

# Annual Review **2018**



The digital era promises massive productivity gains and brand-new business models. To make this a reality, new technologies and smarter solutions need to be adopted on an industrial scale. Companies have to overcome complex challenges standing in the way of their transformation.

We innovate solutions that clear the way for the future. To us, engineering is all about questioning assumptions and using the best technologies available for efficient and sustainable results, from heavy machinery to cloud-based software. We support and serve our customers with industry-specific expertise. In our hands, their challenges turn into solutions that save time, energy or trees and enable new business.

Our ambition is to drive the industrial change, grow and explore together with our customers, wherever they need us. Instead of just selling hours, we design solutions that are innovative, measurable and exceed expectations. Our customers' success is our success.

# Engineering with a difference.



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Etteplan's Annual Report 2018 consists of two parts. The Financial Review 2018 is available at [www.etteplan.com](http://www.etteplan.com)





# Global Etteplan

Etteplan operates in seven different countries on three continents. The international impact of our operations is even broader, as the results of our work are reflected in the operations of our global corporate customers. We are the market leader in Finland and one of the leading operators in the field in Sweden. We seek to grow especially in Central Europe and Asia. Etteplan's operating models make it easy to relocate engineering and technical documentation work to China and Poland, which creates a significant competitive advantage. We also take advantage of the rapidly growing local markets in both countries.

**236**

REVENUE, EUR MILLION (growth 10.1%)

**20.2**

OPERATING PROFIT, EUR MILLION (growth 30.4%)

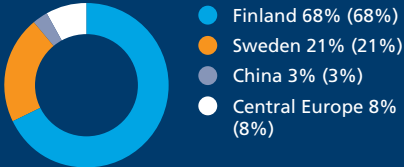
**>60**

OFFICES IN SEVEN COUNTRIES

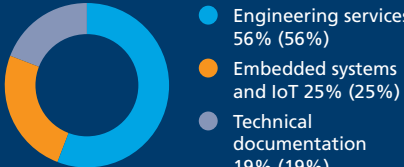
**3,055**

NUMBER OF PERSONNEL (in 2017: 2,802)

Revenue by geographical area 2018 (2017)



Revenue by service area 2018 (2017)



Employees by geographical area 2018



## Our strengths

### 1. CUSTOMER-ORIENTED OPERATING CULTURE

Our long-term global customer relationships are based on our expertise. We are able to react quickly to our customers' changing needs and wishes. We know the specific aspects of our customers' industries.

### 2. ADVANCED AND UNIQUE SERVICE OFFERING

Our service solutions support the renewal and competitiveness of our customers' business. We have the ability to combine engineering and digital solutions in a unique way.

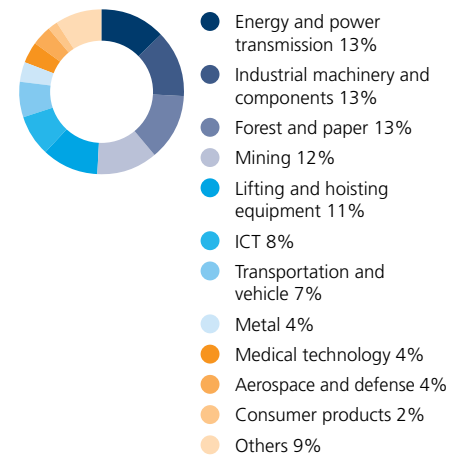
### 3. STRONG MARKET POSITION CLOSE TO THE CUSTOMER

We are among the leading engineering providers in all of our market areas. We utilize our global network of experts in various fields of technology for the benefit of our customer.



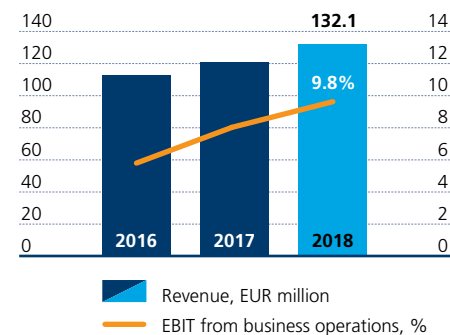
# Expertise and services

Revenue by customer segment 2018

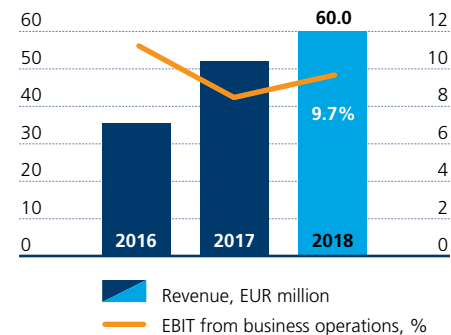


Etteplan is a rapidly growing and developing expert company that specializes in solutions for industrial equipment and plant engineering, software and embedded solutions, and technical documentation solutions. We are a leading operator in the engineering industry. Our customers are global machinery and equipment manufacturers. Our most important task is to anticipate the needs of our customers and to improve their competitiveness. We stand out by the high-level and wide competence and service orientation of our experts. Etteplan was founded in Finland in 1983. The Company's shares have been listed on Nasdaq Helsinki Ltd since 2000.

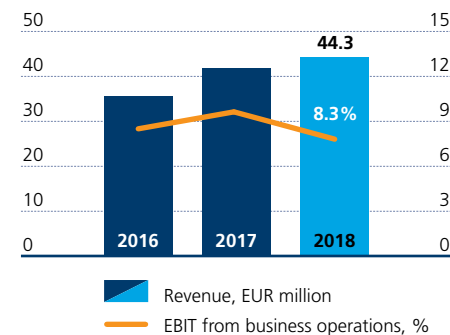
Engineering Solutions  
(Engineering Services)



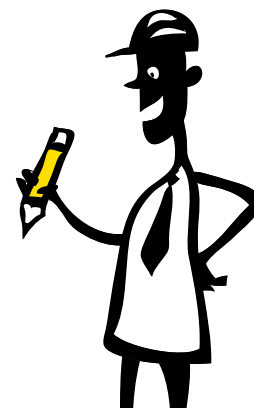
Software and Embedded Solutions  
(Embedded systems and IoT)



Technical Documentation Solutions  
(Technical Documentation)



» Etteplan renewed its organization and structure as of January 1, 2019. Read more at [www.etteplan.com](http://www.etteplan.com)



## ENGINEERING SOLUTIONS (Engineering Services)

## SOFTWARE AND EMBEDDED SOLUTIONS (Embedded Systems and IoT)

## TECHNICAL DOCUMENTATION SOLUTIONS (Technical Documentation)

The content of our services	Engineering Solutions refers to the innovation, engineering and calculations of the technical attributes of machinery or equipment for the purpose of product development and manufacturing.	Software and Embedded Solutions refer to all product development services as well as software and technology solutions that enable the digital connectivity of machinery or equipment as part of the Internet of Things (IoT).	Technical Documentation Solutions refers to the documentation of a product's technical attributes, such as manuals and service instructions for the users of a product, as well as related content creation and distribution in print or digital form.
Our customers' needs	Assignments are typically product development and Engineering-to-Order for a new product, involving the customization of the product in accordance with end customer requirements and the legislation of the market area in question.	A common challenge faced by our customer is the need to develop a service based on a new business model that takes advantage of the opportunities presented by digitalization.	For an industrial customer, technical documentation is typically a non-core operation that has a significant impact on the efficiency of the end customer's maintenance service operations.
Examples of our services	<ul style="list-style-type: none"> <li>Product development projects</li> <li>Engineer-to-Order projects</li> <li>Plant engineering</li> <li>Engineering analysis</li> <li>Project management</li> <li>Product safety</li> <li>Product cost analyses</li> </ul>	<ul style="list-style-type: none"> <li>Product and software engineering and consulting</li> <li>Technology services and consulting</li> <li>Testing services and production testing systems</li> <li>Services for comprehensive IoT solutions, such as business systems, mobile applications and various integrations</li> </ul>	<ul style="list-style-type: none"> <li>Technical writing and illustrations</li> <li>Animations and simulations</li> <li>Digital systems for distributing technical documentation to service and maintenance personnel</li> <li>Software and methods for producing high-quality technical content</li> </ul>
Share of Revenue	56%	25%	19%
Share of revenue represented by Managed Services	52%	47%	75%



## CASE: FORTUM HYDRO

# Improving the efficiency of Fortum Hydro's asset information with the help of artificial intelligence

Fortum Hydro and Etteplan started their cooperation in 2014, when Fortum outsourced its Documentation Management function to Etteplan. Now Etteplan and Fortum have studied how to automate parts of the documentation process with the help of cognitive technologies. The target of the study was to envision the potential of the use of machine learning and, in the long term, artificial intelligence (AI).

Fortum's 120 hydro power plants, i.e. assets, in Sweden hold hundreds of thousands of drawings, lists, and project documents, located in different source systems, from many years of operation. New and old documents are produced and updated continuously. Asset information – such as drawings of an asset, project documentation and historical failure and maintenance data – are used, for instance, in investment projects and in maintenance activities. Hence, to support Fortum's business the asset information has to be up-to-date, easy to find and reflect the physical asset. Digitalizing and connecting asset information from different source systems to assets and work orders with the help of cognitive technologies can help filter out the relevant information, at point of need, from the mass saving both time and frustration for Fortum's own personnel and its suppliers.

Based on the studies, Etteplan believes leveraging on cognitive technologies in managing asset information will improve its asset information management services. With use of cognitive technologies – that, in short, refer to technologies simulating human thought processes – a computer can understand important relations between different assets, work orders and tech-

nical documents, how it should be structured and present it to a plant manager, project manager or maintenance technician where and when it is relevant. This saves a lot of time compared to manual information handling.

"Simply put, cognitive platforms utilizing machine learning and artificial intelligence applied in this area can reduce time and frustration spent on finding the right information, reduce risk of making incorrect decisions and, most importantly, reduce risk of personal injuries", describes Director, Global Service Solutions **Eric Tengstrand** from Etteplan.

Another area discussed in the study is to utilize cognitive technology to solve and predict technical problems: a computer can, for instance, gradually learn to recognize the causes of recurring problems. This is a step towards cognitive predictive maintenance, where a computer gives recommendations on how to tackle emerging operational deficiencies before they develop into actual failures.

"Cooperation with Fortum Hydro reflects well how Etteplan sees big potential in utilizing new technologies such as artificial intelligence in its service offering", continues Tengstrand.

"Fortum has seen this project with Etteplan as very important for our next development in the digitalization area. The project has been interesting and proven that these solutions will be a natural part of our work processes in the future", concludes **Martin Lindström**, Head of Asset Management from Fortum Hydro.

» READ MORE [WWW.ETTEPLAN.COM](http://WWW.ETTEPLAN.COM)

# Documents in order with artificial intelligence



Carl-Eric Ryberg and Eric Tengstrand

# Key events of the year

Etteplan's growth also continued during 2018. We strengthened our capabilities in software design through acquisitions and expanded our operations in China.



**MAY:** Etteplan's growth in the Chinese market continues – a sixth office opens in Qingdao in May, and a seventh in Wuhan in July.



**MAY:** Etteplan strengthens its digital services and software capabilities by acquiring Eatech Oy.



**OCTOBER:** Etteplan and Tana Oy expand their cooperation to digitalize Tana's repair and maintenance services.



**NOVEMBER:** Digital twin developed by Etteplan and Mevea revolutionizes Slepner's sales and after-sales.



**DECEMBER:** Eatech Oy, Soikea Solutions Oy and Koodain Oy start operating under the Etteplan MORE name.



**FEBRUARY:** Etteplan strengthens its Android know-how by acquiring Koodain Solutions Oy.



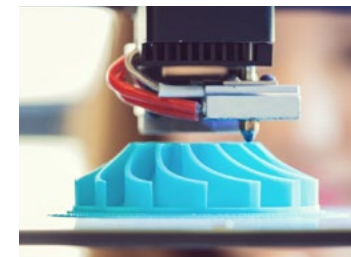
**FEBRUARY:** Etteplan introduces a revolutionary innovation for our designer Ulla Kulju for adaptive track motorcycling at the MP 18 Motorcycle Show.



**MAY:** Etteplan and Valmet expand their cooperation – Etteplan to design a significant part of the machines used in wood production.



**AUGUST:** Etteplan continues to expand in the Polish market and begins offering engineering services for Valmet and other customers operating in Central Europe.



**NOVEMBER:** Siemens Industrial Turbomachinery AB chooses Etteplan as its partner in 3D printing design.



**DECEMBER:** Etteplan to NASDAQ Helsinki's Medium Cap.



**DECEMBER:** Etteplan renews its organization and structure to boost growth.





## CEO'S REVIEW

# Continued profitable growth and strengthened expertise in digital solutions

**We developed our operations significantly in 2018 and strengthened our digital expertise in particular. Etteplan offers a strong and increasingly comprehensive range of engineering services for industrial customers, from equipment and plant engineering to embedded systems, software solutions, digitalization and technical documentation solutions.**

Etteplan had another successful year in 2018 and we continued our profitable growth. The market situation was good in all of our market areas and our strong operational efficiency produced record results. Our operating profit rose to a new level, exceeding EUR 20 million for the first time. In addition, our cash flow was excellent. Our revenue also grew by more than 10 per cent and was 236 million euros. However, we cannot be fully satisfied with this, as the growth fell short of our target level of 15 per cent.

The Engineering Services service area achieved excellent success throughout the year. Operational efficiency was at an excellent level and our profitability

exceeded our target level of 10 per cent in the second and third quarter. We were also active in developing our service offering in new technologies, such as additive manufacturing and digital twin solutions, which we expect to be sources of significant future growth.

The Embedded systems and IoT service area recovered from the project challenges that had previously burdened it and resumed a level of performance that matches our expectations in the latter part of the year. Growth was strong, and profitability was again excellent in the last quarter. Growth was supported by the acquisitions of Eatech Oy and Koodain Solutions Oy earlier in 2018. The

acquisitions significantly strengthened our competences, particularly as a provider of comprehensive digital solutions, agile software development and cloud service software. The acquisitions were a continuation of our previous investments in digitalization and software development as well as the acquisition of Soikea

Solutions Oy over two years ago. At the end of the year, we merged these three companies acquired by Etteplan into a software development unit that operates in Finland under the Etteplan MORE brand. We have further strengthened our ability to challenge other players in the market and provide IoT services to industrial customers. With more than 700 professionals, we are in an excellent position to support the accelerating digitalization of our customers' business and we expect continued strong growth from the service area going forward.

Our Technical Documentation business did not reach our expected level during the latter part of the year. Growth slowed down as our customers' investments in new operating models decreased from the previous year and the number of new outsourcing agreements declined. However, activity in outsourcing discussions has now picked up again and we are currently engaged in several significant negotiations regarding outsourcing solutions. Business in the fourth quarter of the year was also burdened by the continued challenges in Germany. We have initiated new immediate measures to rectify the situation and we believe the business will improve in spring 2019.

Our growth in China continued and we opened two new Chinese offices in 2018, in Qingdao and Wuhan. The number of our offices in China grew to eight in the beginning of 2019 when we opened an office in Shenzhen.

We renewed our organization in the beginning of 2019 to respond even

better to the changing competitive situation. Our balance sheet is healthy, which provides us with opportunities for developing our business and accelerating our growth as we move forward.

Our revenue has now grown for 21 consecutive quarters and our operating profit has improved for 11 consecutive quarters. This has been enabled by excellent performance throughout the organization, and I want to thank everyone at Etteplan for these achievements. I also want to thank our customers for their good and successful cooperation. Our goal is to continue to be a reliable and highly competent partner in solving our customers' various challenges.

We are also pleased that our success has been reflected in the company's market capitalization, and we started the year 2019 in the Mid Cap category on the stock exchange. I also wish to take this opportunity to thank our shareholders for their trust and the opportunity to develop the company with a long-term view.

While the market situation is currently characterized by political uncertainty and demand growth has slowed down, we expect market growth and the positive development of our business to continue in 2019.

**Juha Näkki**  
President and CEO

**» Boosted by our growth, also our market capitalization grew, and we rose to the Mid Cap category on the stock exchange in the beginning of 2019.**





## CASE: POSTI

# Proactive maintenance of the software ensures operation of the parcel lockers

E-commerce is growing in popularity, which has also seen Posti's parcel volumes grow in the past few years. Hundreds of parcel lockers must function seamlessly. Etteplan's new software unit is responsible for managing the maintenance of parcel lockers, which comprises technical support and maintenance of the software. Cooperation began when Eatech, which Etteplan later purchased, updated the parcel lockers' software in 2017. In 2019, cooperation will be expanded from the current parcel lockers to Smartpost parcel lockers in apartment buildings and workplaces.

"From Posti's point of view, it's practical that we offer the maintenance of the entire system as a turnkey service," explains **Esa Mäkelä**, Managing Director of Etteplan's software unit. "Their customer service has a direct connection to our service department that can provide remote technical support or coordinate device maintenance. We also take care of necessary application updates and development."

According to Mäkelä, Etteplan's strength lies in proactive maintenance of parcel lockers. The smart machines can actively be monitored remotely and any possible errors can be fixed before the end user notices them.

In addition to the maintenance of parcel lockers, Etteplan will also develop and maintain the software of Smartpost parcel lockers. Posti's goal in the coming years is to grow its Smartpost parcel locker network significantly.

Software design is one of the areas in which Etteplan has grown in recent years. In 2018, Etteplan strengthened its expertise in the area through the acquisition of Eatech Oy and Koodain Solutions Oy. The previously purchased Soikea Solutions Oy also joined the software unit that functions in Finland under the Etteplan MORE brand.

» READ MORE [WWW.ETTEPLAN.COM](http://WWW.ETTEPLAN.COM)

# Growth from software design



Niko Heikura,  
Ville Imeläinen,  
Juha Hankkila  
and Hannu Korpi



# Digitalization is increasing the need for engineering in the industry

The digitalization of industry is increasing the need for engineering and creating growth opportunities for engineering service providers. At the same time, the need for new competencies and close cooperation between different areas of technology increases.

Industry, and society as a whole, are undergoing a digital transformation that will see the digitalization and networking of almost everything. At the same time, investments in the Internet of Things are growing rapidly. Intelligent and con-

nected production processes increase efficiency and change the way industry operates. Manufacturing methods are developing and enabling the creation of new kinds of value chains, business models and revenue models, while also increasing the need for engineering.

Machinery and equipment manufacturers may find new paths to growth in service-based business based on analyzing and leveraging data accumulated from machinery and equipment. Digitalization can, for example, lead to a better understanding of how machines are used, increase their capacity and change their technical attributes.

## Cooperation between different areas of technology

The transformation of industry is also challenging the field of engineering. In practice, this is a new area of engi-

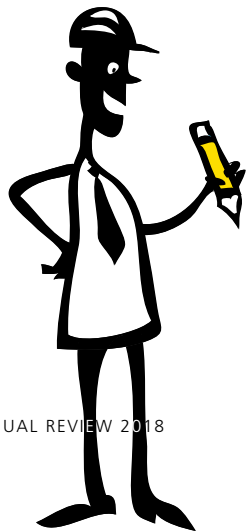
neering that combines in-depth equipment know-how and expertise in new technologies. As technology develops, the experts in the field are also required to have a broader understanding that extends beyond their specific field of expertise, as well as the ability to cooperate effectively with professionals representing other fields of technology.

The growth of the engineering and consulting industry throughout the world leads to increasing demand for competent professionals. The workforce is becoming more international and engineering companies are increasingly looking for experts also outside their home markets.

## Engineering companies are expanding their competencies

The competitive landscape in engineering consists of a large number of players of various sizes and different competencies. The industry has been characterized by consolidation for quite some time now. Large players are looking to outgrow the market organically and expand their competencies and operating areas through acquisitions. Customers are outsourcing non-core business functions, reducing the number of partners they work with, and engaging in closer cooperation with their selected partners.

» Engineering companies are expanding their competencies also through acquisitions.



	GLOBAL TRENDS	ETTEPLAN'S STRENGTHS
Accelerated technological development	<ul style="list-style-type: none"> <li>• New technologies</li> <li>• 3D printing increases product variations</li> <li>• Shortened product life cycles</li> <li>• Improved manufacturability</li> <li>• Technology transfer, reverse innovation</li> <li>• Solutions that support sustainable development</li> <li>• Increased demand for engineering</li> <li>• Increased need to develop new competencies</li> </ul>	<ul style="list-style-type: none"> <li>• Diverse technological and digitalization expertise</li> <li>• Broad expertise spanning different industries</li> <li>• Life cycle services</li> <li>• Technology expertise in the development of new energy sources and materials</li> </ul>
Digitalization	<ul style="list-style-type: none"> <li>• The Internet of Things (IoT)</li> <li>• Renewal of business models</li> <li>• Increased intelligence of machinery and equipment</li> <li>• Increased demand for engineering</li> <li>• Increased need to develop new competencies</li> <li>• Challenges the existing areas of technological competence</li> <li>• Supports export of services</li> </ul>	<ul style="list-style-type: none"> <li>• Broad expertise spanning different industries</li> <li>• Strengthening digitalization expertise</li> <li>• A service offering that promotes the renewal of the customer's business</li> <li>• Ability to combine equipment and plant engineering with digital solutions</li> </ul>
Structural changes in the global economy	<ul style="list-style-type: none"> <li>• Economic shift toward emerging markets</li> <li>• Population growth, urbanization and the aging of the population</li> <li>• Increased need to establish a stronger presence in new growth markets</li> </ul>	<ul style="list-style-type: none"> <li>• Strong market position close to the customer</li> <li>• Growing presence in China</li> <li>• International network</li> <li>• Long-term global customer relationships</li> <li>• Service solutions</li> </ul>
Outsourcing	<ul style="list-style-type: none"> <li>• Focus on core business</li> <li>• Tighter competition</li> <li>• Cost-efficiency</li> <li>• Quality requirements</li> <li>• Creates organic growth opportunities for companies in the engineering industry</li> </ul>	<ul style="list-style-type: none"> <li>• Superior outsourcing process</li> <li>• Strong market position close to the customer</li> <li>• Service solutions</li> <li>• Customer references</li> </ul>
Industry consolidation	<ul style="list-style-type: none"> <li>• Many companies of different sizes in the industry</li> <li>• Large players outgrow the market organically and through acquisitions</li> <li>• Customers reduce the number of partners they use</li> <li>• Closer cooperation with key partners</li> <li>• Creates the opportunity for growth through acquisitions</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous development of own service offering</li> <li>• Long-term global customer relationships based on expertise</li> <li>• Service solutions</li> <li>• Strong market position close to the customer</li> <li>• Strengthening expertise and presence through successful acquisitions</li> </ul>



# Etteplan's growth strategy

**Etteplan is a forerunner in the engineering industry. The continuous development of our service solutions, digitalization and international growth are our key growth areas. We reinforced our software design expertise during the year and introduced a new global organization effective from January 1, 2019.**

Etteplan is a growth company with a target of increasing its revenue by 15% annually on average, both through acquisitions and organically. By making acquisitions, we aim to increase our competence capital as well as strengthen our presence and service offering in our current markets. We aim to make it possible for the customer to obtain all services related to equipment and plant engineering, technical documentation, software design and embedded systems from the same provider. Our organic growth is based on our broad service offering and expertise as well as our strong market position.

In 2018, we carried out two acquisitions in Finland that reinforced our software design expertise in particular. We acquired the Android specialist Koodain Solutions Oy in February, followed by the software design company Eatech Oy in May. Eatech Oy, Koodain Solutions Oy and Soikea Solutions Oy, which was acquired in 2016, constitute Etteplan's software development unit and oper-

ate under the Etteplan MORE brand in Finland from the beginning of 2019. Etteplan's personnel now includes more than 700 experts in software design and embedded systems.

To boost our growth, we introduced a new global organization on January 1, 2019, where the service areas form the reporting lines instead of the previous country organization. With the organizational change, we speed up the development of our service solutions and sales, as well as improve our ability to incorporate new technologies into our service solutions. The change will enhance our capability to reach our strategic target for Managed services.

Our competitive situation has become even more global. Our customers' projects are wider and more complex. With the global organization, we aim to ensure that our entire service offering is available to our customers in all of the seven countries we operate in.

The number of hours sold in China grew by 35% during the year. We now

have nearly 400 employees in China. The local engineering market in China is opening up and, in the spring, we began providing technical documentation services to a major state-owned Chinese corporation. We also opened offices in Qingdao and Wuhan. Early 2019 the number of our offices in China increased to eight when we opened an office in Shenzhen.

In Poland, we established a unit focused on mechanical engineering, which will primarily serve Valmet's needs in its early stages.

We utilize our international network particularly in customer projects implemented in Finland and Sweden. Etteplan's operating models make it easy to relocate work to China and Poland, which creates a significant competitive advantage for both Etteplan and our customers.

**>> We are improving our ability to quickly incorporate new technologies into our service solutions.**



## OUR VALUES:

Customer-oriented  
Proactive  
Attractive

## OUR VISION:

Our customers get the best service solutions anywhere at any time

## From strategy to action

Customer focus

Service solutions

One Etteplan

Engineering methods

Cornerstones of strategy

## Engineering with a difference

Focus areas in business operations

1

Service solutions

2

Digitalization

3

International growth

2018

54%

SHARE OF REVENUE REPRESENTED BY MANAGED SERVICES

DIGITALIZATION CREATES NEW BUSINESS OPPORTUNITIES

35%

THE GROWTH OF WORKING HOURS SOLD TO THE CHINESE MARKET



# Strategic and financial targets

We develop our operations and monitor our progress primarily in accordance with our strategic and financial targets. Below you can find information about our development in these important areas.

	TARGET	MEANS	DEVELOPMENT 2016-2018												
Growth	<p><b>15%</b> Average annual revenue growth.</p> <p>Includes both organic growth and potential acquisitions.</p>	<ul style="list-style-type: none"> <li>Growth in key customers</li> <li>Organic growth through service solutions</li> <li>Acquisitions that support growth</li> </ul>	<p><b>Revenue and revenue growth, %</b></p> <table border="1"> <tr><th>Year</th><th>Revenue (EUR million)</th><th>Revenue growth (%)</th></tr> <tr><td>16</td><td>183.9</td><td>30.3</td></tr> <tr><td>17</td><td>214.8</td><td>16.8</td></tr> <tr><td>18</td><td>236.5</td><td>10.1</td></tr> </table>	Year	Revenue (EUR million)	Revenue growth (%)	16	183.9	30.3	17	214.8	16.8	18	236.5	10.1
Year	Revenue (EUR million)	Revenue growth (%)													
16	183.9	30.3													
17	214.8	16.8													
18	236.5	10.1													
Profitability	<p><b>10%</b> EBIT from business operations of revenue.</p>	<ul style="list-style-type: none"> <li>Shifting the business model towards Managed Services</li> <li>Market leadership</li> </ul>	<p><b>Revenue and EBIT from business operations, %</b></p> <table border="1"> <tr><th>Year</th><th>Revenue (EUR million)</th><th>EBIT from business operations (%)</th></tr> <tr><td>16</td><td>183.9</td><td>6.6</td></tr> <tr><td>17</td><td>214.8</td><td>8.0</td></tr> <tr><td>18</td><td>236.5</td><td>9.3</td></tr> </table>	Year	Revenue (EUR million)	EBIT from business operations (%)	16	183.9	6.6	17	214.8	8.0	18	236.5	9.3
Year	Revenue (EUR million)	EBIT from business operations (%)													
16	183.9	6.6													
17	214.8	8.0													
18	236.5	9.3													
Managed Services	<p><b>65%</b> The share of revenue represented by Managed Services (Managed Services Index, MSI) by the end of 2019.</p>	<ul style="list-style-type: none"> <li>Service models</li> <li>Technology solutions</li> <li>Project business</li> </ul>	<p><b>Revenue and Managed Services, %</b></p> <table border="1"> <tr><th>Year</th><th>Revenue (EUR million)</th><th>Managed services (%)</th></tr> <tr><td>16</td><td>183.9</td><td>53</td></tr> <tr><td>17</td><td>214.8</td><td>57</td></tr> <tr><td>18</td><td>236.5</td><td>54</td></tr> </table>	Year	Revenue (EUR million)	Managed services (%)	16	183.9	53	17	214.8	57	18	236.5	54
Year	Revenue (EUR million)	Managed services (%)													
16	183.9	53													
17	214.8	57													
18	236.5	54													
Balance sheet	<p><b>&gt;30%</b> Equity ratio.</p>	<ul style="list-style-type: none"> <li>Corresponding financial arrangements</li> <li>Improving cash flow</li> </ul>	<p><b>Equity ratio, %</b></p> <table border="1"> <tr><th>Year</th><th>Equity ratio (%)</th></tr> <tr><td>16</td><td>40.0</td></tr> <tr><td>17</td><td>40.7</td></tr> <tr><td>18</td><td>42.9</td></tr> </table>	Year	Equity ratio (%)	16	40.0	17	40.7	18	42.9				
Year	Equity ratio (%)														
16	40.0														
17	40.7														
18	42.9														

# Incorporating digital technologies into service solutions

A **service solution** is a solution consisting of services and service delivery models customized according to the customer's needs. The continuous development of service solutions is one of the cornerstones of Etteplan's strategy and a focus area of our growth. The utilization of digital technologies and software solutions plays a key role in the continued development of our service solutions. Artificial intelligence, 3D printing and digital twin technologies are examples of these. By incorporating new technologies into Etteplan's service solutions, we help our customers utilize these technologies in their business and create new added value for them. Realizing the benefits of digitalization requires a comprehensive understanding of equipment as well as the optimal technology solutions for them.

**Managed services** are the method by which services are delivered to the customer. They include for example projects and outsourcing solutions. Etteplan's experts work under Etteplan's supervision and Etteplan is responsible for service quality. Managed services consist of Etteplan's top experts, service management and production models as well as software solutions. We ensure that the service is produced cost-efficiently and that results are measurable. The customer purchases the service model and pays for the results instead of the resources. Managed Services free up the customer's resources while improving their cost competitiveness and the quality of operations. Etteplan's target is to increase the share of revenue represented by Managed Services to 65% by the end of 2019. Managed Services enhance Etteplan's own capacity management and increase the profitability of operations.

Etteplan is a forerunner in the engineering industry, particularly due to its service solutions and Managed Services. We are developing our service solutions, for example, by incorporating digital technologies into them, and we will increase managed services' share of our revenue.



»» The development of service solutions improves our competitiveness.



## CASE: SIEMENS TURBOMACHINERY

# Cooperating to increase the use of additive manufacturing at Siemens Turbomachinery

Etteplan and Siemens Turbomachinery AB started an interesting cooperation in spring 2017 to investigate the use of 3D printing for the parts and applications of gas turbine auxiliary systems. The project was also aimed at assessing new areas in which additive manufacturing could be used in the future. To achieve this goal, Etteplan used its AM Screening model, which produces a proposal and an investment calculation to illustrate the advantages of the new manufacturing method.

Headquartered in Finspång, Sweden, Siemens Turbomachinery AB is one of the pioneers in the world of additive manufacturing. Etteplan and Siemens have been working together for several years and Etteplan is one of the preferred partners of Siemens. The team assigned to the current projects include experts from both Finland and Sweden.

According to **Tero Hämeenaho**, Business Development Manager at Etteplan, the customer has appreciated, among other things, Etteplan's insight into how to improve products and their cost-efficiency:

"We don't just look at the world from the perspective of 3D printing. We always try to identify all development areas related to products, whether they are linked to additive manufacturing or not, and to give the customer access to the full range of our comprehensive engineering expertise."

Additive manufacturing is a rapidly growing trend and Etteplan has invested strongly in its product development and in increasing its expertise. The goals of the growth company are clear:

"We aim to be the Nordic region's leading expert in designing for additive manufacturing by 2020 – a position that we have already achieved in Finland."

*Additive manufacturing (AM) or 3D printing, are umbrella terms for the technology through which items are manufactured layer by layer using materials such as plastic or metal.*

» READ MORE [WWW.ETTEPLAN.COM](http://WWW.ETTEPLAN.COM)

# Pioneering Solutions



Tero Hämeenaho and Ilkka Rytönen



# Responsibility and personnel

**Etteplan's responsibility is comprised of financial, social and environmental responsibility. Responsibility is at the core of our operations and part of our day-to-day work as we engineer hundreds of sustainable solutions for our customers every year.**

The base of our responsible operations are our values, Code of Conduct and open stakeholder relations. We are committed to the continuous development of our responsibility, and this marks the second time we are reporting on our responsibility in accordance with the international GRI sustainability reporting framework.

## Responsibility highlights and development areas in 2018

### Highlights

- Strong financial result – another year of improved revenue and operating profit.
- The EtteCoach coaching program continued with more than 50 participants. The Leadership Impact training continued.
- We hired 794 new employees.
- For the second time, we are reporting on our responsibility based on the Global Reporting Initiative (GRI), the world's most widely used framework for reporting on corporate responsibility.

### Development areas

- Actions supporting the achievement of strategic and financial targets.
- The development of employee experience through various development programs.
- The development of internal labor market and career opportunities.
- Developing eco-efficient solutions in customer projects.





## CASE: AM TRAINING

# With training we created an expert network for additive manufacturing

An enthusiastic group of Etteplan employees took a deep dive into the world of additive manufacturing early in the year 2018 when Etteplan organized a 10-day training program on the subject. The employees selected for the training represented different fields of technology and several of Etteplan's operating countries. During the program, leading experts in additive manufacturing taught the participants and gave them the opportunity to apply their new knowledge and skills in group assignments.

According to **Riku Riikonen**, Senior Vice President of Engineering Services, the goal was to provide interested employees with unique learning opportunities and to increase the understanding of additive manufacturing among Etteplan employees. This is a goal worth investing in, as additive manufacturing is revolutionizing traditional product engineering:

"The training program provides us with a larger group of people, representing various educational backgrounds, who can work on additive manufacturing projects. It also enabled us to create an internal network that can distribute information throughout Etteplan," says Riikonen.

The lessons learned from the training program are highly likely to be put to good use in the near future, as customer demand is growing and the company has several development and sales projects underway in this area. One of the participants, **Anna Ofenhed**, thought the training program was a good introduction to the subject.

"The training provided us with tools and plenty of inspiration for further independent study," she says. "We are currently also working on additive manufacturing handbooks for our colleagues to use."

# Expertise is continuous learning



»» [READ MORE WWW.ETTEPLAN.COM](http://WWW.ETTEPLAN.COM)

Johannes Karjalainen, Erin Komi, Iikka Rytönen,  
Jani Renvall, Pasi Moilanen and Tuomas Tervo



## Financial responsibility

### We pay taxes in the countries we operate in

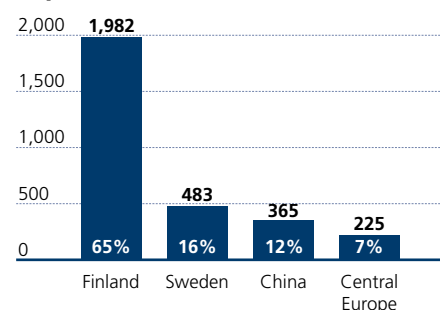
Etteplan's operations have significant economic impacts on many different stakeholders arising from the taxes, wages, dividends and financial expenses that we pay. Etteplan has achieved strong financial results for several years, and the Group's revenue and operating profit continued to grow in 2018. Revenue increased by 10.1% to EUR 236.5 (214.8) million. Our operating profit was EUR 20.2 (15.5) million. We pay taxes on our profits in all of the countries that we operate in.

### Economic value creation:

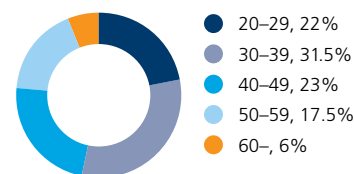
EUR 1,000	2018	2017	2016
Direct taxes	4,364	3,200	2,266
Wages and salaries	156,183	144,965	129,172
Dividends	7,489 <sup>*)</sup>	5,684	3,930
Financial expenses	1,580	1,277	1,245

<sup>\*)</sup> The Board of Directors' dividend proposal, maximum

### Geographical distribution and number of personnel at the end of 2018



### Age distribution 2018



## Responsibility for personnel

### 3,055 highly competent professionals

The number of personnel at Etteplan grew to exceed 3,000 in 2018 as a result of recruitment and acquisitions. At the end of the year, Etteplan had 3,055 (2,802) employees, an increase of 253 from the previous year. Of the Group's personnel, 65% work in Finland, 16% in Sweden, 12% in China and 7% in Central Europe. The majority, or 59%, of the new employees were recruited in Finland. Collective labor agreements cover 100% of the personnel in Finland and Sweden. The Group's personnel in other countries of operation are not covered by collective agreements.

### Human resource management at Etteplan

Personnel and leadership development, providing career opportunities and treating employees equally are at the core of Etteplan's human resource man-

agement. Etteplan's Code of Conduct is the foundation of the company's human resource management. At Etteplan, we are committed to treating our employees equally and promoting non-discrimination in accordance with our equality and diversity plan. Our remuneration policy is based on fair wages, benefits and incentives.

Human resource management at Etteplan is led by the Senior Vice President of HR, assisted by a global HR team. Etteplan has works councils in all of its operating countries to deal with personnel-related matters locally. As the use of local agreements increases, the works councils play a central and active role.

In the expert service business, personnel risks include the availability of labor and the required competencies, as well as attrition. Personnel risks are discussed in more detail on pages 64-67 of Etteplan's Financial Review 2018.

## Personnel and leadership development

Etteplan's business operations, growth and success are based on the expertise of our personnel. We develop the competence capital of our employees based on needs identified by the company and its employees as well as customer needs. Along with developing technical competencies, it is equally important to develop leadership skills. In addition to training, ongoing learning on the job plays a key role in ensuring our employees' continuously improving ability to solve our customers' problems, offer new and innovative solutions and find new ways to resolve technical challenges.

The EtteCoach training program for supervisors continued in 2018. A total of 57 people participated in the training. Etteplan Leadership Impact training for directors and regional managers was also organized in 2018 after a break. The development of employees in managerial roles is measured annually by means of feedback received from the personnel.

The career path model is at the core of monitoring the professional development of Etteplan's employees. The aim of the model is to make career possibilities and their requirements visible to the personnel. For supervisors, the model offers a tool for career planning, systematic personnel development, the planning of personnel structure and the specification of recruitment needs.

Our expertise management system comprises 700 different expertise areas. Our career path model includes four

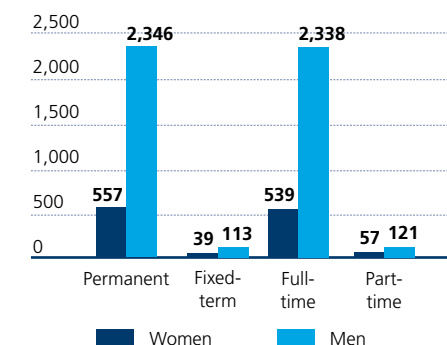
career paths: Technology Leadership, Business and People Leadership, Project Leadership and Technical Communicator. Each career path contains 5-7 different levels of tasks, which are divided into local-, country-, and Group-level tasks. The task of each and every Etteplan employee is contained in the career path model. Each employee's position in the career path model and the related career opportunities are assessed annually as part of the employee development discussion. In 2018, some 97% (94%) of Etteplan's personnel participated in development discussions.

Providing internal career opportunities to our personnel is one of the guiding principles of our operations. The number of vacancies increased in 2018 and an open application process was also available internally for all of them. As Etteplan's business has expanded, the use of internal job rotation has increased. The large scale of Etteplan's operations provides good opportunities for working in various project teams that serve the world's leading machinery and equipment manufacturers.

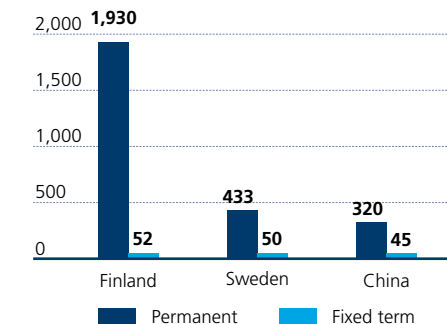
### Managing well-being

We measure job satisfaction by an annual personnel survey. The survey results showed a continued positive trend in 2018, with improved scores for almost every indicator compared to the previous year. The results improved particularly with respect to the work environment, the organization of work as well as the organization's atmosphere, for which the score increased to exceed the industry

### Number of employees by gender 2018

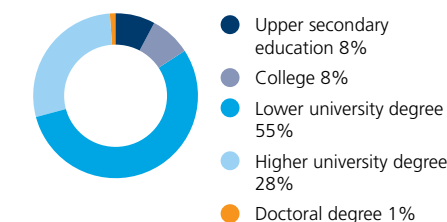


### Number of employees by region 2018



Figures of employees in Central Europe are not disclosed due to the small amount of employees in the region.

### Educational background 2018





reference value. Some 68% of the employees completed the survey (69%).

Etteplan provides general practitioner level occupational health care services for its personnel in Finland. In addition, Etteplan's personnel in Finland belong to an employee benefit fund, which largely covers the use of specialist doctors and medicine. The early intervention model applied in Finland is aimed at earlier identification of the potential loss of work ability as well as planning and implementing individualized measures to support work ability in cooperation with the employee, supervisors, the occupational health care provider, and other experts as necessary. During the year, first-aid training and training on workplace ergonomics was organized for

employees. Sports and cultural activities are supported for the Group's personnel in Finland.

Etteplan monitors workplace accidents, commuting accidents and days of sick leave. The number of days lost to sick leave is low.

Etteplan has an anonymous hotline for employees and external stakeholders to report suspected ethical violations. In 2018, the company was not informed of any incidents of discriminatory treatment of personnel via the reporting hotline or via other channels or sources.

#### New employee hires by age group and gender

Age / Gender	Amount	%
20–29	340	42.8%
30–39	251	31.5%
40–49	129	16.3%
50–59	61	7.7%
60–	13	1.6%
Women	173	21.8%
Men	621	78.2%

#### New employees hires by region

Area	Amount	%
Finland	469	59.1%
Sweden	146	18.4%
China	142	17.8%
Central Europe	37	4.7%
Total	794	100.0%

#### Age and gender distribution by employee category

Age / Gender	Manager	Employee
20–29	1.5%	23.5%
30–39	27.0%	32.5%
40–49	40.0%	22.0%
50–59	25.5%	17.0%
60–	6.0%	5.0%
Women	17.0%	20.0%
Men	83.0%	80.0%

The composition of Etteplan's Board of Directors and Management Group can be found in Financial Review 2018's page 68–69.

#### Accidents<sup>\*)</sup>, Finland and Sweden

	2018	2017	2016
Number of accidents that caused at least one day of absence	6	5	8
Total days of absence	223	174	87
Lost workday injury frequency, LWIF (per million hours worked)	1.53	1.39	2.5

<sup>\*)</sup> Includes both workplace and commuting accidents.

## Environmental responsibility

The goals of the activities under Etteplan's environmental policy include among other things minimizing the environmental impacts of the company's operations, training personnel to recognize the environmental aspects of their work and helping partners observe responsibility in environmental matters. The environmental responsibility of the entire Etteplan Group is guided by the company's Code of Conduct.

At 28 of Etteplan's 33 offices in Finland, the day-to-day work of envi-

ronmental management is based on the requirements specified in the ISO 14001 environmental standard. Six of Etteplan's 14 Swedish offices and both offices in Poland are also ISO 14001 certified.

In Finland, Etteplan's environmental efforts are also guided by the Energy Efficiency Act and the energy reviews stipulated by it. Based on the energy reviews, suitable energy conservation measures are determined for each site. Energy reviews are carried out in three-year intervals.

As an expert organization, the direct

environmental impacts of Etteplan's own operations are moderate. In addition to the electricity consumption of Etteplan's offices, the environmental impacts arise primarily from travel, which has been significantly reduced thanks to electronic meeting technology.

#### Targets 2018

Etteplan sets targets for its environmental efforts in accordance with the ISO 14001 standard. The targets and results for 2018 are presented in the table below.

TARGET	COUNTRY	MEASURES TAKEN AND RESULTS ACHIEVED
Increasing environmental awareness	Finland, Sweden, Poland	Environmental topics have been covered in internal audits and communication channels.
Reducing electricity/energy consumption at offices by -3% compared to 2017	Finland, Sweden, Poland	The electricity consumption of the Group's 10 largest offices in terms of electricity consumption increased by 3%. The higher consumption was due to factors including increase in the number of personnel and the high use of work spaces and equipment.
Reducing the CO <sub>2</sub> level (g/km) of leased vehicles by -2 g/km compared to 2017	Finland, Sweden	Finland -2.6 g/km and Sweden +2.5 g/km. The CO <sub>2</sub> level of the Group's leased vehicles in Sweden is already so low that the majority of the new cars added to the fleet annually would have to be electric cars for the CO <sub>2</sub> level not to increase.

#### Certifications of Etteplan offices by country

COUNTRY	OFFICES	ISO 9001 AND 14001 CERTIFIED OFFICES
Finland	33 (2017: 31)	28 (2017: 28)
Sweden	14 (13)	6 (6)
Poland	2 (3)	2 (2)
Germany	2 (2)	2 (2) ISO 9001 certified



## Corporate responsibility in work with customers

Responsibility is a prominent aspect of Etteplan's business. Our engineering services help customers create environmentally friendly solutions that affect the product's entire life cycle.

### Sustainable development in engineering

Etteplan's business has a strong foundation in the principles of sustainable development. Each year, we engineer hundreds of solutions for the world's leading machinery and equipment suppliers. They help our customers create solutions that are eco-efficient with respect

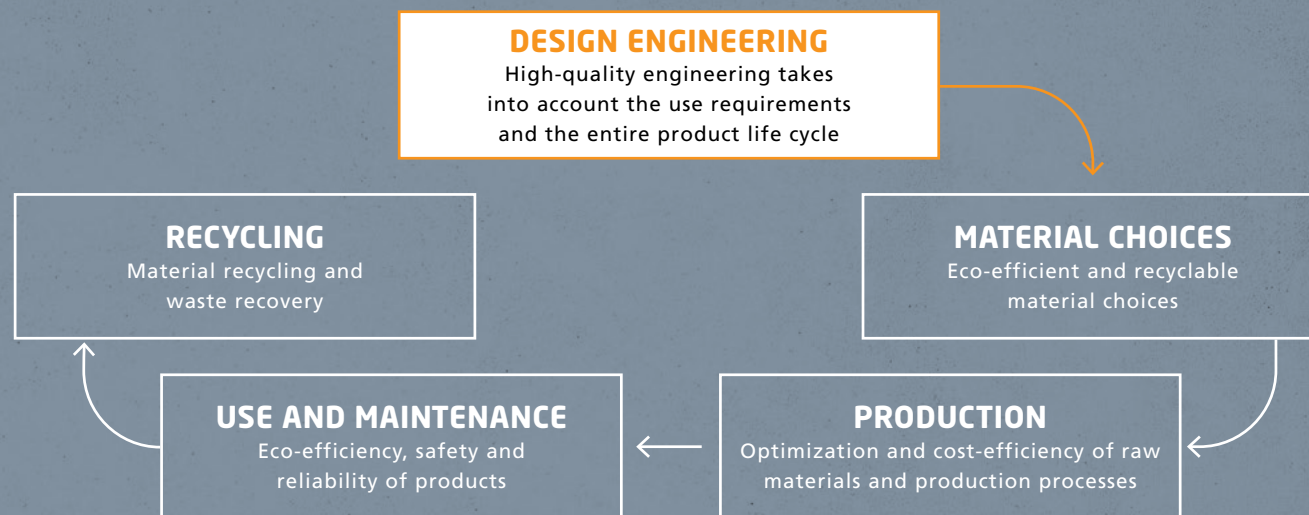
to their manufacturability, usability and recyclability. We develop environmentally friendly technologies and cleantech products, and contribute to the energy efficiency of customers' equipment, machinery and production facilities. Engineering affects the product's full life cycle: from raw materials to production, product use and recycling or disposal.

### Product safety through engineering

We help our customers overcome engineering challenges related to operational safety and safety-critical products,

equipment and software engineering and the engineering of safe working methods, assembly and installation stages. Etteplan's expertise covers all stages of the product, machine or system life cycle, from specifications and engineering to manufacturing, installation, operation, servicing, maintenance, modernization and decommissioning.

### Engineering affects the whole life cycle of a product



## Open stakeholder engagement

In its operations, Etteplan strives for open dialogue with all of its stakeholders. Etteplan takes its stakeholders' views and expectations into consideration and aims to respond to them in the best possible manner.

STAKEHOLDER	HIGHLIGHTED ISSUES	ETTEPLAN'S RESPONSE	COMMUNICATION CHANNELS
<b>Employees</b>	<ul style="list-style-type: none"> <li>The employment relationship and terms of employment</li> <li>Competence development</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with laws, regulations, ethical principles, policies, principles and instructions</li> <li>Continuous development of human resource management</li> <li>Development discussions and personnel surveys</li> <li>Training and internal communication</li> </ul>	<ul style="list-style-type: none"> <li>Managerial communication</li> <li>Meetings and events</li> <li>Intranet and social media</li> <li>Other communication, e-mail</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>Service offering and expertise</li> <li>Service availability and cost-efficiency</li> <li>Service quality</li> </ul>	<ul style="list-style-type: none"> <li>Continuous development of the service offering</li> <li>Quality assurance internally and by external auditing</li> <li>Customer surveys</li> <li>Communication</li> </ul>	<ul style="list-style-type: none"> <li>Meetings and events</li> <li>Website</li> <li>Social media</li> <li>Media</li> <li>Other communication, e-newsletters</li> </ul>
<b>Partners</b>	<ul style="list-style-type: none"> <li>Issues related to cooperation and the terms of cooperation</li> <li>Equal treatment of partners</li> </ul>	<ul style="list-style-type: none"> <li>Adherence to agreements</li> <li>Communication</li> </ul>	<ul style="list-style-type: none"> <li>Meetings and negotiations</li> <li>Audits</li> <li>Website</li> </ul>
<b>Shareholders and investors</b>	<ul style="list-style-type: none"> <li>Financial performance</li> <li>Responsible operations</li> </ul>	<ul style="list-style-type: none"> <li>Adherence to stated objectives and strategy</li> <li>Code of Conduct</li> <li>Investor relations</li> </ul>	<ul style="list-style-type: none"> <li>Board meetings</li> <li>General Meeting and other meetings</li> <li>Website</li> <li>Reports and other communication, social media</li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>Active provision of information</li> <li>Responding to inquiries quickly and truthfully</li> </ul>	<ul style="list-style-type: none"> <li>Website</li> <li>Social media</li> <li>Other communication</li> </ul>	<ul style="list-style-type: none"> <li>Website</li> <li>Social media</li> <li>E-mail</li> <li>Other communication</li> </ul>
<b>Students</b>	<ul style="list-style-type: none"> <li>Trainee opportunities</li> <li>Future jobs</li> </ul>	<ul style="list-style-type: none"> <li>Cooperation with universities and universities of applied sciences</li> <li>Providing trainee positions</li> <li>Communication</li> </ul>	<ul style="list-style-type: none"> <li>Events</li> <li>Website</li> <li>Social media</li> <li>Other communication</li> </ul>
<b>Universities and universities of applied sciences</b>	<ul style="list-style-type: none"> <li>Cooperation</li> <li>Sharing knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Joint projects and trainee positions</li> <li>Reports</li> <li>Lectures</li> <li>Communication</li> </ul>	<ul style="list-style-type: none"> <li>Joint projects and working groups</li> <li>Website</li> <li>E-mail</li> </ul>
<b>Industry organizations</b>	<ul style="list-style-type: none"> <li>Active participation</li> <li>Sharing knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Etteplan's representation in various working groups</li> <li>Communication</li> </ul>	<ul style="list-style-type: none"> <li>Working groups</li> <li>Other communication</li> <li>Website</li> </ul>
<b>The authorities and other parties that guide operations</b>	<ul style="list-style-type: none"> <li>Compliance with laws, regulations, guidelines and ethical guidelines</li> <li>Adherence to quality systems and reporting systems</li> <li>Communication</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with laws, regulations, guidelines and ethical guidelines</li> <li>Communication</li> </ul>	<ul style="list-style-type: none"> <li>Meetings</li> <li>Website</li> </ul>
<b>Decision-makers</b>	<ul style="list-style-type: none"> <li>Obtaining information</li> <li>Opportunities to exercise influence</li> </ul>	<ul style="list-style-type: none"> <li>Website</li> <li>Other communication</li> </ul>	<ul style="list-style-type: none"> <li>Meetings</li> <li>Website</li> </ul>
<b>Non-governmental organizations</b>	<ul style="list-style-type: none"> <li>Responsibility throughout the supply chain</li> <li>Transparency</li> <li>Sharing knowledge</li> </ul>	<ul style="list-style-type: none"> <li>Code of Conduct</li> <li>Audits</li> <li>Responding to inquiries</li> <li>Other communication</li> </ul>	<ul style="list-style-type: none"> <li>Meetings</li> <li>Website</li> </ul>



## Values and Code of Conduct

Etteplan's business operations are guided by the company's Code of Conduct. The Code of Conduct presents the company's values and business principles to all stakeholders and guides our employees in day-to-day business. It applies to all Etteplan companies, and all employees are obligated to comply with it. Etteplan also encourages the suppliers and other partners within its sphere of influence to

adopt the principles documented in the Code of Conduct. The Code of Conduct includes instructions related to ethics and law, quality and the environment, the working environment as well as equality and diversity.

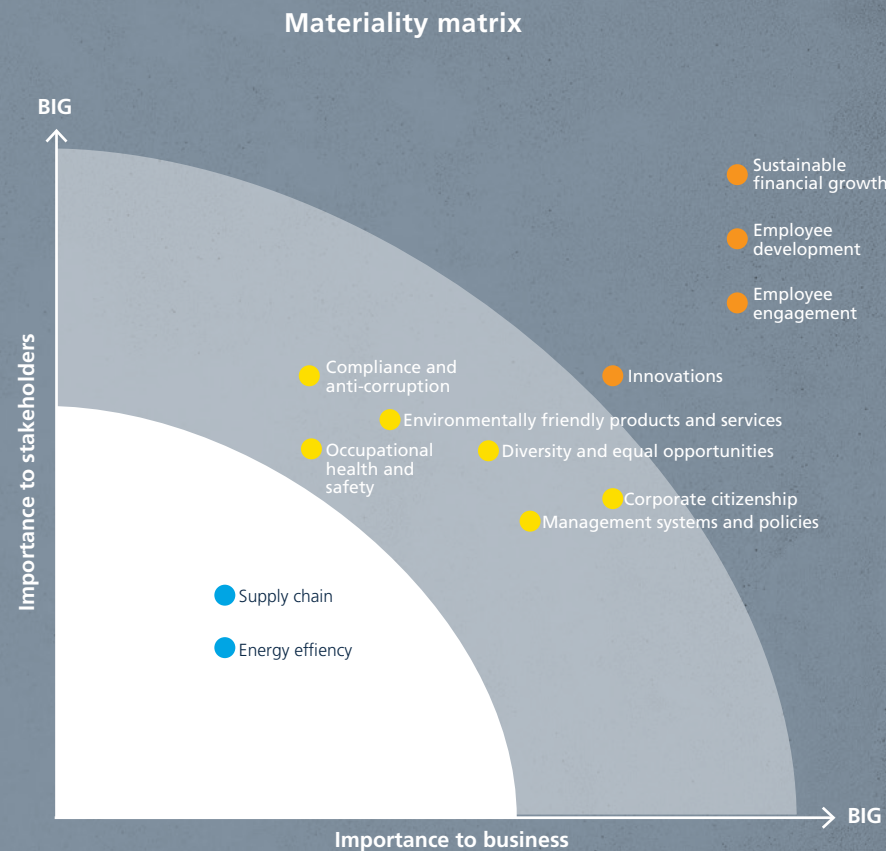
Etteplan has an anonymous hotline for employees and external stakeholders to report suspected ethical violations. No violations were reported via the channel

in 2018. Etteplan had no legal violations during the year.

More information on our ethical operating principles is provided on our website in the section [About Etteplan / Corporate Responsibility](#).

## Material topics of responsibility

Etteplan determined the material topics of its corporate responsibility in 2015 by interviewing key external stakeholders and the company's own personnel. The management validated the results of the interviews to create the company's materiality matrix for responsibility, with the key topics being financial growth as well as personnel development and commitment. Etteplan's corporate responsibility is led by the Senior Vice President of Communications and Marketing, who is also a member of the Management Group.



## Corporate responsibility reporting principles

Etteplan is reporting for the second time on its corporate responsibility using the Global Reporting Initiative (GRI) reporting framework. The report contains basic information on the GRI Standards. The reporting period is January 1–December

31, 2018. The 2017 report was published on March 13, 2018. We report on our corporate responsibility annually. The company's reporting is based on a materiality analysis on responsibility conducted in 2015.

For more information on Etteplan's responsibility, please contact SVP, Communications and Marketing, Outi Torniainen tel. +358 10 307 3302.

## GRI Corporate Responsibility Index

GRI STANDARDS CODE	CONTENTS	LOCATION	
		FSR= Financial statement release FR= Financial review CGS= Corporate governance statement	COMMENTS
<b>GRI 102: General Disclosures</b>			
<b>Organizational profile</b>			
102-1	Name of the organization	p. 2, 4	
102-2	Activities, brands, products, and services	pp. 4–5	
102-3	Location of headquarters	Back cover	
102-4	Location of operations	pp. 2-3	Finland, Sweden, Netherlands, Germany, Poland, China and United States
102-5	Ownership and legal form	p. 4, FR pp. 55–57	
102-6	Markets served	pp. 2–5	
102-7	Scale of the organization	pp. 2–3, FR p. 5, 8, pp. 10–11	
102-8	Information on employees and other workers	pp. 26–27	No significant portion of the organization's activities is performed by workers who are not employees. No significant seasonal variations in employee numbers. Information derived from HR system Sympa.
102-9	Supply chain	GRI index	Etteplan is an expert organization, which acts as a supplier to industry. Etteplan's own material purchases are minimal.
102-10	Significant changes to the organization and its supply chain	p. 16	No significant changes in the share capital structure or supply chain. An organizational change came in to effect 1st of January 2019.
102-11	Precautionary Principle or approach	FR pp. 64–67	
102-12	External initiatives	p. 29	
102-13	Membership of associations	GRI index	Member in the Federation of Finnish Technology Industries and the Swedish Federation of Consulting Engineers and Architects and SVEAT.
<b>Strategy</b>			
102-14	Statement from senior decision-maker	pp. 10–11	
102-15	Key impacts, risks, and opportunities	pp. 23–30, FR pp. 64–67	
<b>Ethics and integrity</b>			
102-16	Values, principles, standards, and norms of behavior	p. 17, 32	
102-17	Mechanisms for advice and concerns about ethics	p. 28, 32	<a href="https://www.etteplan.com/contact/hotline-feedback-channel">https://www.etteplan.com/contact/hotline-feedback-channel</a>



GRI STANDARDS CODE	CONTENTS	LOCATION		COMMENTS
		FSR= Financial statement release	FR= Financial review	
CGS= Corporate governance statement				
<b>Governance structure</b>				
102-18	Governance structure	CG p. 2,5		
102-20	Executive-level responsibility for economic, environmental, and social topics	CG p. 8		
102-22	Composition of the highest governance body and its committees	CG pp. 4–5		
102-23	Chair of the highest governance body	CG p. 5		
102-24	Nominating and selecting the highest governance body	CG p. 4		Reported partly.
102-26	Role of highest governance body in setting purpose, values, and strategy	CG p. 3		
102-28	Evaluating the highest governance body's performance	CG p. 4		Reported partly.
102-30	Effectiveness of risk management processes	CG pp. 7–8		
102-31	Review of economic, environmental, and social topics	CG pp. 7–8		
102-32	Highest governance body's role in sustainability reporting	GRI Index		CEO approves the responsibility section.
102-33	Communicating critical concerns	p. 28		
102-35	Remuneration policies	Remuneration report		Reported partly.
102-36	Remuneration policies	Remuneration report		
102-37	Stakeholders' involvement in remuneration	Remuneration report		Reported partly.
<b>Stakeholder engagement</b>				
102-40	List of stakeholder groups	p. 31		
102-41	Collective bargaining agreements	GRI Index		Finland and Sweden 100%. China, Netherlands, Poland and Germany 0%.
102-42	Identifying and selecting stakeholders	GRI Index		Etteplan's stakeholders are groups on which Etteplan's operations have impact and who have impact on Etteplan.
102-43	Approach to stakeholder engagement	p. 31		
102-44	Key topics and concerns raised	p. 31		
<b>Reporting practice</b>				
102-45	Entities included in the consolidated financial statements	p. 32, FR p. 41		
102-46	Defining report content and topic boundaries	p. 32		
102-47	List of material topics	p. 32		
102-48	Restatements of information	GRI Index		No significant changes.
102-49	Changes in reporting	GRI Index		No significant changes.
102-50	Reporting period	p. 33		
102-51	Date of most recent report	p. 33		
102-52	Reporting cycle	p. 33		
102-53	Contact point for questions regarding the report	GRI Index		Outi Tornainen, Senior Vice President, Communications and Marketing, <a href="mailto:outi.tornainen@etteplan.com">outi.tornainen@etteplan.com</a>
102-54	Claims of reporting in accordance with the GRI Standards	p. 33		
102-55	GRI content index	pp. 33–35		
102-56	External assurance	GRI Index		The report has not been externally assured.

GRI STANDARDS CODE	CONTENTS	LOCATION		COMMENTS
		FSR= Financial statement release	FR= Financial review	
CGS= Corporate governance statement				
<b>GRI 103: Management approach</b>				
103-1	Explanation of the material topic and its Boundary	GRI Index		Etteplan's all operating countries, unless otherwise stated.
103-2	The management approach and its components	pp. 26–31		Reported partly.
103-3	Evaluation of the management approach	pp. 26–31		Reported partly.
<b>Economic Standards</b>				
<b>GRI 201: Economic performance</b>				
201-1	Direct economic value generated and distributed	FR p. 5, 10, 29–30, 43		i. Value created, revenue EUR 236.5 million; ii. Value distributed: material and services EUR 21.8 million; other operating expenses EUR 33.7 million; staff expenses EUR 156.2 million; financial expenses EUR 1.58 million; direct taxes EUR 4.4 million.
<b>GRI 205: Anti-corruption</b>				
205-3	Confirmed incidents of corruption and actions taken	GRI Index		No cases in 2018.
<b>Environmental Standards</b>				
<b>GRI 302: Energy</b>				
302-4	Reduction of energy consumption	p. 29		Estimated energy consumption reduction reported. Reported partly.
<b>GRI 307: Environmental compliance</b>				
307-1	Non-compliance with environmental laws and regulations	GRI Index		No cases in 2018.
<b>Social Standards</b>				
<b>GRI 401: Employment</b>				
401-1	New employee hires and employee turnover	p. 28		Employee turnover not reported. Reported partly.
<b>GRI 403: Occupational health and safety</b>				
403-2 (2016)	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	p. 28		Injury rate and number of injuries reported for Finland and Sweden. No occupational diseases, no fatalities. Number of sickness absences is low. Reported partly.
<b>GRI 404: Training and education</b>				
404-2	Programs for upgrading employee skills and transition assistance programs	pp. 27–28		Programs for upgrading employee skills reported. Reported partly.
404-3	Percentage of employees receiving regular performance and career development reviews	pp. 27–28		
<b>GRI 405: Diversity and equal opportunity</b>				
405-1	Diversity of governance bodies and employees	p. 28		Reported partly.
<b>GRI 406: Non-discrimination</b>				
406-1	Incidents of discrimination and corrective actions taken	p. 28, GRI Index		No cases in 2018.
<b>GRI 419: Socioeconomic compliance</b>				
419-1	Non-compliance with laws and regulations in the social and economic area	p. 28, GRI Index		No cases in 2018.



## CASE: MICRO:BIT

# Etteplan is spreading the good word of programming to Finnish schools

Since 2016, Etteplan, together with other partners, has been bringing the Micro:bit pilot project to Finnish primary and secondary schools. Originally designed by the British public service broadcaster BBC, Micro:bit is a project that takes programming education to schools in an easy and fun way by using a small single-board computer. The Micro:bit programming card, which is the size of a credit card, has embedded features such as a LED display, compass and accelerometer, which the students can program on a computer or tablet according to their own skill level. The device can be used for creating games or utilized in a variety of self-made applications and inventions.

Since the fall of 2016, programming has been a part of the Finnish comprehensive education plan, and supplementary education for teachers plays a key role. So far, 100 teachers from 50 schools across Finland have worked with Micro:bit pilot, and the use of Micro:bit has spread even wider.

One of them is **Jens Lindholm**, who teaches class 4b of the Swedish-language Bosund school in Ostrobothnia. He and his students are currently using Micro:bit to create a robotic car that can move forwards, backwards and sideways according to a person's movements. Jens sums up the benefits of teaching programming to children as follows: "Programming in itself may not teach the students a lot. However, it gives them an understanding of the society that we live in. Everything around us is programmed, from phones, traffic lights and automatic doors to cars that can detect how far apart they are from each other. Through programming, we're able to explain these things a little better."

According to Jaakko Ala-Paavola, Technology Director at Etteplan, it is important for Etteplan to be a part of promoting programming education in Finland. "The future will increasingly be built around technology. It is important to already take an interest in technology at school and for children to have the opportunity to grow into it early on", he says.

» READ MORE [WWW.ETTEPLAN.COM](http://WWW.ETTEPLAN.COM)

# Programming helps children understand everyday technology



Pictured are students from class 4b of the Bosund school and their teacher Jens Lindholm.



## Management Group as of December 31, 2018



The current information of the members of the Management Group can be found on our website:  
<https://www.etteplan.com/about-us/board-directors-management>

## Etteplan as an investment

- 1** Our ambition is to drive the industrial change, grow and explore together with our customers, wherever they need us. Read our story on the inner front cover.
- 2** Etteplan renewed its organization and structure to boost growth. Read more from the CEO's review on page 10.
- 3** How did we perform against our strategic and financial targets in 2018? Find out on page 18.
- 4** Etteplan's Board of Directors proposes a dividend of EUR 0.30 per share or 48% of earning per share. Read more in Financial Review.



# Investor information

## Important dates



## Investor relations contacts

**Juha Näkki** President and CEO, tel. +358 10 307 2077

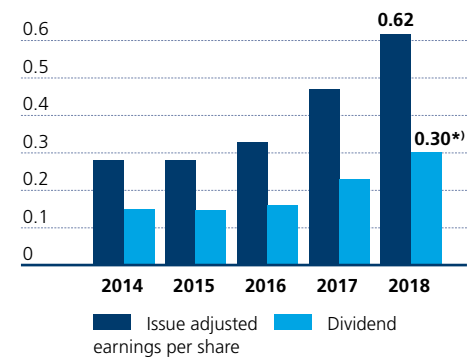
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**Per-Anders Gådin** CFO, tel. +46 70 399 7929

Etteplan's Financial Review 2018 is available at [www.etteplan.com](http://www.etteplan.com).

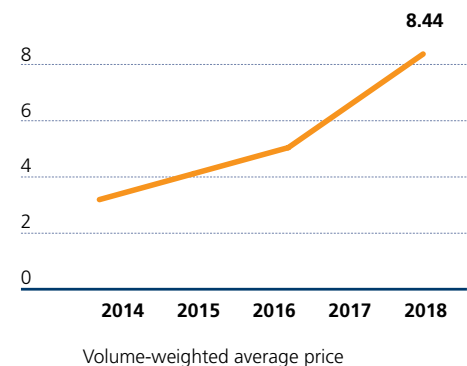
There, you can also find other up-to-date financial information, such as interim reports, half-year financial reports, notifications, and webcasts regarding published profits.

## Earnings per share and dividend



<sup>\*)</sup> Board's dividend proposal  
Rights issue factor 1.050

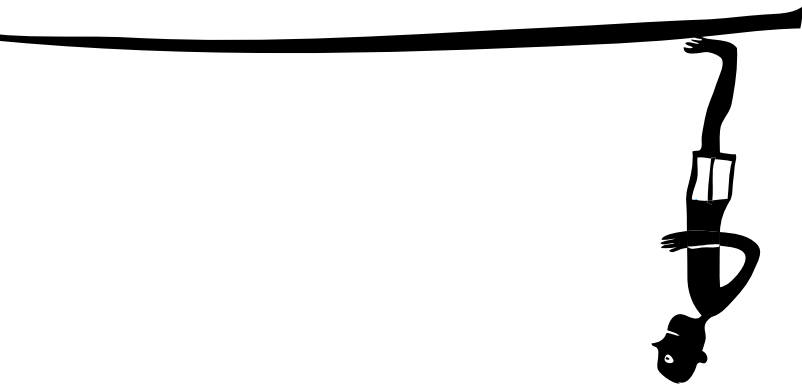
## Share price development 2014–2018



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# Engineering with a difference.



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