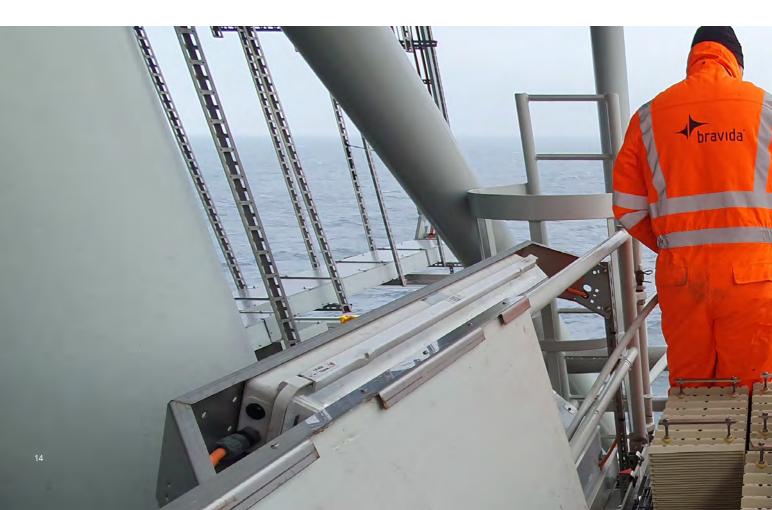
Peter Hjorth enjoys working at high altitude when he maintains offshore wind power off the coast of Denmark – a relatively new business area for Bravida.

'I love flying in the helicopter out to the wind power stations. This is a dream job for me', says Peter Hjorth, supervisor at Bravida Elnet.

A typical work day starts just before the sun rises at 6:30 in the morning and the shift is 12 hours long. The team that works offshore includes a total of five people – three permanent and two substitutes.

'When we're not out at the wind farm, the time is spent carefully planning the work that is to be carried out. But my team and I are also on standby should something happen and we have to go out there quickly', says Peter. Since 2018, Bravida has a contract to carry out maintenance on two of Denmark's offshore wind farms. Peter and his team maintain and service electrical, plumbing, heating, ventilation and fire safety systems here. The contract also includes Bravida Elnet assisting in connecting the electricity from offshore wind power to the Danish electricity grid.

Peter Hjorth, who has a background as a telecommunications technician, has worked with offshore wind power for two years. He is also the person within Bravida who has the most experience within this field. Every fourteen days, he and another two team members





Bravida's business area offshore Kriegers Flak Number of wind turbines: 72 Height: Up to 188 metres Location: 34 km off the coast of the island of Møn Rødsand 1 and 2 Number of wind turbines: 162 Height: Up to 110 metres Location: 10 kilometres off the southern coast of the island of Lolland





go out to sea, either by boat or helicopter, to carry out maintenance on the technical installations on the offshore stations, which is where the power from the wind turbines is collected.

'A lot has happened over these four years. Technological development has progressed and today there are more automated solutions than when I started. But this job also requires a lot more certifications than other installation jobs', Peter continues.

Peter sees a bright future within this business area, both for Bravida and for himself.

'I can see myself still being here in ten years' time. The job is both varied and fun. It is especially hard to beat going out on the helicopter to the rigs as the sun rises – few people get to experience such a beautiful commute", Peter concludes.

Moving forward for one hundred years – the film about Bravida's history





How do you actually get a perspective on building a company over one hundred years? Our company has been developing and changing constantly over all these decades, it has never stood still. And this development has been in step with the enormous project of building a society.

In the film Moving Forward for One Hundred Years, we follow the construction worker Martin who writes letters home to his family. It all starts in Stockholm in autumn 1922, just when local guilds, or construction trade unions, have come together to form Fackföreningarnas Byggproduktion. A journey with Martin begins here and continues up to what is now Bravida.

'We have a pretty complex history and it's difficult to describe all the events in one film', says Liselotte Stray, who is head of group communications at Bravida. But in the film we have chosen the perspective of the employees. It is a fact that the company was started by workers coming together to form a business. There is lovely symbolism in that. It is our 12,000 employees who continue to make Bravida what it is today.





A journey through decades

We meet the film's worker Martin again in the 1940s, when the construction of society took off, and later in the construction boom of the 1960s and 70s, when many thousands of homes needed to be built throughout the Nordic countries, about the time when the major nationwide group of companies BPA was formed.

Just over 20 years later, the company was restructured to become a nationwide installation company, and the film contains the commercial that was broadcast on TV when Bravida was formed in 2000, after BPA merged with the Norwegian company Telenor's installation business.

100 years in two minutes

'The film is only two minutes long and it's impressive to see what a journey it's been when you put everything together in such a short amount of time', says Liselotte Stray. We have searched for clips in various archives and put together a picture of the journey we have taken beginning in 1922. We have then intercut archive footage with scenes we have filmed in which the actor Christoffer Willén moves the story forward wearing workwear characteristic of the period.

Watch the film at bravida.se/en/bravida-100/







BRAVIDA HEROES

♦bravida 100 years

Dick Nilsson – with over 40 years at Bravida

For a thrill-seeker like **Dick Nilsson**, work could never be routine. He has always liked challenges and changes. Bravida therefore became his bastion – for more than 40 years.

'I would never have stayed if it hadn't been a company with variety where I was also given the opportunity to develop', says Dick Nilsson, who started his working life as an aircraft mechanic at Bromma Airport.

Dick was only 19 when he was transferred to Kastrup in Copenhagen. But the commute home to Stockholm became too tough and the longing for his then girlfriend was too great.

'I quit. At that time, in the late 1950s, it wasn't difficult to get a new job. After the first visit to the Swedish Public Employment Service, I immediately got a job as an electrician', says Dick Nilsson.

He changed jobs again fairly soon thereafter, this time to Elektrobyrån where he got a position as an estimator. This is also where he experienced one of the worst days of his working life. After some strange business within the company involving money and IOUs, the company went bankrupt.

'I had collected a brand new red Ford. I also remember that it snowed that morning when I parked my new car outside the office. After a couple of hours, a guy came into office and asked about the car. He had hit it with his car. At the same time, we were told that the company had gone bankrupt and that everyone was going to lose their job', says Dick.

Still it all got sorted out fairly quickly because Dick was offered a job as Siemens' new head of installation and signed a new employment contract only days after receiving the bankruptcy news. But destiny had other plans.

When I has signing the contract with Siemens, BPA

(now Bravida) purchased the assets and liabilities of Elektrounionen Mellansverige, for which I had previously been working. BPA also wanted to get some key people onboard and I was one of them. I broke the contract with Siemens and thus began my path into that which would become Bravida', Dick continues.

Dick Nilsson has subsequently filled different roles within Elektrobyrån and Bravida, both as project manager and supervisor and later as a member of senior management. The duties have always been varied and challenging, which he has always appreciated. The first big job he managed for Elektrobyrån was the construction of the Kaknäs Tower. And he remembers the jobs abroad with particular enthusiasm.

'For me personally, the greatest change was the opportunity to work abroad. Among other things, I got to go to Vietnam to build the Swedish embassy and to Algeria in North Africa to build a concrete factory. Getting to travel the world was among the best experiences both personally and in my professional life', Dick says.

Initially Elektrobyrån was a subsidiary of BPA – what is now Bravida. It was only in the last five years before Dick Nilsson retired that Elektrobyrån was fully incorporated into Bravida. Before that, Elektrobyrån lived like its own little company within the group.

'We were really three companies within Elektrounion in the Stockholm market that competed over orders and contracts, and Elektrobyrån was a strong brand and a known supplier. But it was still completely logical to finally be completely integrated with the rest of Bravida in order to move forward more efficiently', Dick concludes.

Bravida – serving the archipelago

Traffic jams have never been an issue when **Lars Jansson** have gone out on jobs. But thick ice has been. Having to hack your way through or take a detour has been a nice problem to have in the archipelago.

For 58 years, Lars Jansson has travelled the waters around the islands off Vaxholm in a boat. For the bulk of his working life he has worked with electrical installations in the Vaxholm archipelago.

'After the military shut down in 2005, the work has mainly involved electrical installations in private buildings, both for permanent residents and summer visitors. And now when more wealthy people are buying property and building new houses on the islands, there's been no shortage of work', he says.

Lars is based in Vaxholm. He has a little office there and a warehouse in one of the old military buildings. Moored in the harbour is Grisslan – which quickly and smoothly takes him to the surrounding islands.

'I have always been happy with my job and that's why I wanted to continue after I retired. Now I take jobs on an hourly basis and decide myself how to organise my working week. I'm always off on Fridays though. I'm Bravida's island on the island', Lars Jansson concludes.



Bent Lislerud – a working life under constant change



After a 45 year long career that has been filled with exciting assignments and challenges, **Bent Lislerud** feels ready to retire. But the job and all the experience he has gained is something he will never forget.

'It has, to say the least, been a memorable journey throughout my entire working life, and I have not only had the benefit of working on fun projects but have above all had the chance to meet and get to know an enormous number of lovely people', says Bent.

Bent started his careers at Norwegian Telecom in 1978, which then changed its name to Telenor. The section where he worked was acquired by Bravida some years later. He has had management positions for many years and his current role is head of department for Electro Service/Project and the Security Department at Bravida Fredrikstad.

With around 95 employees within the department and a turnover of SEK 140 million per year, it is a major responsibility in a world and an occupation that is subject to constant change and renewal.

'So much has happened in my years in the industry, not least during the time as a Bravida employee. My department has long been the fastest growing within the company, which of course has been particularly exciting', Bent continues.

There are plenty of stories from Bent's working life involving everything from special projects such as the construction of hospitals and what it is like to work under many different managers because you will have a number of them when you work at the same company for so many years. However, Bent himself prefers to highlight the good working environment he is surrounded by and which he has also had a large part in creating. Perhaps that is why he mentions the only time he can remember being angry in the workplace when we ask if he wants to talk about any particular event.

'There was only really one occasion when I really lost my temper. Normally, I was always the first to arrive at work, which meant I could always park in the same space. But suddenly one day my colleagues had put names and registration numbers on the parking spaces and there was no space for me. But the situation was quickly resolved and no one repeated that mistake', Bent says with a smile.

Kai Levisen and 'The Bravida Way'



'I've always enjoyed getting up in the morning and going to work', says **Kai Levisen**. He has worked with Bravida since 2003 and describes the job and his colleagues as a second family.

'The best thing about my job is freedom with responsibility. We work independently and are allowed to make our own decisions. I also have many nice colleagues with whom I also spend time privately. If my body holds up and I'm healthy, I absolutely want to stay working here until I retire', says Kai Levisen, who has 45 years' experience working as a ventilation fitter in Denmark.

In addition to working as a fitter all over Denmark, he is also head of the union in Aalborg and has a seat as an employee representative on Bravida's group board of directors for Denmark.

'Being a union representative within Bravida is quite rewarding, it's a good company and we have a harmonious idea of how things are to be done and solved. We have a good collaboration what we call 'The Bravida Way', he says.

Kai Levisen also has a position within the EWC – European Working Council – which meets twice per year.

'That gives us insight into how the other Nordic countries are doing. If there's any major changes

we find out about them. Matters discussed are economy and employees' opinions about new things happening in the company and that affect the countries', Kai Levisen continues.

Bravida's office in Aalborg, which is Kai Levisen's home base, has a low staff turnover and the employees stay for an average of ten years or longer.

'Bravida is a professional company with an accessible decision-making procedure. It's easy to get hold of people in order to get answers to questions. Through a good working model and a simple structure, used in all countries, 'the Bravida Way' means that there are always clear rules and a working method that is good for profitability', he says.

One of his most positive memories from his working life is the year when Bravida took over as the new owner of the company he was working for and Kai Levisen got a new employer.

'It's a lovely memory for me, when Bravida took over in 2003. The work situation got a lot better and we became more profitable with Bravida as the owner', Kai Larsen concludes.

With an ear to the business ...

Name Petra Rundblad Age 51 Role at Bravida Service centre manager Location Värnamo How long have you worked at Bravida? 2.5 years Describe in one word what you think Bravida stands for Sustainability How are you getting on at Bravida? Love my job



Caroline Uebel strives towards ambitious goals

The project manager **Caroline Uebel** is one of the managers who steers a larger project that is currently underway in Stockholm - Slussen's new bus terminal. She oversees all the VS installations in the project.

'The most fun part of my job is that it's varied. Things are always happening and that suits my personality', says Caroline Uebel.

Caroline started as a project manager in VS immediately after finishing her bachelor's degree in civil engineering focuing on energy, environment and management. After a few years of work within hospital projects, she started at Bravida in August 2021 where she instantly got involved in the project Slussens Bussterminal.

In a time when sustainability is on everyone's lips, this is something she also takes into account in her day-to-day work as a project manager.

'I think sustainability is taken into account more within Bravida. We are more ambitious than I've seen previously. We talk about it when we are shaping the projects, then it's up to the individuals and finally it's the price tag that decides', she says.

Caroline Uebel, who has gained expertise within environmental management through her education, has a pragmatic approach to the issue of sustainability.

'It takes a long time to implement changes in the construction industry, which is fairly conservative. Then it has to take effect throughout the entire



organisation. Achieving the full effect requires a change in attitude at several levels', she says.

The fact that she works in a male-dominated world is not something she reflects upon herself, unless it is pointed out – which it often is. What she does reflect upon is her academic background.

'A common career path in the industry is starting out as a fitter. I therefore sometimes have to prove that I can think from the practical perspective as my background is in academia.

But I feel that Bravida appreciates diversity more than has been my previous experience', Caroline Uebel concludes.

» I'm super happy «

Name Peter Y Eriksson

Age 36

Role at Bravida Senior fitter

Location Jönköping

How long have you worked at Bravida? 16 years

How are you getting on at Bravida? I'm super happy here, I like

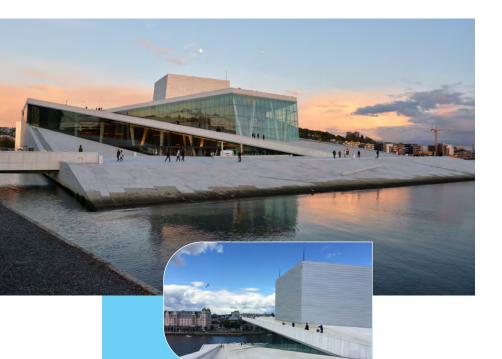
my colleagues, supervisors and my boss.

What is your best Bravida memory? My wrestling match with

my apprentice at a construction site. A fun thing on an otherwise quite slow day.



Iconic buildings that stand out



The Opera House in Oslo

The expensive construction of the new opera house in Norway was a controversial project that stirred up a lot of emotions among Norwegian people. NOK 3.9 billion later, the prestige building stands there as a new landmark in Oslo. The opera house, clad internally and externally in the finest Italian marble, spreads out over 38,500 square metres. It also features the largest chandelier in the Nordic countries – weighing 8.5 tonnes and seven metres in diameter – this impressive installation lights up with 8,000 light emitting diodes, flanked by 5,800 crystals. The magnificent chandelier not only contributes to lighting the space but also to the acoustics of the room. Bravida's installations have guaranteed climate-smart and energy-efficient durability of this grand building, which can now age with dignity.

Revered stave churches

Medieval stave churches are an important aspect of cultural heritage. There are now only a few of them left and most of these are in Norway. The architecture is impressive and the traditional craftsmanship stems from the Viking Age. These enormous wooden cathedrals were once common throughout the Nordic countries but there are now only 28 of them left. By preserving this cultural heritage, Bravida has contributed through its specialisation to fireproofing and increasing safety in and around these wooden treasures.



A cultural centre made entirely of wood

A unique wooden building was inaugurated in Skellefteå on 2021. The city's new landmark, which took three years to build, is a cultural centre with a theatre and stages that also houses a hotel. The building, built entirely of wood, was planned to be 18 stories tall but upon completion it had 20 stories The roof and the upper part of the building have been clad in solar panels as the starting point for the project was to create a climate-smart building. Bravida has been an important stakeholder in creating this special building with its expertise in sustainable and energy-efficient installations. Skellefteå, which is located in the forest belt of Norrland, has a long tradition of and expertise in building with timber and wood products. The challenge of this unique wooden building was that none of the installations were to be visible and also that the entire building's wooden construction was load-bearing.

'A careful plan was required for how installations would be fitted into the load-bearing wooden construction. We has to think a bit more about, for example, installations in the stage spaces that have stringent requirements in terms of sound but also a ceiling height of 20 metres', says Peter Norrman, Project manager region North Norrland, who continues:

'In order to prevent vibrations between the stages, double wooden walls were required and the installations were to be put between these. With that type of solution, it is difficult to make adjustments afterwards, which is why it was important to think through every stage of the installation from the beginning'.

The tallest building in the Nordic countries

Work on the tallest building in the Nordic countries, Karlatornet in Gothenburg, is in full swing. The building will be completed in 2023. The bulk of this tall building will be tenant-owner apartments, but it will also house offices and a hotel. Bravida is supplying green solutions to the section that is to be homes. The company is contributing here to the sustainable housing of the future through features such as energy optimisation. The construction is a multidisciplinary project for Bravida. It is a complex job for Bravida's installers to, for example, make sewage pipes work with the correct air pressure at the height of the building that, when it is completed, will be 245 metres tall with 73 storeys.

'This is a Bravida plus project in its purest form that involves all installation components', says Hans Hermansson, who is on the steering committee for the Karlatornet project within Bravida.



The art of creating ultra-modern hospitals

In recent years, Bravida has emerged as a major turnkey supplier to several new ultra-modern hospitals all over the Nordic countries. This is thanks to skilled staff who have gained the necessary cutting-edge expertise required for these assignments.

Hospitals are complex buildings where great demands are placed on security and reliability. The technology and equipment required in the premises often have critical functions and can, if installed incorrectly, prove to be life-threatening. The supplier must have an understanding and knowledge of how the technology and premises are to be used.

One of the most prestigious buildings Bravida is currently involved in is the Faculty of Health Sciences in Odense. The centre will include research and education for medical doctors. The faculty is connected with Odense University Hospital, where the passage between the new premises measures 2.1 kilometers.

The new research centre will contain rooms and receptacles for bodies ahead of post-

mortem examinations. Installations will take place for a new biobank with several smaller freezers in which DNA samples are stored.

'Installing systems for these purposes is technically very specific. It places great demands on ventilation and temperature control', says Janus Lading, project manager at Bravida.

A total of 110 Bravida employees are working on the project, which will soon progress into its second half.

'The toughest challenge when taking on these types of projects is to find the right people for the task. It's an enormous project and it's always a challenge to keep to a deadline. So far we've succeeded very well. I feel like people are watching us, if we succeed it means a great The Faculty of Health Sciences is connected to Odense University Hospital. Janus Lading is Bravida's project manager who is involved in realising a new medical university in Odense in Denmark. This includes a biobank for DNA samples and a post-mortem examination room, facilities that place great demands on ventilation and temperature regulation.

Elgaard





Östfold Among the large much written about hospital projects that Bravida has contributed to realising is the super hospital Östfold south-east of Oslo. It was opened at the end of 2015 and Bravida was the turnkey supplier of the security platform. The new ultra-modern hospital has a surface area equivalent to twelve football pitches.



Karolinska Bravida is securing

security solutions.

Karolinska's research facility in Solna in Stockholm by supplying high-tech



Drammen Construction of the new ultra-modern hospital in Drammen in Norway will begin in 2022. The building will be nine stories high and is described as state-of-the-art, with the very latest technical equipment. The surface area is 90,000 square metres. Sustainability is a focus area in line with Bravida's strategy. Bravida's contribution is electrical installations and security, one of the company's largest contracts within a single area.



Aalborg At the university hospital, Bravida has contributed with ultra-modern digitalisation technology.

success internally', says Janus Lading.

With projects like this and the many other hospital projects around the Nordic countries, Bravida's employees have gained the experience necessary for these assignments.

Other spectacular hospital projects include Östfold outside Oslo, which, in terms of surface area, is the largest Norwegian hospital. The business area Fire & Security has been responsible for security installations here.

One of the latest jobs is Drammen Hospital in Norway, a project with a strong focus on sustainability in several dimensions, which aligns well with Bravida's sustainability strategy. Drammen Hospital will be completed in 2025. In parallel with the construction of new hospitals, Bravida is also a leader within technical building operations and therefore manages the operations of several regional hospitals all over Sweden.



Tromsö The hospital is located in the far north of Norway and is therefore an important hub for a large catchment area. Here, Bravida is responsible for installing sustainable electrical, plumbing, heating, and ventilation systems.



Aarhus University Hospital is the largest hospital project in Denmark's history. The technology in a large hospital requires large spaces. At the hospital in Aarhus, two whole floors have been dedicated to technology and logistics.



Bravida's climate-neutral deliveries result in a better urban environment

With charged batteries and muscle power, Bravida is making a difference in Stockholm. The result is less congestion and noise. The green alternative, GreenHub, with fossil-free deliveries, is creating profitability for both Bravida and our customers.

'The biggest gain from GreenHub is a better environment', says **Carl Graf**, business area manager for GreenHub Norrmalm in Stockholm city, who continues:

'In addition to reductions in carbon emissions, our technicians get both daily exercise and a less complicated workday. Among other things we don't have to deal with traffic jams or finding parking. We also reach the customer significantly faster'.

Norrmalm is the latest addition to the Bravida GreenHub family. It was set up when Carl Graf took over as business area manager in December 2021. With electric bikes, electric mopeds or by foot, GreenHub's employees are on-site with customers within 15 minutes. But the new way of getting around



also comes with other demands.

'My job becomes extra exciting as you suddenly have to think more broadly about all surrounding aspects. GreenHub presents new challenges and opportunities when it comes to, for example, the working environment. We have a strong focus on having the correct personal protective equipment, clothes and safety for everyone to be able to get around safely in the city traffic', says Carl Graf who is looking forward to making the business grow in Norrmalm.

By changing the traditional way of delivering services using climateneutral transportation, Bravida is also contributing to savings for customers.

'It has a knock-on effect for our customers, who can include our fossil-free transportation in their sustainability reports. For one building the customer saves at least half a tonne of carbon emissions per year with our green alternative. For those who own many buildings that becomes a substantial amount', says **Marie Agélii**, marketing manager within Bravida Sweden, who was involved in the start-up of GreenHub.

The whole idea with GreenHub is to work closely with our customers to make as low climate footprint as possible. The resources that are freed up using the green model GreenHub are primarily time. Time that is used to provide further added value to customers.

'By freeing up time, we can spend time developing and optimising buildings even more with automation and digitalisation. Ever since we started this project, several new business opportunities have been created and we have super exciting customer dialogues, says Marie Agelii.



In addition to the establishment in Stockholm, there are also GreenHubs in the larger Nordic cities Gothenburg, Copenhagen, Aarhus, Helsinki, Oslo Lysaker, Oslo City, Bergen, Trondheim and Kristiansand.

GreenHub – from idea to success

Going from idea to introduction took three months. Through the new initiative GreenHub, Bravida is supplying technical services in an environmentally friendly and fossil-free way. The man behind the green model is **Dag Vidar Kvernbråten**, regional manager in Oslo.

'The first time I launched the GreenHub idea internally, I immediately got everyone onboard. Including management. The support was incredible. The work to implement GreenHub then went really quickly – it was 'great fun', says Dag Vidar Kvernbråten.

Inspiration for GreenHub came from several different directions – both from customers and from within Bravida's organisation. The demands were a more costeffective service, proximity to customers and environmentally friendly and sustainable deliveries of services.

Bravida's first GreenHub was opened in the heart of Oslo in spring 2020. Taking the car while working is not allowed, instead the technicians and service personnel use electric scooters or electric cargo-bikes to visit customers. And the customers are never further away than a radius of 15 minutes from the hub.

'We have managed to reduce both the time it takes to do the job and our fossil emissions. Deliveries now take place in a sustainable and cost-effective way, with a closeness to the customer', says Dag Vidar Kvernbråten.

GreenHub was a success right from the start. The evaluation from the initial establishment indicated remarkable growth





only six months after the launch. Several new customers and service contracts had been added

'The growth was greater than what we had expected. And during this period, customer appointments also increased by 20 per cent. Several of our customers have also said that they want us to introduce GreenHub in other locations in Norway', says Dag Vidar.

Bravida's green model has gained attention in the media as well as interest from politicians and the business community. GreenHub has become a real role model for sustainable operations.

'We have really gained a lot by introducing GreenHub. The next goal is to introduce another GreenHub in the Oslo area in 2022', Dag Vidar Kvernbråten concludes.

The Bravida School – from good to better

For Bravida, our staff are the be-all and end-all. At the Bravida School, great emphasis is therefore placed on continuous professional development via selected courses so that everyone can get a chance to grow in their roles and have a career within the company.

'The challenge for Bravida is the fast pace of development. Consequently, the Bravida School is an important foundation for helping to keep up with the changes. Our staff have to have all the knowledge required to be able to carry out their tasks in the best possible way', says **Christine Nilsson**, head of training and HR at Bravida.

When the Bravida School was launched in 2008, four training programmes were launched. Now there are between 80 and 100 training sessions per year. Courses are often held by our employees who are experts within their respective areas.

'Throughout the years the Bravida school has become a pride both for our employees and for us when we recruit new employees. The training programmes on offer are constantly being expanded and the school is growing larger. The eagerness among our staff to develop their skills is great and we have therefore embraced a more modern way of conveying knowledge, for example using learning on demand and webinars', says Christine Nilsson.

A good examples of learning on demand is the digital introduction training course we developed a few years ago which is sent to all of our new employees throughout the Nordic countries in which our CEO Mattias Johansson welcomes them' says Christine Nilsson.



A success story without an end

Bravida has been doing fantastically well in all countries. By reorganising more functionally, creating new working methods and tools, as well as placing a greater focus on skills – the businesses have ended up at the cutting edge, with advanced digitalisation and automation services.

We called our Managing Directors from all over the Nordic countries, **Tore Bakke, Johnny Hey** and **Marko Holopainen** to talk a bit about the future.

Hello Tore Bakke, Managing Director in Norway – what does the future hold for Bravida?

'It looks very promising since we have built up the competence and capacity to meet



the challenges of the future regarding both installation and service. We have become "specialists" in hospital projects and when the healthcare system continues to expand in Norway, we can count on more work in hospitals, I am sure of that.'

Is there anything else you can highlight?

'Yes, digitalisation and sustainability are two strong focus points for the future. Here at Bravida we have both the technology and knowledge to help our customers reduce their carbon emissions, which feels amazing. But for the future we'll also need more employees with new skills and to develop the skills we already have.'

What is one of the biggest challenges for the future?

'Attracting and retaining staff is a challenge. We need to become even better at employer branding, creating more traineeships and apprenticeships and putting more effort into skills and leadership development. As an employer we also need to place greater demands on our employees' willingness to change. Development will move at an even faster pace in future, which means the company must be fast on its feet.'

With sights set on the future...

Name Rose-Marie Åhlund

Age 60+

Role at Bravida Administrator

Location Örebro

» When I think of Bravida I think of environmental responsibility «



How long have you worked at Bravida? 9 years

How do you think that your job will have changed in 50 years' time? Much of what I do as an administrator can be automated in the future, but not everything.

Hello Johnny Hey, Managing Director in Denmark – what does the future hold for Bravida?

'We've made quite a lot of progress within digitalisation and automation. With services that are more clearly defined and a large skills bank in this area, we have been able to place more focus on further developing our disciplines and increasing transactions. So the future looks bright.'

Name a challenge you can already see.

'The challenge ahead is in attracting new staff with the relevant skills and to making them feel like they are happy and want to stay with us. The staff of the future are more digitally oriented, more open to technology and are more productive.

But that also means that they are inclined to change, and in order to keep them in the company we need to position ourselves as an employer with attractive career opportunities and activities that genuinely focusses on sustainability. That's the future. Everything we say and do must reflect the company's values. Another way

to secure skilled staff is to take on trainees and apprentices from other organisations and work functions.'

Name Jonathan Albertsson

Age 26



Hello Marko Holopainen, Managing Director in Finland – what does the future look like for Bravida?

'The future is sustainable. We are going to be number one in sustainability! Geographically, Finland is located in the coldest part of the Nordic countries, and buildings consume a lot of energy - so we can make a big difference here. With the aid of technology and skills, we can help make our customers' buildings more energy efficient and demand will grow. When someone asks which company is the best within sustainability, I want them to think of Bravida. We are going to be number one in sustainability!

Can you say anything else about the future?

'The young generation of staff are the future. To us, the generation who have learned digitalisation from the cradle are an attractive group. They embrace and use technology and processes quickly and can come up with good ideas. The same young group are also driven by values. And to make us the obvious choice of employer for this group, we must also offer a strong and genuine willingness to move forward with sustainability as part of our business.'

How will you make this happen?

'It will require quite some innovation on our part, with us having to offer job rotation, continuous professional development and opportunities to progress upwards in the organisation, but also in the form of specialisation.'

Role at Bravida Electrician/security technician Location Oskarshamn How long have you worked at Bravida? 4 years When do you feel particularly proud to work at Bravida? When I see how different departments/technology areas solve problems together. That is the strength of a large group. In which area do you think Bravida will have developed most over the next 20 years and why? Smart technology and comprehensive solutions, e.g. Bravida Charge and Integra as a platform, will put us at the forefront of development.



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Noted from the past:

Solar heating that flopped

Pioneering new technology does not automatically lead to success. In the 1980s, a project group within the company built an innovative solar heating plant that was to supply more than 50 houses with all their electricity from one single solar heating plant.

The project management team had great visions for the new technology but the installations became too complex. As soon as it became cloudy the electricity ran out – and Sweden is hardly known for its many hours of sun so it did not become a hit. The municipal commissioner in Växjö at the time was involved in the grandiose scheme. After the flop he became known as 'Sune Sun'.

Computer driving licence

Now it is hard to imagine any person below the age of 80 not knowing how a computer works. But in the late 1990s it was not as obvious. Therefore, in order to increase the degree of digitalisation among the population, the computer driving licence was introduced, which coincided with the home PC reform of 1997. And at Bravida, as in many other companies, staff got to take their computer driving licence.

Ship ahoy for the Tuna Cruiser

For a short period in the 1960s and 1970s, the company got into the boat business. The self-designed boat model the Tuna Cruiser was built in steel but using wooden boat techniques, which meant it had the same harmonic lines as a wooden boat. The unique Tuna Cruisers, which were made with one or two masts, are sailing to this day. Manufacturing ended in 1979, with 74 boats having been built.

The CEO trick

When Mattias Johansson took up his post as the new CEO of Bravida in 2015, he adopted a conventional but still unconventional method to reach out to all employees. Instead of a regular email, he chose to write a traditional letter on paper which was put into envelopes and sent to all employees. Traditional letters are only received nowadays if it concerns something very important or an invitation to something festive. Guess whether the CEO trick was a success and the letter was read ...

The 1990s

In 1998, some of the company's local offices were to be closed down. The notification of the closure was to be made in person, which is why various management representatives were sent to the offices concerned. One of these representatives stepped into an office in southern Skåne, made the staff redundant and closed the office.

When everything was done, the 'hilarious' mistake was discovered. The representative had gone to the wrong city and closed down the wrong office.



Now we are running towards the future!

One hundred years. **ONE HUNDRED YEARS!** Take a deep breath and say the words out loud to yourself because on this long journey we have overcome many obstacles together. That is big. We have marched in step with society. And we have been before our time with modern ideas – such as the idea to implement the five day working week long before it was standard for everyone something which became the starting point for the staff welfare and culture that now permeates the whole of our organisation.

Technology will always simplify and improve, but our craft in all of our disciplines is something I think will be in demand for a long time to come. With one hundred years behind us, we are ready to meet the needs of the future with digitalisation, automation and new skills. It is you who work in any of our departments, with your specific professional skills, that are our most important asset. Skilled craftspeople will always be needed. At the same time, it is important to us that these staff are supported by project managers and managers – this will make us the best team. Along the way, we must keep pace with the development of society in order to be attractive to both our customers and new members of staff. But also so that those who work at the company will find it fun to go to work. In order to succeed in this we must always think innovatively.

Despite digitalisation and the winds of the future that are now blowing through the whole of our business, meetings between people will still be at the core of everything we do. Relationships and people create values, and values are our business. Together with our customers and employees, we therefore continue to doggedly and imaginatively fill buildings with life.

Because in one hundred years' time, we will all be able to say: we did it! And we did it together. Like we always do.



bravida 'maina