Loudspring

Company Report

8/2018

inderes.

Creating value through saving resources

Loudspring's creation of shareholder value is based on supporting the business of core holdings and allocating its available capital efficiently. Loudspring's holdings include interesting early-stage companies, most of them non-listed, that focus on improving resource efficiency. In relation to the value we have determined for the holdings portfolio (sum of parts) and the premium we accept for Loudspring, the share price is undervalued. The starting points for our coverage of Loudspring are recommendation buy and target price of EUR 1,05.

Loudspring aims to become a global resource-saving group

Loudspring is a group that has holdings in 12 early-stage companies, of which seven are core holdings and five are included in the venture portfolio. According to the current strategy, the holdings focus on the improvement of resource efficiency in five industrial sectors (real estate, fashion, food, energy and water). In its core holdings, Loudspring can act as a minority shareholder, however, in select companies, its goal is to increase the holding all the way up to 100% and develop the companies like an industrial owner. The efforts to increase holdings are focused on capital light, easily scalable and high impact business. In our view, Loudspring's holdings continuously gain momentum from the megatrend of resource efficiency.

Significant hidden potential in holdings

In general, the business of the core holdings has progressed to a point where their technology, as well as the customer value of the products or services they offer, has been validated. Most of the core holdings have also found a business model that works, which can be used to scale the business upward in a profitable manner. Loudspring supports its holdings in internationalization, finding and securing financing, and improving credibility. Many core holdings are currently going through a major period of growth and value creation. Due to the small size of the companies, the lack of income funding and limited capital the business risks are also higher than usual. However, diversification has helped spread and lower the portfolio's risk level.

Valuation is based on the sum of parts

In our view, the valuation of Loudspring is solely based on the value of its holdings (separate valuations) and on Loudspring's ability to create shareholder value. We estimate that the gross value of the holdings is EUR 29.6 million. Loudspring's most valuable holdings are Eagle Filters (EUR 7.0 million), Nocart (EUR 6.6 million), Nuuka Solutions (EUR 5.4 million), Enersize (EUR 3.9 million), and ResQ Club (EUR 1.9 million). Taking into consideration our estimates of group costs, the net value of the sum of parts is EUR 23.6 million or EUR 0.88 per share. In our opinion, Loudspring's strong track record and diversified portfolio earn it an investment premium of 20%, and we set the target price per share at EUR 1,05.

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Recommendation and target price

Buy

Previous: -

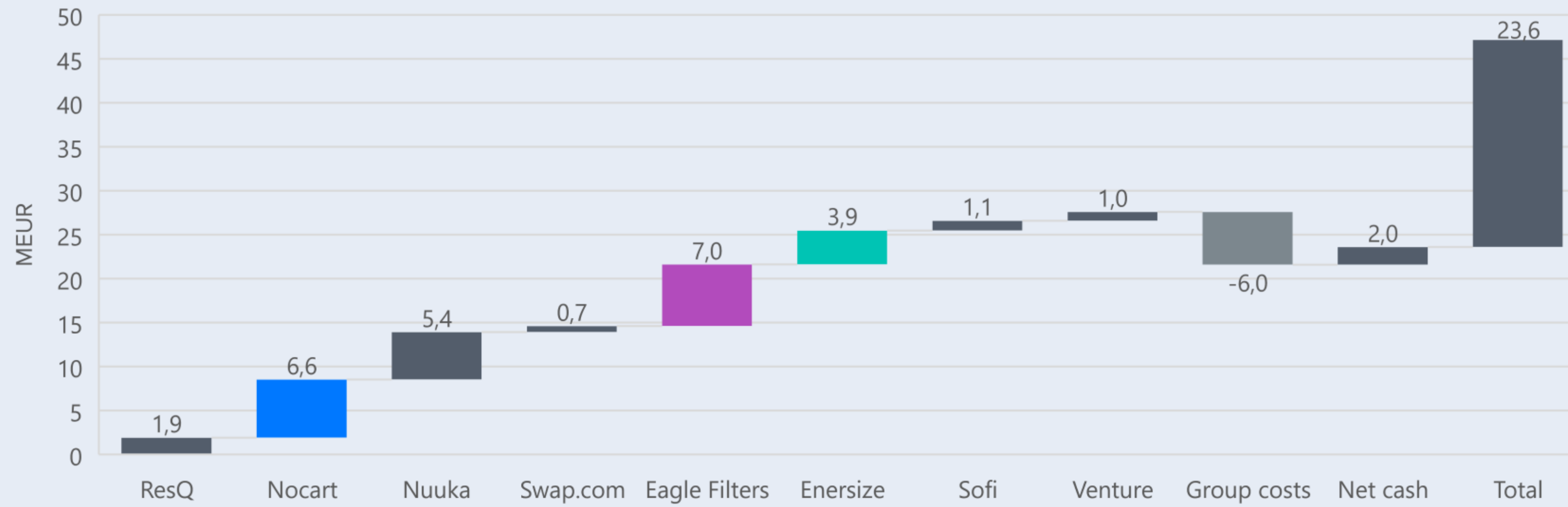
EUR 1,05

Previous: -

Share price: EUR 0.90
Potential: 16,6%

Lähde: Thomson Reuters

Sum of parts calculation



MCAP 23 MEUR

EV 27 MEUR

Equity 22.7 MEUR

P/B 1x 2018e

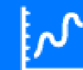
Source: Inderes

Value drivers

- Excellent ability (so far) to allocate capital
- Increasing Loudspring's ownership in scalable and capital light holdings and helping the businesses reach the next level
- Resource efficiency megatrend is beneficial to portfolio companies

Risk factors

- The holding companies are still in the early stage and their value development leans heavily on expectations for the future
- Limited capital



Valuation

- The company is undervalued
- Development of key holdings is the most important value driver for the Loudspring share
- Successful allocation of capital continues to be important
- We see a clear upside if Loudspring and the strategy progress as planned

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Loudspring company description 1/5

Company description and history

Loudspring (formerly Cleantech Invest) is a group that owns and develops resource-saving early-stage companies. Louspring currently holds shares in 12 early-stage companies, of which seven are core holdings and five are included in the venture portfolio. In terms of core holdings, Loudspring's business is characterized by long-term ownership and increasing the value of its holdings, which is typical for a conglomerate. In terms of the venture portfolio, the business is characterized by investment activities, which is typical for a holding company. In the last couple of years, Loudspring's focus has shifted to fostering the growth of its core holdings while the role of investment activities has decreased. Loudspring has also expressed its intent to consolidate its main holdings and become an industrial company which in the future will also have fully-owned core businesses.

Loudspring, which was founded in 2005 by Timo Linnainmaa and Tarja Teppo, first acted as an adviser on cleantech investing. When the current CEO Lassi Noponen came to Loudspring in connection with corporate restructuring in 2010, Loudspring was changed into an investment company. Also at that stage, Loudspring was granted the status of Accelerator under the Vigo Accelerator program of the Ministry of Economic Affairs and Employment of Finland, through which it gained access to many interesting early-stage companies. In 2010, Loudspring raised a private equity fund, Clean Future Fund Ky, in which it acted as a general partner (ownership interest of 36.9%). Loudspring made its first investments through this fund, including already a few of its current holdings. In 2013, the funding rounds of Cleantech Invest raised EUR 3.4 million and Loudspring began to make investments from its balance sheet. Loudspring was listed on First North Helsinki in 2014 and on First North Stockholm in 2016. Loudspring has more than 5,400 shareholders currently.

Group structure

The corporate structure of Loudspring should make a distinction between the parent company and the holdings. The parent company's group costs can be seen as similar than the administrative costs collected by funds, although in Loudspring's case, the costs are relatively larger on account of the way it actively develops the business of its core holdings. At present, the figures of the associated companies are not consolidated to the parent company's profit and loss account. As a result, the parent company's P&L mainly shows the way that the group's costs have developed and possible non-recurring investment income/loss due to exits. Loudspring employs six people, and the parent company's expenditure mainly comprises personnel expenses and costs associated with its global presence.

Holdings

In general, the core holdings' businesses have progressed to a point where their technology, as well as the value of the products or services they offer, has been validated. Core holdings have also for the most part found a well-functioning business model that can be used to scale business upward in a profitable manner. However, in our view, some holdings are still in the process of forming their business model. We estimate that the core holdings represent 97% of Loudspring's value. Loudspring's core holdings include Eagle Filters (67.6%, with an option to raise the share to 80%), Nuuka (47,9%), Nocart (19.3%), Enersize (31.9%), ResQ Club (19.4%), Sofi Filtration (25.2%) and Swap.com (6.6%). The venture portfolio includes Sansox (9.6%), Metgen (2.4%) and Aurelia Turbines (2.3%), and the Swedish companies Watty (3.8%) and Oricane (21.2%). The percentage shares of Loudspring shown in parentheses are diluted holdings.

Loudspring's ownership structure

The current management of Loudspring (CEO Lassi Noponen and CFO Timo Linnainmaa) hold rather significant ownership interests in the firm, around 10% of the shares and 40% of voting rights. For a listed company, this is considered a significant holding. In principle, we find the management's large holding to be positive for shareholders because this puts the management and the shareholders in the same boat. Loudspring's capital stock comprises 19.4 million class A shares (1 vote per share) and 4.6 million class K shares (20 votes per share), in addition to which options have been issued in total for roughly 3.1 million shares. For a listed company, this is a significant amount (a dilution of roughly 10%). However, most of the options were issued before Loudspring was listed (2.4 million shares' worth) and the diluting effect of the options was known by those who invested in the company in the stock market. The terms of the management's options after Loudspring was listed have been strict and their dilutive effect low.

Loudspring company description 2/5

Investment strategy

Loudspring is an investment and development firm that actively develops its holdings and has an investment strategy. Our valuation is based on holdings and, on the other hand, on Loudspring's ability to create shareholder value. The portfolio's value provides a basis for valuation, and we are able to get a perception of Loudspring's ability to create added value by looking at its investment strategy and by assessing the historical development of the holdings.

Strategy and Investor story

Loudspring's strategy and investor story lean heavily on the idea that owning shares in companies that save natural resources is good business. Loudspring believes that the interests of the shareholders and the environment are inseparable and aligned.

Applying diversification to early-stage companies

At the time of listing (2014), Loudspring's story was to offer investors a channel for investing in non-listed companies that focus on sustainable development in a broad range of industrial sectors. The strategy was to acquire early-stage holdings in different associated companies in a diversified manner so that the risk level of the holdings as a whole would remain low while retaining the potential for appreciation.

By applying diversification, Loudspring also aimed to acquire holdings in associated companies that are different from each other in terms of the scalability of business and exposure to risks. The purpose of acquiring holdings in low-risk associated companies was to gain capital protection for the business as a whole, while holdings in associated companies engaged in activities that have higher risks and can be scaled faster were acquired to seek explosive growth and appreciation. The investment strategy has led to the current portfolio in which most of the core holdings' businesses have clearly moved forward and reached the next level.

Focusing holdings in capital light companies

Loudspring has announced its three-year target to become a global corporate group that focuses on saving natural resources. Loudspring's current strategy is to own companies that focus on improving resource efficiency in five industrial sectors (real estate, fashion, food, energy and water). Loudspring can act as a minority shareholder in the associated companies, however, in select companies, its goal is to increase the holding all the way up to 100% and develop the companies like an industrial owner.

The efforts to increase holdings are focused on capital light, easily scalable, high impact businesses. Loudspring has not yet specified what these companies are, but in our opinion, Nuuka, Eagle, Sofi and ResQ are core holdings that fit this description. Loudspring has in fact clearly increased its holdings in Eagle, Nuuka and ResQ during the last 12 months. In our view, from among the core holdings, Swap.com and Nocart cannot currently be deemed capital light companies because a lot of capital is needed to finance their growth. For a long time, Swap.com's upward scaling of business has generated significant losses and, despite Nocart currently being the only company in the portfolio that is making a profit, significant amounts of capital are tied to its working capital due to business growth. When it comes to Enersize, we do not believe that Loudspring is trying to increase its holding, the reason being that it was listed in First North Stockholm last summer. However, this is not completely out of the question as its market value has clearly decreased recently. We estimate that Loudspring's possible future goal may be to try and consolidate its associated companies if there are obvious synergies and if the consolidation can be expected to increase the value of the companies.

Previously, in addition to saving natural resources, Loudspring's strategy was to focus on clean energy. However, Loudspring has given up its holdings in Savo Solar and One1 in the last few years. This was partly due to the businesses of these companies being capital heavy, and partly due to the allocation of Loudspring's resources to more profitable businesses, as estimated by Loudspring's management. Loudspring has announced that it will focus its operations in Helsinki and Stockholm. In addition, it now has a permanent establishment in California.

Loudspring company description 3/5

Aligned with a strong megatrend

As we approach the limits in the use of Earth's natural resources, future economic growth is conditional on improving resource efficiency. The alignment of Loudspring's business with the megatrend of resource efficiency provides it an opportunity to gain momentum moving forward. Loudspring is a unique firm in the sense that the larger the companies in which it has holdings grow, the more natural resources (minerals, renewable resources, clean air and climate, clean water and biodiversity) they save. Loudspring's communications are also heavily based on conveying this message, which in our view is sensible and creates a positive image of the firm. A positive image can contribute to business growth at least through the following factors:

1. Consumers and companies increasingly make their purchasing decisions based on sustainable values.
2. It facilitates successful recruitment.
3. Institutions that want to invest in sustainable targets are more inclined to grant financing (debt/equity) to Loudspring.

Allocation of capital

Throughout the history of Loudspring, its capital has been scarce and creating shareholder value to investors is based on allocating those scarce resources profitably. Loudspring has also stated that it will continue to analyze and implement corporate restructuring and capital arrangements in accordance with the strategy.

Investments in early-stage companies

Loudspring's first investments were directed at very early-stage start-up companies. From the perspective of capital allocation, the added value this kind of investment activity generates is finding and identifying profitable investments as, according to our estimate, the scarcity of financing available to early-stage companies puts Loudspring in a position to negotiate good deals.

We estimate that Loudspring's status as a Vigo Accelerator, granted by the Ministry of Economic Affairs and Employment in late 2009, also gave the firm a good starting point through the Vigo Accelerator program's advantageous investment terms (state's contribution) as well as by giving it access to information on interesting early-stage companies. The program has also clearly profiled Loudspring as an investor that is interested in early-stage companies and who is a co-entrepreneurs, which can also bring in other investors. According to our estimate, Loudspring has over the years become a desirable partner for developers of new technologies and owners of growth companies, which in turn makes it possible to continue investing profitably in start-up companies. At the moment, however, this is not what Loudspring's management focuses on, but it may do so in the future as the core companies mature.

Added value through increasing the ownership in the selected companies

Loudspring's allocation of capital has recently been directed at increasing the share of ownership in certain core holdings. We estimate that Loudspring also often is in a good position in negotiations to buy out external investors, at least for the following reasons:

1. Loudspring's management knows the firm's core holdings well and, compared to external investors, they have a better understanding of the firm's true value.
2. Old investors can pull out of their holdings cost-efficiently if they do not want to invest more money in the firm and the firm's development has been slow for a long time.
3. Loudspring can offer liquidity to the owners of non-listed companies through an exchange of shares.
4. Favorable terms are also available due to a clear increase in the firm's value to all the remaining shareholders as extra financing is obtained.

Exits

During its history, Loudspring has only exited from a few investee companies, most recently from the German company Plugsurfing (3.1%) when Fortum acquired it. The annual return on this investment was 18%. Loudspring also sold a small portion (2.3% decrease in holding) of its shares in Enersize on the stock market during Q3/2017, which yielded very highly at 1030% for a 7-year investment period (invested in 2010). Loudspring has stated that it aims to partly exit from certain companies included in its venture portfolio this year, which is a sign of shifting the focus more towards the core holdings.

Loudspring company description 4/5

Own shares as means of payment and increasing leverage are possible

In 2017, Loudspring raised a significant amount of capital in a directed share issues (around EUR 5 million). We estimate that share issues will be one of the firm's key financing channels also in the future, despite the reduction in share price. Success depends on the management's ability to direct the raised capital in a way that brings added value to shareholders. If the yield is higher than the dilution, the management has succeeded.

Thus far the company has solely used equity in its investing activities. In our view, in the near future (with the core holdings' cash flow becoming positive) Loudspring will have an opportunity to moderately increase leverage finance, and debt financing can be put into efficient use in the allocation of capital.

Offering debt financing to the holdings

Loudspring has offered some debt financing from its balance sheet to the core holdings to support their growth (Enersize), as well as implemented convertible bonds (Nuuka). Depending on the loan terms and the performance of the company in which Loudspring holds shares, this may also be used as a means of creating shareholder value, but we estimate this is not the main purpose of capital allocation and has more to do with supporting core holdings.

Supporting the core holdings

According to Loudspring's estimate, more than 80% of the management's working time is spent on supporting the business of the core holdings. This is a considerably high portion compared to a conventional investment company's management. Meanwhile, these support activities constitute a significant part of Loudspring's creation of shareholder value.

The Loudspring team acts as executives in the majority-owned businesses. The Loudspring team includes Chief Executive Officer Lassi Noponen and Chief Financial Officer Timo Linnainmaa, as well as Chief Investment Officer Antonio Gallizio, who runs Loudspring's operations in the United States. The Loudspring team provides assistance to its holdings especially with regard to international growth. Through its international network, Loudspring has been able to attract new shareholders, customers, key persons and distributors for its portfolio companies. During the last three years, Loudspring has established offices in Los Angeles, Berlin (temporarily) and Stockholm, and it has helped companies enter the Chinese market through its cooperation partners.

Here are examples of how Loudspring supports the growth of its core holdings:

1. By acting as the executive owner of its core holdings, providing guidance to the companies in developing their strategies and business models, and ensuring that the executive management teams in the holding are composed so that they can function properly.
2. By offering financing and/or assisting the companies to secure financing.
3. By offering the core holdings an efficient channel for recruitment and other group services, such as communications and centralized procurement of external services.
4. By expanding the network of contacts of the holdings.
5. Loudspring's status as a listed company also provides its core holdings that are still in the early stage a significant advantage in the form of better credibility when they conduct negotiations for big accounts and partnerships.

Other activities

In California, Loudspring is involved in a product development project aimed at producing a new water filtration system designed for households. It is a completely automated UV water purification system against microorganisms and bacteria. Technology developed by Sofi Filtration is utilized in the product, but it is subcontracted by Loudspring. It is our understanding that local partners will be utilized in distributing the product. We do not expect the product to generate significant income or costs in the near future, but we will consider it an option that can generate value in the future if the product becomes successful.

Loudspring company description 5/5

Source: Inderes

Assessment of the investment strategy 1/2

Loudspringin track-record

The key focus points in analyzing an investment strategy are the development of the value of an investment portfolio and the owners' return on investment. One approach to assessing the value created by a company to its shareholders is to examine the growth of equity. Due to the many share issues implemented by Loudspring during the period under review, the development of the equity per share should be observed to take account of the dilutive effect. In 2013, the firm started making investments from its balance sheet, and we have chosen equity per share at year-end 2013 as the starting point for the firm's track record. Between 2013 and 2017, the annual growth rate of the firm's equity per share was around 40%, which can be considered an excellent achievement (>20% is very good). The firm has not paid dividends or made capital repayments during the period under review.

Loudspring's equity does not reflect the hidden value of investees because the holdings are not measured at fair value on the balance sheet. On the balance sheet, the holdings are recognized in the purchase price or the price of the last external funding round. Based on our sum of parts calculation, the current shareholder value is EUR 0.88 per share. This is little bit higher than the firm's equity (2017: EUR 0.84), and the difference (EUR 0.04 per share), in our view, reflects the hidden value. By using our sum of parts calculation, the annualized total return or compounded annual growth rate (CAGR) for the period between the end of 2013 and June 2018 is around 36%. In our opinion, this figure gives a better picture of creating shareholder value because it takes into account assets that are undervalued in the balance sheet. On the other hand, this figure does reflect the hidden value of the share back in 2013. Uncertainty is also associated with the estimate, and its materialization would require the realization of holdings with the values we have provided. Affected by the negotiation situation, buyer and selling time, the prices that the firm will eventually achieve in the exits will deviate from the values we have provided. A very high total return will, in our view, show that the investment strategy works, although the risks have also been high. In addition, we have briefly examined on the basis of public information how well the different components of total return did.

Assessing the early-stage company investments

In its 2014 listing prospectus, Loudspring published a list of the investments it had made between 2010 and April 2014 in the early-stage companies in which it held shares at that time. Of the firm's current core holdings, Nocart, Nuuka, Enersize, Swap and Sofi were already included in the portfolio at that time. The portfolio also included Aurelia Turbines, MetGen, Sansox and Oricane, which are currently included in the venture portfolio. Other holdings during the period in question included Savo Solar, One1, BT Wood and Lumeron. The graph on the following page shows that the appreciation is based on the appreciation of the (successful) core holdings.

No major changes have occurred in the venture portfolio's holdings, which are still waiting to break through. In our view, other investments not included in the current portfolio can be deemed as unsuccessful. The graph presents a rough overall picture of the firm's successful investments in early-stage companies, because it does not take account of the funding rounds that the companies may have implemented later (any additional investments) or the values derived from exits. As a whole, however, the firm can be deemed as having been very successful in its investments in early-stage companies.

Failing is part of doing business

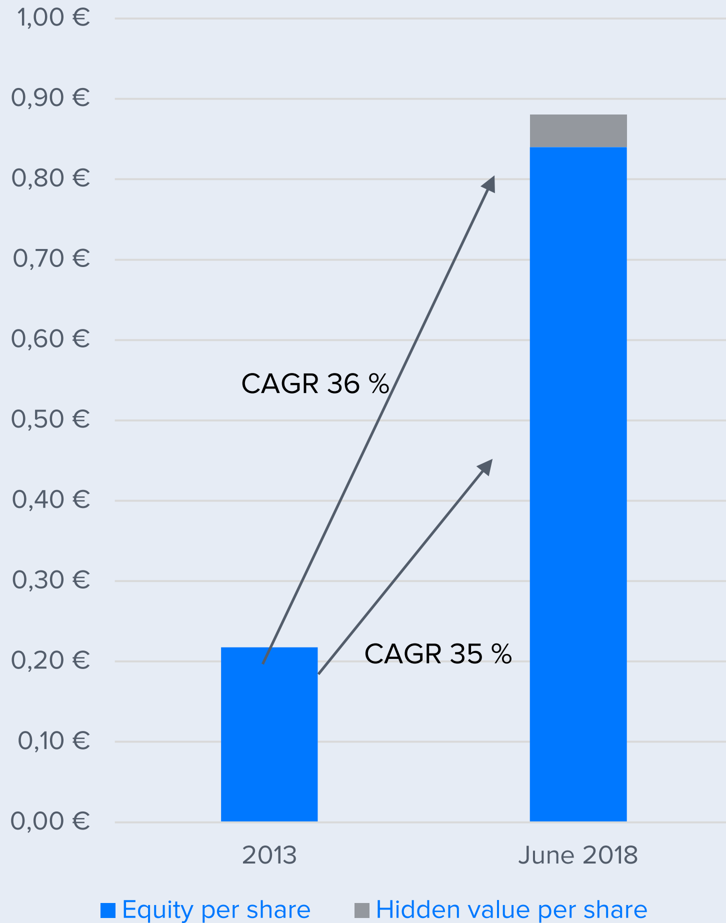
It is typical among early-stage and growth companies that some go bankrupt or end their operations in another way. Loudspring's unsuccessful investments include Enercomp Oy and Ultranat Oy, which both went bankrupt in 2013, and the bankruptcy of BT Wood Oy in 2015. The firm was also forced to write down Savo Solar (part of the investment was recovered when the company was sold) and shares of One1 in its balance sheet, and write-downs were also made to the balance sheet values of Oricane and Lumeron. In our view, the number of failures in relation to successes is low, and Loudspring has succeeded well in selecting companies in their portfolio that have managed to overcome their early-stage challenges. According to our estimate, this is also largely due to the support that Loudspring has provided to the companies.

Assessing the increases in the ownership

In our view, Loudspring has managed to create clear shareholder value through its current strategy, which is aimed at increasing holdings in selected companies. The firm has significantly increased its holdings in Eagle, Nuuka and ResQ in the last twelve months. In October 2017, Nuuka's owners exchanged shares with Loudspring, at which time by using Loudspring's share price (EUR 2.74), the valuation of Nuuka in the transaction was calculated to be EUR 3.5 million. Loudspring also exchanged shares with Eagle in January 2018 based on Loudspring's share price at that time (EUR 2.64), and the valuation of Eagle in the transaction was calculated to be EUR 2.2 million. Our current estimate of the valuation of Nuuka is around EUR 11 million, and the valuation of Eagle around EUR 9 million. Loudspring has not revealed the valuation of ResQ when they increased their stake in the company but we assume that this transaction increased the shareholder value as well.

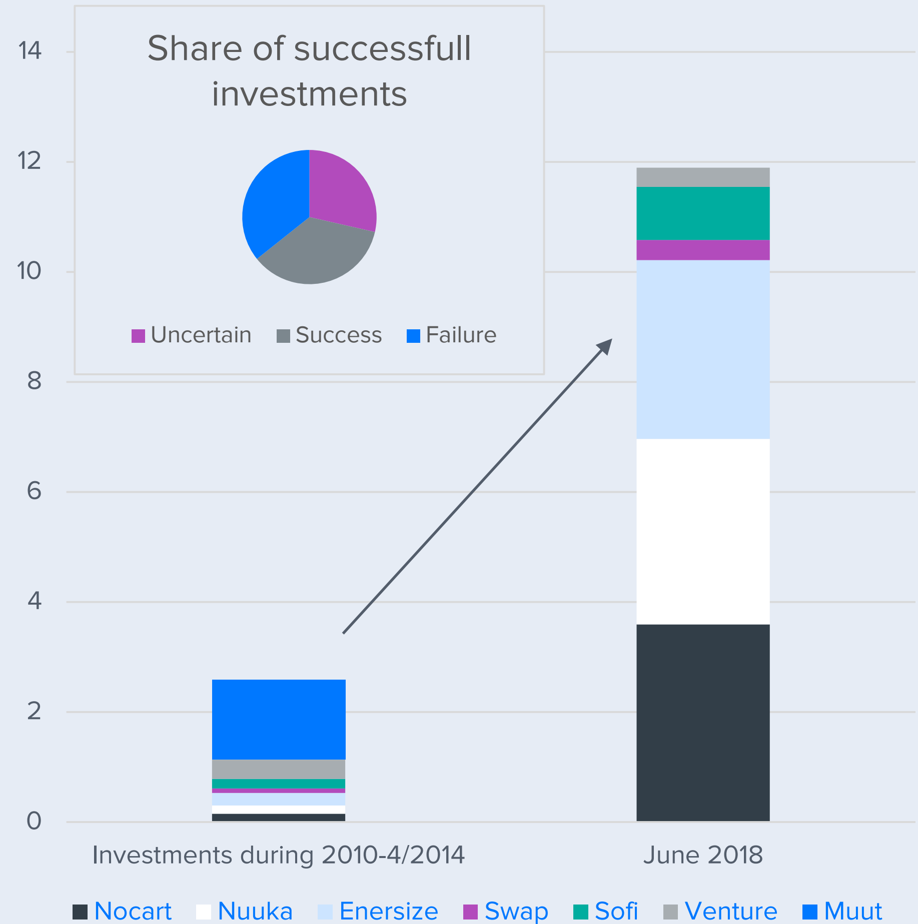
Assessment of the investment strategy 2/2

Return on equity and the hidden value of holdings



Comment: equity per share includes full dilution of options

Appreciation of investments in early-stage companies (MEUR)



Note: Earnings from exits or the invested additional capital to holdings in later funding rounds are not accounted for. (Source: Cleantech Invest 2014 listing prospectus and Inderes)

Eagle Filters 1/3

Company description and history

Eagle Filters is a technology company that designs and manufactures air inlet filters for natural gas power plants. Thanks to the company's filters, the turbine blades stay clean and the customer benefits from higher turbine efficiency, availability and usability. The company's technology enables an extremely short investment repayment period for the power plant operator. We expect an increasing number of power plants to adopt Eagle's product in the coming years, as soon as the product gradually becomes better known among customers. Loudspring's high ownership and good growth outlook makes Eagle one of Loudspring's most interesting holdings.

Eagle Filters that is domiciled in Kotka was founded in 1995. In 2011, it started focusing on gas turbines' air inlet filters because they were found to generate the best value proposition to the customer in the product portfolio at that time. The company's European customers had to pull away from the investments in 2012 when higher emission allowances lowered the running of several power plants. The company entered debt restructuring in 2014 and its equity is still negative in (2017: EUR -0.46 million). In 2015, a dramatic fire occurred at Eagle's factory in Kotka that destroyed 50% of the company's production capacity and 75% of its inventory. Since then, the filter production has been carried out in Estonia and Lithuania based on subcontracting but the filter materials are processed further in Kotka before being transferred to assembly. Design and product development are also still in Kotka.

Loudspring first invested in the company in 2015 and it has slowly increased its holding in the company, most recently in July 2018 to 67.6% (option to raise the share to 80%). Due to Eagle's tight equity position, we believe Loudspring has been able to raise its holding in the company at an extremely favorable price compared to the value of Eagle's technology and its outlook. In the latest funding round, Eagle's valuation was EUR 2.2 million.

High market potential

The share of natural gas in the world's electricity production is almost one-quarter. Gas power plants are clearly cleaner than coal plants (50% lower CO_2 emissions) and they will be needed for a long time due to their good adjustment capability. As the production of irregular solar and wind power increases, the value of adjustment capability grows as the production and consumption of electricity should always be in balance in the electricity grid. Currently, 95% of gas turbines are equipped with filtration defined by the plant manufacturer (OEM), the filtration capacity of which is clearly weaker than that of Eagle's HEPA filters. We believe that OEM operators have no incentive to develop their filters as a filter and turbine that runs longer is taking away from their future sales to the customer. Eagle is now starting to hit this niche market. According to Eagle's estimates, the potential market for natural gas power plant filters is USD 1.65 billion. (When moving to high performance filtration).

High customer retention provides the basis for growth

The world's largest gas power plant operator Engie selected Eagle's technology as the best in tests performed at its subsidiary's New York power plant. Engie's tests also included Eagle's competitors in the US (Gore, Donaldson, AAF). After the test period, all four gas turbines in the power plant have shifted to using Eagle's filters. Engie has some 370 gas turbines globally to which we believe it will be much easier to sell the filters as a result of winning the test. Another important reference for Eagle is the largest electricity producer in Israel, IEC that has installed Eagle's technology in four of its ten largest turbines. We expect these two customers to be the biggest potential for growth in the next few years. Friction in sales work is still caused by the fact that the group's power plants have their own managers that usually make their purchasing decisions independently.

We believe adoption will gradually become easier thanks to impressive references also among new operators. We feel Eagle's most potential markets are located in countries that produce a considerable share of electricity with gas turbines or where the air contains a lot of impurities (e.g. USA, South America, Southeast Asia, South Korea and Israel). There is also a clear need for the company's technology in China due to air impurities but Eagle has not yet been able to break onto this market and we expect that the Chinese market requires its own reference.

Eagle's growth driver is high customer retention as not one power plant has exchanged Eagle's products for something else after adopting them. Eagle has reported that its order book is currently at record level. The company has also recently hired a new sales manager with help from Loudspring, whom we expect will support sales growth considerably already this year.

Eagle Filters 2/3

The company has also established a subsidiary in the United States with the aim to utilize local partners as a distribution channel. Currently, Eagle has eight employees of whom four work with sales.

Products have pricing power

The pricing of the company's products is based on high value added for the customer and we believe that they have high margins. Our estimate is that the price of one filter is about 5 times that of an OEM filter but the life-cycle cost of the more expensive spare part is clearly lower for the customer. The precise repayment period depends on regionally varying prices of electricity and natural gas, air impurity and the typical annual run time of the turbine.

Product portfolio and production

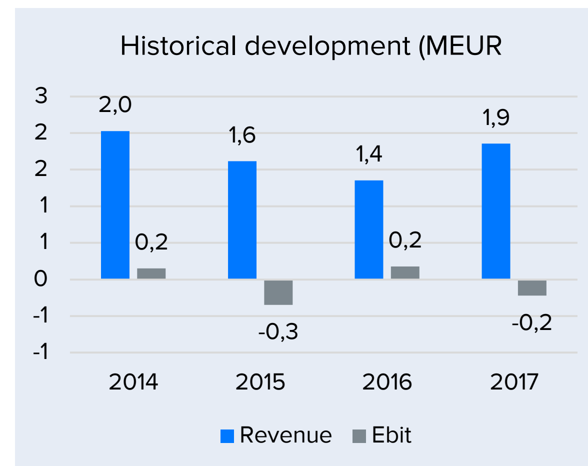
The shape and size of air filters varies by gas turbine manufacturers. Thanks to its long operating history Eagle already has an extensive selection of various types of filters that can replace the OEM filters of different manufacturers (e.g. Siemens, GE and Rolls Royce) directly without customization. However, we also believe that there is a large number of gas turbines on the markets for which spare part sales would require designing a new product and expanding the product portfolio. According to our view, the company should, due to its limited resources, focus on power plants where sales does not require designing a new product. The company's production that has been outsourced to the Baltics can, in our opinion, flexibly respond to possible rapid growth in Eagle's order volume. We estimate that the company's business is highly profitable for the subcontractors as well, which increases their commitment and willingness to make investments.

Capital restricts growth

We do not believe the company's past development reflects the true potential of the business as the company's products require considerable sales work in the beginning and adoption of new technology is typically slow. The company's scant capital has also restricted growth. Because Eagle's filter production has been outsourced its business is relatively capital light. However, a lot of working capital is tied as a single customer delivery is typically worth several hundreds of thousands of euros and power plant customers demand long payment terms for deliveries. According to our estimates, Eagle will also not get any help for its working capital need from its subcontractors as they do not grant Eagle term of payment due to its restructuring debts. Historically, it has been difficult for Eagle to get capital from banks as they demand high collateral debt financing and Finnvera's loans during manufacturing and export guarantees have not carried very far. Loudspring becoming involved in the company has alleviated the company's capital situation through its financial contacts and the invested equity and debt financing.

With the help of Loudspring, the company has also found a factoring partner, which means that working capital growth does not burden its growth to the same extent as before. Factoring increases financing costs but in the whole this is not an essential problem. Due to the company's high margins, increasing sales is the company's main task. If profitable growth materializes, the company's financial situation and credibility would also improve, which would help secure financing.

At the end of 2017, the company's equity was negative at EUR -0.46 million. The company had EUR 0.65 million in long term interest-bearing debt and EUR 0.95 million in short term debt of which factoring represented some EUR 0.5 million.



Estimates

Growth realizing is the main value driver for Eagle. We expect net sales to grow by 70 to 90% per year in 2018 to 2020. Of the growth factors, we expect customer retention to continue at close to 100% and re-orders to take place every two years. The typical life time of a new gas turbine is 30 years, which generates predictability for net sales.

Eagle Filters 3/3

Follow-up sales to turbines that already use Eagle's products is very profitable as they no longer require considerable sales work. The second growth factor is growth in new sales and, according to our estimates, it consists primarily of Engie's and ICE's power plants that do not yet use Eagle's products. We also estimate that a couple of new power plant operators will annually pilot Eagle's products, which supports growth in the coming years.

Eagle's personnel costs in 2017 were EUR 0.35 million and other costs EUR 0.49 million. In our estimate, costs will grow by 20% per year as a result of personnel growth and other sales related costs increasing. However, costs will simultaneously gradually become scaled as old power plants make reorders and the productivity of new sales grows gradually.

We estimate that 25% of the company's net sales will be tied to accounts receivable (90 day payment term) and 10% of net sales to unfinished product inventory. We expect that the company will finance this largely with factoring funding this and next year, the interest rate of which we estimate to be 15%. As sales grows and the result turns positive, we believe the share of factoring funding will decrease gradually and, at the same time, the average interest rate of debt financing will decrease.

However, we feel this requires that the company can turn its equity positive and repay its restructuring debt, which will enable purchasing from subcontractors with an invoice and banks' confidence in the company improving.

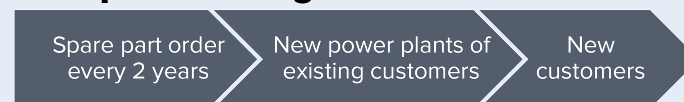
Eagle's valuation

Due to the company's negative equity for the time being and gradually improving financing position we have modeled the income statement development to the last row and the basis for Eagle's valuation is the P/E ratio. We estimate that the 2020e P/E ratio 5-6x is, at this stage, risk neutral for a company like Eagle that is in its early stages, and based on our estimates, the company value is EUR 9.2 million.

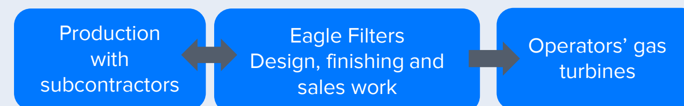
Factors that have a negative effect on the valuation (and the P/E ratio used) are the uncertainty related to net sales growth and earnings improvement, the company's poor track record in increasing its net sales and the debt related to the corporate restructuring. The valuation is, in turn, supported by the exceptionally strong net sales growth outlook, strong customer retention and Loudspring's majority holding, which offers clearly better preconditions for financing growth.

According to our view, Eagle's value is EUR 9.2 million and calculated with a 67.6% holding, the value of Loudspring's holding in the company is EUR 6.2 million with the current share. In our view, Loudspring will, however, use the remaining option and increase it's holding to 80% at an extremely favorable price (with the valuation of the latest valuation round) so, in our view, the value of the Eagle holding is EUR 7.0 million. We emphasize to investors that if the growth we predict materializes, Eagle's value is considerably higher, because if the earnings growth actualizes the 2020 P/E ratio rises, according to our view, to around 15-25x (depending on the outlook) and the company's value is around EUR 25-40 million.

Composition of growth



Value chain



Working capital financing

Estimates

(MEUR)	2017	2018e	2019e	2020e
Customer retention	100%	100%	97%	97%
Reorders	n/a	1.8	3.6	7.2
Revenue	1.9	3.2	5.4	10.3
Gross profit	0.6	1.3	2.2	4.1
Opex	-0.8	-1.1	-1.3	-1.6
EBITDA	-0.2	0.2	0.8	2.6
Depreciation	0.0	0.0	0.0	0.0
EBIT	-0.2	0.2	0.9	2.6
Interest	-0.1	-0.2	-0.2	-0.3
Tax	0.0	0.0	0.0	-0.6
Net income	-0.3	0.0	0.6	1.7

Source: Inderes

Nuuka 1/4

Company description

Nuuka sells and develops software as a service (SaaS) for commercial building owners. Building owners can use Nuuka's applications to monitor the data produced by the sensors of the property's various automated systems (e.g. temperature, energy consumption, CO2 and humidity) in a processed form. The alarms and recommendations from the applications enable to find the cause behind various operational problems. With the help of Nuuka, the building owner can improve, e.g. the energy efficiency and indoor air quality of the building, the first of which lowers running costs and the latter the value experienced by the end user, which enables higher net sales. In the past two years, the company's business has expanded into a platform for managing the IoT processes of new smart buildings and the company is seeking strong growth in this area in future.

History

The company was founded in 2012 by Mikko Maja, who still acts as the technology manager and owner (12%) of the company. Loudspring invested in the company already in the early stages in 2013 acquiring a 30% share for EUR 150,000. Loudspring currently owns 48% of the company and the convertible note option would make it the majority owner. In 2014, at the time of Loudspring's IPO, Nuuka's own objectives in the prospectus were ambitious (2020 net sales EUR 40 million and EBIT 45%). However, the company is clearly behind these expectations (2017: net sales EUR 0.43 million and EBIT -105%). We estimate that the single biggest reason for this is the remotely readable energy meters that have become mandatory for Finnish power grid companies, which has resulted in numerous services offering hourly energy measurement data entering the market. We also assume that in many properties the alarms that inform of the status of Nuuka's automated systems are partly unutilized because in Nuuka's current business model the monitoring of the property is the customer's responsibility and because the customer usually has an external real estate service company it is not necessarily trained in using Nuuka's service. Nuuka is currently testing a new service concept in order to tackle this problem.

Nuuka wants to become the IoT platform for buildings

Nuuka's service has become more versatile throughout the years and, as a result of development work, interfaces have been opened between various equipment supplier's systems and Nuuka. Currently, data from over 60 different building services engineering suppliers' systems (ABB, Schneider Electric, Honeywell, Siemens, etc.) can be easily transferred to Nuuka's service. Open interfaces separate Nuuka from its numerous competitors. They enable cost efficient implementation of the system, in addition to which, third parties can use it as an efficient IoT platform also in managing their own applications.

IoT market is expected to grow dramatically

The IoT market for smart buildings is expected to more than quadruple to USD 25 billion from 2016 to 2021 (source: Markets and Market). The IoT market growth is driven by the increase in the number of sensors in buildings resulting from the steep drop in sensor prices and growth in the number of different IoT applications, as well as increased resource efficient thinking.

In its expansion, Nuuka currently focuses on the Nordic and the Benelux countries because these areas are in the forefront of smart building.

Business and service pricing

Nuuka currently employees 12 people and the business resources are strongly focused on the sales of the SaaS service (5 people) and on linking new customer buildings to the service, as well as the development work of the platform. Nuuka's typical new customer acquisition takes place by carrying out a pilot with the customer after which sales to the operator's other real estate becomes a lot easier.

The increased number of buildings does not depict Nuuka's net sales particularly well as the customers are very different in terms of their needs. The company has three pricing levels: Basic EUR 0.6 per m2, Plus EUR 1.5 per m2 and Smart EUR 2.5 per m2. In the cheapest price class, the customer only receives an energy and responsibility report, in the middle range, all monitoring from the automated system, and on the highest level, customers receive the desired data also to be used by various IoT objects. According to our estimate, a majority of Nuuka's buildings still belong to the lowest price level but we estimate that the sales mix will improve gradually as the building IoT market grows.

Nuuka 2/4

Main references

Nuuka's most important customer is real estate developer OVG, whose core business is designing and constructing smart office buildings. Nuuka's systems are already utilized at least in the EDGE building (Amsterdam) and Unilever's headquarters (New York) both developed by OVG. EDGE is especially important as a reference as it has been selected the world's best sustainable office building. Other important large announced references for Nuuka are the Swedish supermarket chain ICA and in Finland the City of Helsinki, Varma and LähiTapiola. The size of Nuuka's business is still so small that references are particularly important in acquiring large customers. Without these references, we believe the company would have credibility issues.

Earnings model and growth financing

Nuuka's earnings model is typical for a SaaS company, the cash flow from its customers is initially negative due to the costs of sales and piloting. Only the income accumulated from continuous monthly billing turns the customer relationship profitable. According to our information, monthly billing starts after 3 months of adopting the service. The contract between Nuuka and the customer is always made for a minimum of one year and after that the service has a 3 months period of notice. The company tries to bill the costs arising from the installation of the service from the customer.

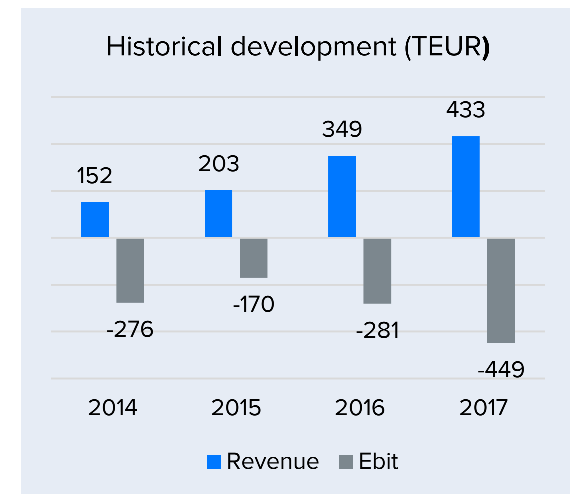
In its sales Nuuka targets customers that have an extensive real estate portfolio (over 10 properties). Thus, the high sales costs can be scaled to the entire portfolio as long as the customer value is proven in the pilot. In terms of business scalability, how much the customer acquisition costs compared to the value of the customer's life span is crucial. The key growth drivers for the company are its high customer retention (so far nearly 100%) and probable expansion into the customer's other real estate portfolio. This way new customer acquisition can cost quite a lot as long as these parameters remain high. The development costs of the company's platform must also be allocated to as many customers as possible, and strong growth is important also for this reason. In our view, the company must invest heavily in growth.

The fact that income financing is accumulated with a delay creates a financing need, and the need is emphasized if the company accelerates growth and hires new sales personnel. We believe Nuuka will increase its personnel considerably over the next few years. At the end of 2017, Nuuka's liquid funds stood at EUR 177,000 and we estimate that the company needs around EUR 1 million in additional capital in the coming years depending of the amount of front-loaded growth investments. We expect that the company will receive affordable debt capital to finance this due to important new customers and their high credit rating.

Nuuka is a potential acquisition target

We see good growth potential in Nuuka due to its valuable references, expertise in building services engineering systems and the open interfaces of the software. We do, however, believe that as the market grows, large IT players like Microsoft and Google will try to become the dominating IoT platform for smart buildings as well. Due to the small size and limited resources, as well as the high scalability of the development costs of the SaaS service, we do not believe Nuuka will be able to compete against these giants forever. In future, we see Nuuka as a potential acquisition target for the large players.

We believe growing in size is key for Nuuka in terms of the scalability of the business costs and from the viewpoint of a possible takeover as the acquisitions of SaaS companies are usually done based on the EV/S ratio.



Nuuka 3/4

Estimates

Nuuka has finally turned the sales of its SaaS service into clear growth as in 2017 recurring net sales grew by over 100% according to the company. We expect the strong development to continue in the coming years. This and next year SaaS net sales growth is strongly supported by ICA store buildings becoming part of the service and the substantial 1,000 property order received from the City of Helsinki. According to Nuuka, ICA's properties are rapidly being linked to the service, of a rate of approximately one per week. We estimate that having all the properties of the City of Helsinki being linked to the service will take until next year.

So, the outlook for 2018 growth is strong and the visibility for 2019 SaaS net sales growth is already quite good thanks to announced deals. We do, however, emphasize that the growth figures for coming years involve uncertainty - they are dependent on successful sales and large projects can change the estimates quickly.

We expect Nuuka to increase its sales and installation personnel considerably over the next few years. This means that the company's operating costs grow clearly in our estimates. We also expect Nuuka to continue investing in developing the software platform. Part of these costs are capitalized in the balance sheet as development expenditure, which is visible as increased depreciation (25% straight-line depreciation). In our estimates, the productivity of sales improves thanks to major customer references and new customers will first be visible as increased installation sales, after which the customers will start generating SaaS net sales (a 3 month lag). In our model, we have assumed that customer retention will remain high but gradually decrease as competition tightens. The company's operational cash flow increases in our estimates and turns positive in 2020 thanks to strong SaaS net sales growth.

Nuuka's valuation

According to our view, the EV/S ratio is the right indicator for determining the value of a company like Nuuka that operates with the SaaS business model. Visibility for 2019e net sales growth is, in our opinion, relatively good due to announced customers (Helsinki and ICA). Based on the strong growth expectation for SaaS net sales (2017-2019 CAGR % 150%) we are ready to accept a risk neutral 10x ratio for recurring SaaS net sales for 2019e and we value non-recurring installation net sales at a ratio of 1x.

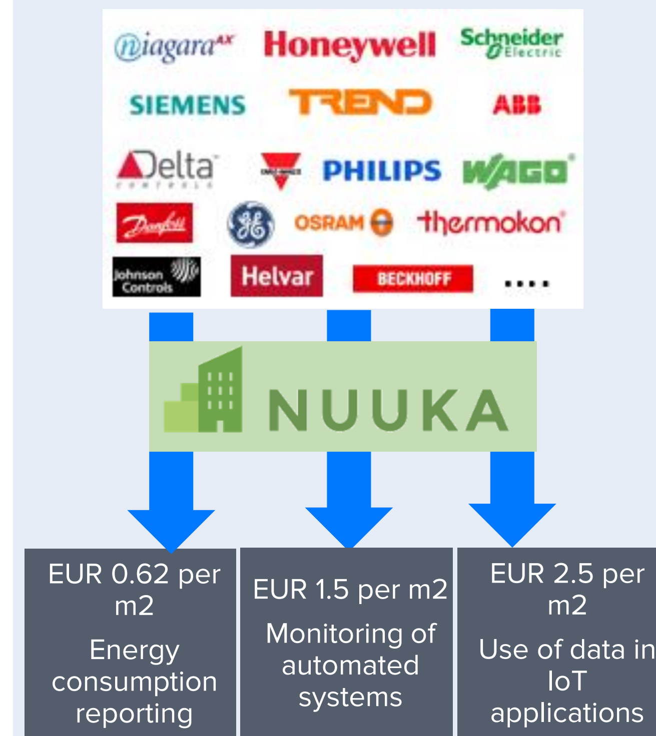
The graph on the following page shows the effect of the growth % on the acceptable EV/S ratio for listed companies that are clearly larger than Nuuka. Factors that have a negative effect on Nuuka's valuation are the company's small size and clearly more limited resources compared to large IT houses. The valuation is, in turn, supported by the big orders received by Nuuka and good customer retention which, in our opinion, shows that the product is currently competitive.

With this method, Nuuka's enterprise value (EV) is EUR 12.2 million. Considering the expected growth in the company's net liabilities in the next few years, the value of the Loudspring holding is currently EUR 5.4 million.

Estimates

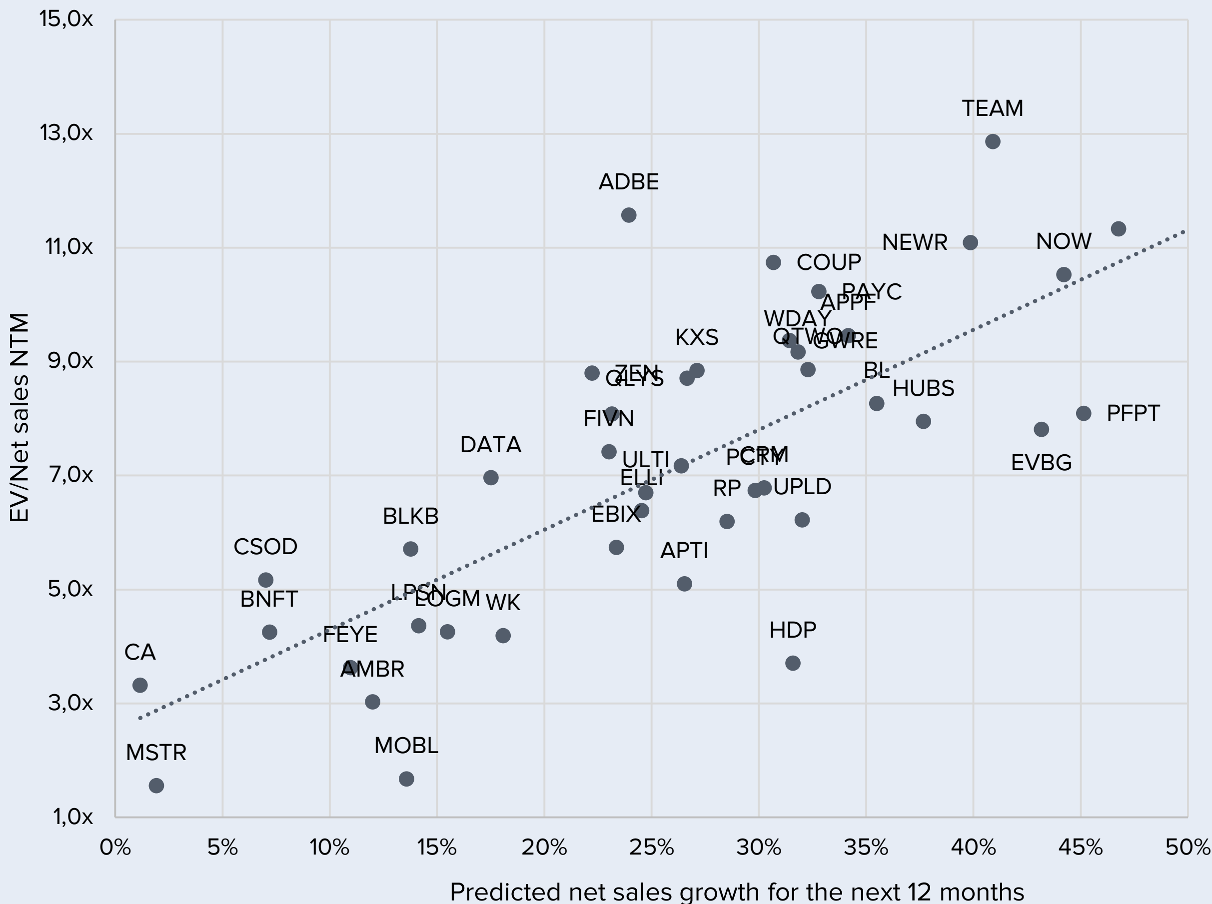
MEUR	2017	2018e	2019e	2020e
Retention rate	100%	100%	97%	94%
Revenue	**0.43**	**1.60**	**2.44**	**3.54**
Installation sales	0.26	1.10	1.35	1.69
SaaS sales	0.17	0.50	1.09	1.86
Opex	**-0.81**	**-1.87**	**-2.45**	**-3.06**
EBITDA	**-0.38**	**-0.27**	**-0.01**	**0.48**
Depreciations	-0.08	-0.16	-0.22	-0.28
EBIT	**-0.45**	**-0.32**	**-0.23**	**0.20**

Nuuka's value creation



Nuuka 4/4

Valuation level of SaaS peer group



Lähde: Thomson

Name	Ticker	Name	Ticker
Adobe Systems Inc	ADBE.OQ	LivePerson Inc	LPSN.O
Alteryx Inc	AYX	LogMeIn Inc	LOGM.O
Amber Road Inc	AMBR.K	MicroStrategy Inc	MSTR.OQ
AppFolio Inc	APPF.O	MobileIron Inc	MOBL.O
Apptio Inc	APTI.O	New Relic Inc	NEWR.K
Atlassian Corp PLC	TEAM.OQ	Paycom Software	PAYC.K
Benefitfocus Inc	BNFT.O	Paylocity Holding	PCTY.O
Blackbaud Inc	BLKB.O	Proofpoint Inc	PFPT.O
Blackline Inc	BL.O	Q2 Holdings Inc	QTWO.K
CA Inc	CA.OQ	Qualys Inc	QLYS.O
Cornerstone OnDemand	CSOD.O	RealPage Inc	RP.O
Coupa Software Inc	COUP.O	Salesforce.com Inc	CRM.N
Ebix Inc	EBIX.O	ServiceNow Inc	NOW
Ellie Mae Inc	ELLI.K	Tableau Software Inc	DATA.N
Everbridge Inc	EVBG.O	Ultimate Software	ULTI.O
FireEye Inc	FEYE.O	Upland Software	UPLD.O
Five9 Inc	FIVN.O	Workday Inc	WDAY.O
Guidewire Software Inc	GWRE.K	Workiva Inc	WK
Hortonworks Inc	HDP.O	Xero Ltd	XRO.AX
HubSpot Inc	HUBS.K	Zendesk Inc	ZEN.N
Kinaxis Inc	KXS.TO	Twilio Inc	TWLO.N

Sofi Filtration 1/3

Company description

The roots of Sofi Filtration reaches back to the laboratory of the Otaniemi Technical University in 2010, where new types of filtering based on Cross Flow technology was modelled. It was found that the technology was capable of more efficient micro filtration at a high flow rate than previous methods. The founders of the company decided to commercialize the technology in 2011 and Sofi Filtration was born.

After a successful R&D phase, the company's current technology and the first product were ready already in 2014. Since its outset, Sofi has been able to collect financing from several public and private sources amounting to EUR 2 million. Loudspring invested in the company already in the early stages in 2013, EUR 175,000 for a 22% share (current holding 25%). The company's production is carried out as subcontracting in Finland and the company currently employs 4 permanent and 6 part-time consultants.

Sofi's patented technology has been proven competitive in many uses and the company has used a considerable amount of resources in making various pilots and proving that the technology works in different applications and industrial sectors. The technology is best suited for applications where the particles are very small, even 0.1 micro meters, the substance to be cleaned is solid, its concentration is high (dirty) and the processed flow is high. Sofi's advantage is also the small size of the device. Currently, the most potential customer areas are:

- Treating flue gas waste water
- Water purification in the district heating network
- Scrubber waste water treatment
- Treating water pumped as byproduct in oil drilling
- Water purification in tunnel construction
- Metal recovery from waste water
- Filtering micro plastics from waste water

The company's value propositions vary by customer segment but typically Sofi helps industry to reach higher water recirculation rates. This, in turn, saves money and helps reach the waste water emission standards cost-effectively. With Sofi's technology, precious metals can also be separated from waste water. The company's customer references include: Fortum, Anglo American, Porvoon Energia, VAPO, YIT, SRV, Lindström and Kalliorakennus Yhtiöt.

Business model is still taking shape

Sofi's product can either be sold directly to the customer, through a distribution partner or a system integrator. In Sofi's pilots where customer value has also been tested, sales has taken place directly to the customer.

Sofi's product is very durable and its estimated life cycle is 10 years. Sofi Filter's filter cleans itself with ultrasound and, thus, the filter does not need to be changed constantly. This lowers the customer's operational costs (compared to competing filtration systems) but also lowers the potential of Sofi's spare part business. The metal mesh used in filtration by Sofi's technology needs to be changed around every 18 months and we estimate that this spare part sales generates roughly the same amount of net sales during the life cycle of the product as the original product. So far, Sofi has also offered remote monitoring services to individual customers that is based on monthly billing. Sofi's product can also be purchased as a service and, for example, in earthworks projects this has proved to be the best business model.

Source of growth not yet clear

Due to its sustainable technology, Sofi has to constantly find new customers for its product, which increases sales expenditure. Adoption of new water technology is extremely slow (5 to 15 years) among customers, which makes the product sales cycles long. According to the company, new customer acquisition can take up to 1 to 2 years. In our view, Sofi's technology is valuable. The company must, however, find a more sustainable growth strategy with which technology adoption can be accelerated cost-effectively.

So far, the company has sold around 30 devices, the majority of which has, according to our estimate, been compatibility projects. These have first involved pretesting of a sample in Sofi's laboratory and a field pilot where the products value to the customer has been proven to the customer. According to our estimates, the overall margin of these pilots has been modest and the customer's life cycle in relation to the cost of the customer acquisition has not been in balance in terms of growth. Pilots have, however, been necessary in order to create credibility and interest in Sofi's products. Various public financing programs and grants (biggest one EUR 750,000 Tekes' young innovative enterprise) have enabled continued operations.

Sofi Filtration 2/3

In our view, Sofi needs in future to be able to finance its growth more with income financing in order for its growth to rest on a sustainable base. The company has to finally move to the next level in its growth strategy and we believe external distribution channels and selling the product to different system integrators is a possible path to profitable growth. In practice, the company's high sales cost is outsourced in the model if the company is able to create sufficiently good cooperation relationships.

Sales outsourcing can accelerate growth

In its current strategy, the company tries to increasingly utilize external distributors instead of direct sales. Even though the company does not get the distribution margin for these products, we see this as a very sensible approach due to the company's limited resources and the risk related to the success of large project deals. Sofi tries to open new distribution channels especially in the United States where Sofi has already established a subsidiary. One interesting new distribution channel in the US is the deal made with Encotech to represent Sofi's technology to oil and gas industry customers.

We estimate that it will take some time to find the right distribution partners and to generate sales growth because it requires that the distribution company is first convinced that Sofi's technology works and then training of the sales force in order for them to be able to communicate the value added provided by Sofi's products to the customers.

Sofi has also made agreements on delivering products to different system integrators, which we also see as a potential sales channel when the right partners are found for different applications. The Finnish Caligo Industria is an example of existing cooperation. Caligo is a company that develops and delivers turnkey solutions for flue gas cleaning. Since 2016, Caligo has purchased six modules from Sofi to be integrated into its own end product.

Estimates

The company's net sales decreased from EUR 550,000 in 2016 to EUR 390,000 in 2017. The declining trend raises concern of continued growth but, according to our estimate, growth was depressed by launching activities in the US (has not yet generated net sales). We believe one larger project deal can increase net sales by some EUR 200,000, which makes forecasting very difficult. We have not created a forecast model for Sofi because it is hard to model the net sales growth of the company at this stage as project delivery sales is very volatile, as the sales growth from new distribution channels is uncertain and the amount of recurring net sales only leaning on low spare part sales. Predictability is also made hard by the fact that growth within the same customer has, according to our estimate, not yet materialized, except in individual cases, even if the pilot has proved its worth.

We estimate that the net sales break-even level at the current cost structure is around EUR 0.8-1.0 million and if the company is successful it can reach this balanced level already this year. This does, however, require a few larger project deliveries in this period. Starting from next year, we also expect that new distribution channels will become visible as net sales growth and their growth slope determines Sofi's value considerably in the short term.

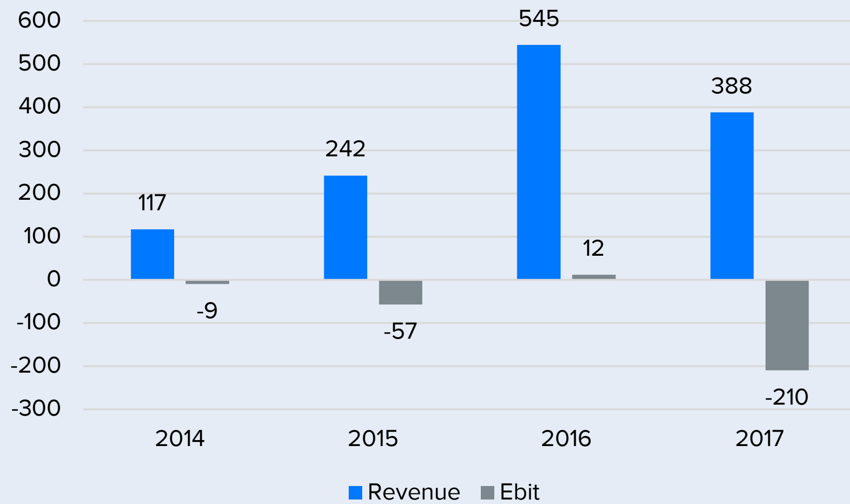
Valuation

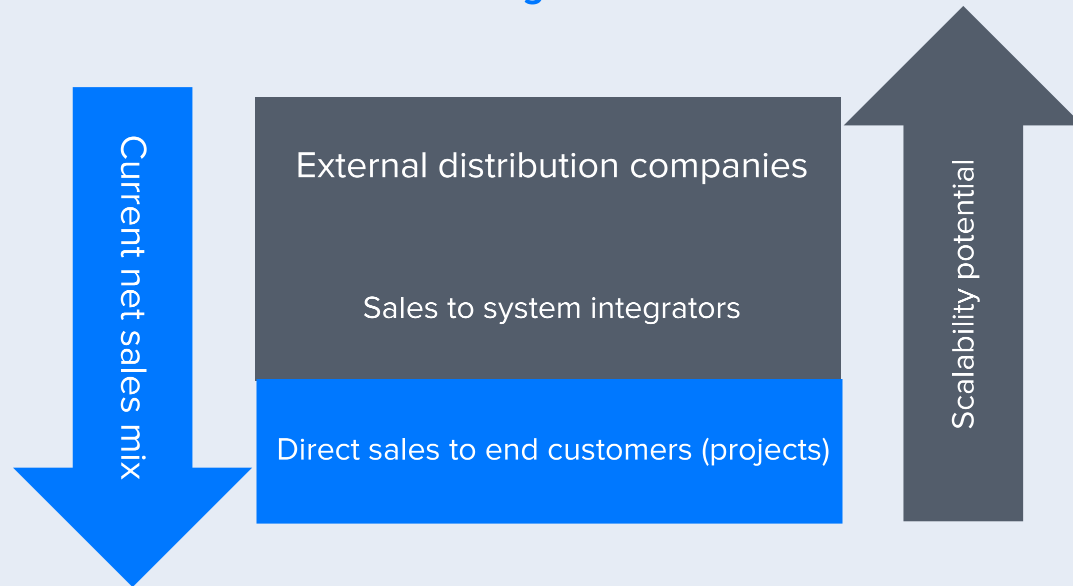
At this stage, we estimate Sofi's value moderately to be EUR 4.4 million, which is based on its balance sheet value (in Loudspring balance sheet) and the last valuation round. The value of Loudspring's share is EUR 1.1 million.

We consider it possible that one of the company's many applications makes a breakthrough and net sales grows considerably in the coming years. Sofi's valuation is supported by the capital lightness of the business and the high sales margin of the products. Possible growth in customer demand would also become quickly visible in the company's result.

The substantial risk that has a negative effect on the valuation is that the adoption of Sofi's technology takes so long among customers that the company runs out of money before it.

Sofi Filtration 3/3





Source: Inderes

ResQ Club 1/4

Company description and history

ResQ develops and operates a mobile platform that allows consumers to buy excess restaurant food at a discounted price and restaurants can get additional income from food that would be wasted. Recently, K food shops have started to offer surplus food bags to ResQ users. The use of the application offers clear value to both sides in the network, and also to the environment. The application brings additional income and new customers to restaurants and polishes the company's responsibility brand. On the other hand, the customer saves money and time with ResQ and gets positive feelings for acting ecologically. Joining the service is free for the parties and ResQ's income flow is based on a percentage-based commission of the selling price of the meal.

ResQ Club was launched in Helsinki in February 2016. Loudspring invested in the company for the first time in May of the same year and, as a result of later funding rounds, its holding has risen to 19.4%. ResQ got negative publicity in February 2018 when the company's ex-CEO was convicted for stealing the business idea from his former employer Lunchie Oy. The conviction did not apply to the company and, in our opinion, it only resulted in a small reputation loss for ResQ. Since last fall, ResQ (under the current CEO) has started to focus more on profitable growth instead of the previous fast but uncontrolled growth (2017 EBIT: EUR -1.3 million). The scant liquid funds have resulted in a steep drop of around 70% in the number of personnel to the current 14 employees. Despite the cuts, the growth rate has remained reasonable and in Q1'18 the growth rate has been 8.5% per month.

A lot of growth opportunities on the markets

Smartphones becoming more widespread has enabled entirely new possibilities for food demand and supply to meet. Various digital marketplaces can be divided into demand driven applications (Wolt and Foodora) and supply driven applications like ResQ. The supply driven market is in Western countries driven by food waste that has been an unsolvable problem for a long time. Typically, a restaurant's waste corresponds with 10-20% of its total supply. ResQ estimates that the value of the market it serves with its business concept could reach EUR 4 billion just in Europe. There is only a handful of notable players like ResQ but there are several players in the pilot stage. The market is attractive both from a financial and ecological viewpoint and thanks to the big potential we expect several new players to enter the market in the next few years.

Main competitors

The size of the market and the opportunities it offers does not, in our opinion, limit growth, as the main growth drivers are a working product and the resources available to the company. According to ResQ it currently has two considerable competitors: the Danish TGTG and the Swedish Karma that like ResQ have grown exponentially in the past couple of years. TGTG has expanded into eight countries in Europe (the UK, Germany, France, the Netherlands, Norway, Switzerland, Belgium and Denmark) and according to its website it has 5,000 partners and 3 million customers. In the past 2.5 years, ResQ has been used by over 2,100 partners in Finland, Sweden, Germany and the Netherlands, and there are 280,000 registered customers. Karma is the market leader in Sweden and it has expanded at least to London. According to its website, it has 1,000 partners and 250,000 users.

ResQ estimates that its mobile platform is the best in Europe, and its application development team consists of prominent experts, which supports this view. In terms of available resources, we believe ResQ is the underdog compared to TGTG and Karma. For the time being, ResQ's strategy is to build highly profitable network basis and scale the network upward locally while its competitors, in our view, tries to expand more geographically. In our opinion, it is challenging to expand geographically in a controlled manner simultaneously in several countries and this requires a lot of capital.

Business model and network effects

The business model of a marketplace like ResQ is based on hooking up the user with the producer as effortlessly as possible and on the compensation received for doing this. The growth of the business is based on increasing the size of the network in order for the selection and number of transactions to grow. On one side of the network are the users (demand) and on the other the restaurants (supply) - increasing both increases the value of the network from the point of view of both sides (indirect network effects). When ResQ scales the users, both sides need to be in balance in order for the user experience to remain good for both the customers and restaurants. The networks that are created in food waste are very local as they are typically used during weekdays, for example, in connection with commuting and even one city (or suburb) can form its own local network.

ResQ Club 2/4

Therefore, we expect that there in future can be several successful players within one country even though a big player will get a slight benefit when people travel between cities.

ResQ's income flow is based on a commission the size of which can be calculated from ResQ's net sales and the reported volume of sold meals. In 2017, meals were sold through the platform for some EUR 1.5million and net sales amounted to EUR 0.30 million (20% commission) and in 2016, meals were sold for around EUR 0.5 million with a EUR 0.12 million net sales (commission 25%). We estimate that the average commission for the Finnish and Swedish business is close to 25% and on the more competed Central European markets lower than this.

Ramping up the networks

When expanding into new areas the company faces the chicken or the egg dilemma and attracting the first users and restaurants to the service is expensive as the network in itself does not yet offer sufficient value for those who join. The expansion speed of the network is slowed down more by increased supply as attracting restaurants to the service requires clearly more sales work from the company than attracting consumers does. In our opinion, the first mover gets a clear benefit as on an untouched market the restaurant's option to the service is throwing away the food. The benefit for the first mover is lowered by the costs needed to educate the restaurants, which slows down adoption. These costs fluctuate heavily between market areas.

According to ResQ's customer survey, 99% of the users recommend the application, which means the growth engine among customers is viral. At first, the number of customers can be kicked off with media attention and after that the cost for customer marketing is very low. When a sufficient mass of restaurants and customers have joined the service the ball truly starts rolling, and the sales costs will drop in this area also for restaurants. A network that covers a majority of restaurants and customers in the area creates, in our opinion, a regional moat and the next player to enter the market must be able to offer a clearly better feature in order to penetrate the market.

We consider ResQ's position to currently be very strong in Finland and partially also in Sweden. In order to ensure the volume of its service right at the start, ResQ also expanded to Germany by merging with the local Meal Saver in May 2017 but since then, the growth in the German business has not progressed as expected. We believe this is partially caused by TGTG's competitive pressure and partly due to the differences in the local restaurant culture and lower price levels compared to Finland. These factors lower the profitability of sales efforts, especially when the business is being ramped up.

Now ResQ focuses on taking command of all Finnish cities (2 sales persons) and smaller cities in Sweden (1 sales person), as in these areas we estimate the sales ROI% to be attractive. ResQ's sales process is efficient and one sales person can take command of 40-50 restaurants per month. The company still has activities in Germany and the Netherlands but at this time the company does not have sufficient resources to focus on growth in these areas. Our understanding is also that the company has pulled out from Estonia entirely.

Considering the company's cash situation it makes sense to direct resources to the areas where growth is more profitable. However, we feel that in an ideal situation (if the company had more capital available) the company should take over markets more aggressively as the first mover and optimize its profitability later. We estimate that the repayment periods of the company's sales investments are short in Finland and Sweden. We believe similar areas can be found elsewhere in Europe but taking command of them initially requires a lot of capital. We also find the US to be an interesting market.

Licensing possible in future

Due to the current limited resources, one option for ResQ is to carry out expansion into new countries with a licensing model, which would not tie up the company's capital in expansion. The flipside is that the company will get a smaller share of the volume that travels through the platform. We see licensing as a sensible and probable expansion channel in future as it would also enable taking over untouched markets before the competition in the current financing situation. However, this would require the company to find suitable partners.

Service develops further

The company still focuses heavily on developing its platform. It is, for example, developing new free tools for restaurants to make it easier to adopt the application already before the restaurant starts to utilize the marketplace. One such tool is a personnel resource calculator that calculates the restaurant's need based on sales history.

ResQ Club 3/4

The company estimates that new functionalities will make adoption of the application easier and a market where competition exists can be taken over later. The company recently added restaurant user reviews to the service, which clearly creates added value to the network as transparency concerning the quality of service and food increases. The company's aim is also to later develop AI to make it easier to the user and the right meal to meet in the service.

Estimates

In our estimate, the company continues to expand organically, mainly with current resources, taking command of the Finnish and Swedish markets. In 2019, growth will, according to our estimate, also be supported by licensing income. We estimate that the company's costs are around EUR 1.2 million after the personnel cuts, and we expect the costs to increase moderately in the next few years (10% per year). Since 2017, the company also started to capitalize some of its R&D costs in the balance sheet and we expect this to continue in the coming years as well. As a result of this, depreciation levels will increase over the next few years (10 year straight-line depreciation).

According to our estimate, the company's cash flow will turn positive in 2020 and, after this, the cost structure that can rapidly be scaled to the volume will quickly turn the company highly profitable as it continues to grow strongly. The funds collected by the company in its last funding round (spring 2018) will, in our opinion, suffice to finance current organic growth. Thus, it is more of a strategic choice whether the company wants to accelerate its growth by collecting additional funding.

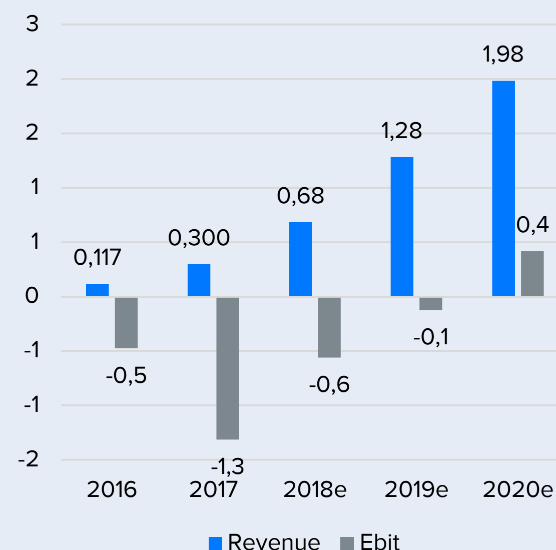
Valuation

In the neutral scenario, the company progresses according to our estimate and visibility into organic net sales growth is relatively good due to the low-risk expansion strategy. Our valuation is based on the neutral scenario and the peer group presented on the next page that consists of listed food delivery services. According to our view, ResQ grows clearly quicker than its peers, which supports premium pricing. At the same time, ResQ's small size lowers the premium. In our opinion, an acceptable valuation for ResQ is 2019e EV/S ratio 6x-10x (we used 8x). This gives an enterprise value of EUR 10.3 million for ResQ and, considering the net debt needed to finance growth, the value of Loudspring's holding is around EUR 1.9 million.

In addition to the neutral forecast, we have created two other scenarios in order to pin-point ResQ's valuation as the value is highly volatile depending on the owner's willingness to take risks. In the negative and positive scenario, a lot more capital is invested in the company (EUR 10 million) and, in both scenarios, growth accelerates and net sales quickly rises to EUR 10 million. In the negative scenario, efficient use of capital fails and growth becomes too expensive, so the value of the holding falls to EUR 0 million. In the positive scenario, the company successfully allocates its resources in a controlled way in profitable growth, which could increase the value manifold within a few years. In our opinion, the company has good preconditions to reach the positive scenario by raising its risk level and allocating its resources better than before to the right targets.

Estimates

MEUR	2016	2017	2018e	2019e	2020e
Own volume	0.5	1.5	2.9	4.8	7.3
License volume	0.0	0.0	0.0	1.0	2.0
Revenue	0.1	0.3	0.7	1.3	2.0
Growth-%	-	156%	128%	88%	55%
Opex	-0.6	-1.6	-1.2	-1.3	-1.4
EBITDA	-0.5	-1.3	-0.5	0.0	0.5
Depreciation	0.0	0.0	0.0	-0.1	-0.1
EBIT	-0.5	-1.3	-0.6	-0.1	0.4

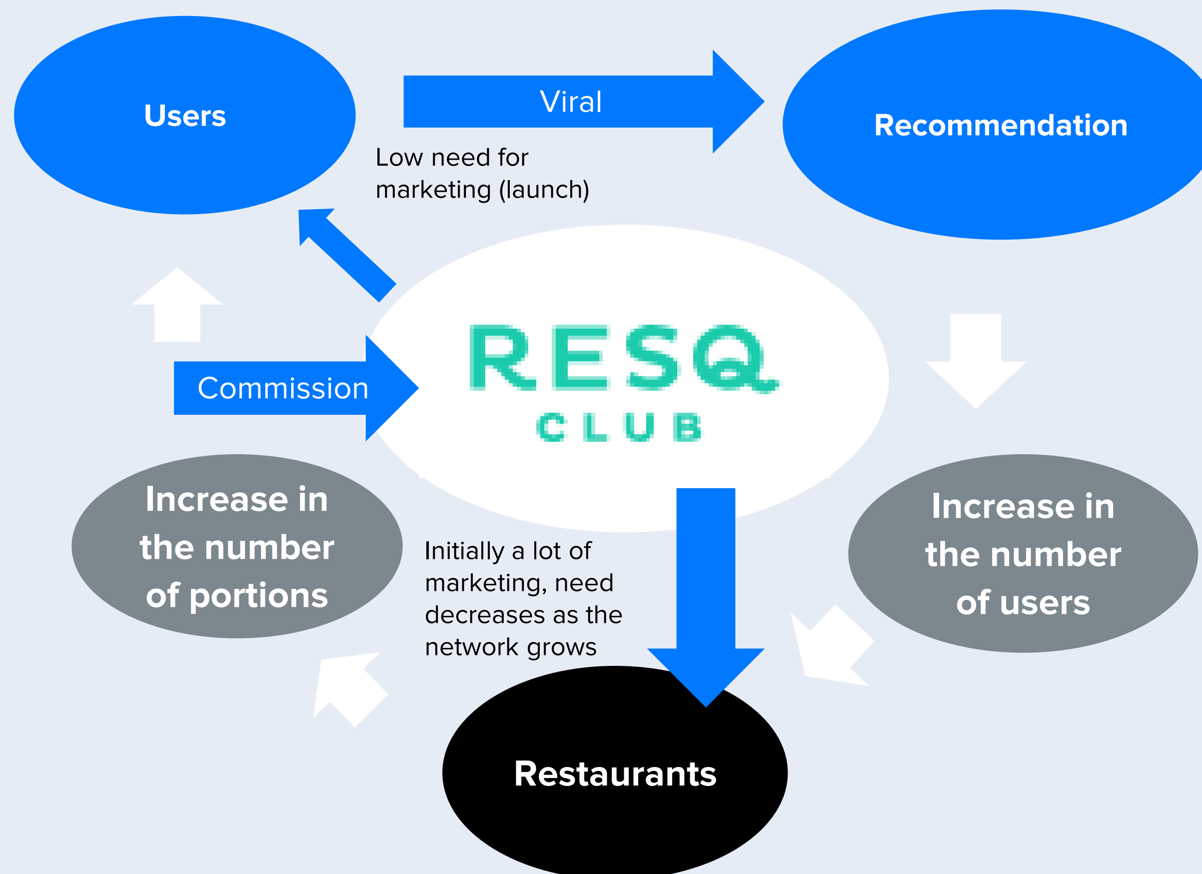


ResQ Club 4/4

Peer group

Name	EV (MEUR)	EV/S 2018e	EV/S 2019e	Growth-% 2018e-2019e
Delivery Hero SE	8624.6	10.1	6.9	46%
Ocado Group PLC	8075.9	4.2	3.8	11%
Just Eat PLC	6296.2	7.2	5.8	25%
Takeaway.com NV	2341.4	9.3	7.1	32%
Median	**7186.0**	**8.2**	**6.3**	**28%**
ResQ	10.3	15.1	8.0	88%

Business model



Source: Inderes

Swap.com 1/4

Company description

Swap.com is an online store for used goods operating in the US. The product selection of the company has some 2.3 million products consisting of women's, children's and men's clothing, and some other product categories. The company (formerly Netcycler) was founded by Juha Koponen and Jussi Koskinen in 2008, who are still part of the management. At first, the company acted as an eBay-like P2P marketplace in Finland and later in the UK and Germany but this business model did not really work.

After acquiring Swap.com in 2012, the company focused solely on the US market and changed its business model to an Amazon-type Fulfillment Center model. In this business model, customers do not ship their clothes directly to one another but the seller sends the products to Swap.com that checks, photographs, prices and ships the clothes to the buyers. Swap.com's net sales consists of the sold products and part of this net sales is paid to the sellers that send the products to Swap.com based on a commission structure. In addition, a fixed handling fee is subtracted from the seller's commission, with which the company covers its logistics costs. Currently, the company only operates in the US. Loudspring first invested in the company already in 2010 acquiring a 3.5% share for EUR 84,000. In later funding rounds, the holding has risen to 6.6%.

Over the past three years, the company's net sales has increased more than tenfold and in 2017 it was around USD 16 million (2014: USD 1.47 million). Swap.com has in recent years invested a lot in marketing, which has resulted in rapid growth but also in high need for financing. During its operating history Swap.com has collected around EUR 50 million from investors to achieve its current position and we believe a majority of this funding has been spent on marketing and new customer acquisition.

Efficient warehouse a competitive advantage

The company's warehouse (33,500 m2) is located in Chicago's logistics hub, which enables cost efficient transport services for Swap.com when sellers send packages to the company and the company sends orders to customers. The receiving process inside Swap.com's warehouse is, in our opinion, its main competitive advantage as the process is highly efficient. The inspection of received goods and putting the clothes on mannequins are manual steps but photographing of the products is fully automated, as is the transfer of the products on a conveyor belt. In addition, AI is used to help the personnel in listing products. Based on image recognition and earlier data, AI can identify part of the clothes automatically. The identification process becomes more efficient the more data Swap.com accumulates. The company has already accumulated a vast amount of data as it has sold over 5 million used products to consumers.

The company has developed its information system from scratch. Our estimate is that receiving and storing one product costs around EUR 1.5 for Swap.com. This cost can in a business model be seen as capital tied to the clothing, as the company only pays for the clothes when they are sold. In terms of tied capital, the company's business model is quite light.

Little competition in low price category

At least ThredUp operates with a similar business model in online sales of used clothing in the US. Unlike Swap.com, it focuses merely on higher price category brand products. We believe that this premium segment is the most profitable but also most competed. Our estimate is that Swap.com dominates the low price category products as it is difficult for competitors to make the receiving process of clothes efficient enough, and thus they do not accept cheap clothes. The average selling price of Swap.com's products is just USD 8.00 and we assume this is manifold lower than for its competitors.

Local flea markets and second hand shops operating based on donations have sold used clothing for a long time. Their store capacity is, however, limited, and they can often not accept a lot of goods at once. We feel that Swap.com offers an interesting distribution channel for these operators and we do not see them as directly competing with the company. The company estimates that the size of the market for used clothes in the US is around EUR 100 billion and the low price level market forms a majority of this.

Company has started to focus on profitability

This year, the company has focused on significant efficiency improvement measures with the aim to achieve break-even in its business. The efficiency improvement measures have included cost cutting and the most cost efficient marketing channels have been selected from those in use. The company has high customer retention and around 80 % of sales comes from old customers. According to our view, it protects the achieved net sales level relatively well as it is cost-effective to do direct e-mail marketing at existing customers.

Swap.com 2/4

The large size of the company's network also, in our opinion, creates some new users as people recommend the service to one another. In spring, the company carried out an internal funding round where it collected enough capital to continue its pruned activities.

Business model needs to be balanced

In Swap's business model, the consumers in the digital marketplace and the sellers that send products to its warehouse should be combined as effortlessly and cost-effectively as possible, in order for the platform to offer both parties in the network higher value than competing networks. Buyers are on one side of the network and sellers (selection) are on the other and increasing both increases the value of the network from the point of view of both sides (indirect network impact). When growing, Swap.com must ensure that both sides of the network are in balance. The company's cost-effective goods receiving is already highly optimized but, according to our view, the company should direct resources at improving activity on the consumer side.

Quicker inventory turnover in focus

As a result of the profitability program, the company's focus has already in recent months focused on increasing the volume of goods in order to speed up inventory turnover and turn cash flow positive. Loudspring has also strongly supported the company in formulating the new strategy. In our view the inventory has grown to unnecessary proportions as we estimate that the inventory ties up goods worth more than one year's net sales (2.3 million products * USD 8 per product). It is also important to speed up inventory turnover because a larger net sales can be operated with one warehouse and the business model can be scaled better also in terms of costs related to the actual physical warehouse building. Currently, the company is not accepting new products from sellers and, according to the company, this is due to the receiving service being congested (unboxing has grown to 100 days).

We feel the company should in future be more critical about what products are accepted to storage. Even if Swap.com does not have to pay for the products before they are sold, receiving and storing of each product costs money. According to our estimate, building up the current product selection has cost around EUR 3.5 million (2.3 million products * USD 1.5 per product). The company can affect the products it is sent with rules and pricing models. The company can improve inventory turnover also by developing the consumers and the right clothing finding each other in the marketplace. This would also require better utilization of user data.

Higher sales margin provides more capital for marketing

The traditional way to improve inventory turnover is to increase marketing on the consumer side. The marketing budget is sustainable if it can be funded with the income from sold goods. Connected with this, the company made its commission model more sustainable already in summer 2017 and Swap receives a higher share of the product price for itself. Previously, the company got 25% + USD 1.5 per sold product, which, according to our estimate, resulted in too small a sales margin for the company to cover fixed costs. Now the seller gets 20% in cash for a product that costs under USD 10, 40% for a product that costs USD 10 to 20 and 60% for a product that costs over USD 20. The seller can also, instead of cash, get Swap.com purchasing credit, in which case the commission is 10% higher of the selling price. We find this change in the commission model to be positive as the larger share of sales the company gets enables gradual increasing of the marketing budget also without external financing. The limited marketing budget should, however, be successfully directed at lucrative targets. Goods receiving must also be reopened at some stage as soon as the current backlog has been dissolved.

There are also difficult to perceive risks related to balancing the activities due to network effects that can result in sales making a downturn. At this time, it is unclear how the efficiency measures will affect the different sides of the network, especially when the marketing budget decreases.

Estimates

The annual accounts and balance sheet of the Finnish parent company Swap Services Oy are publicly available but the US subsidiary Swap Inc. that is responsible for the business activities does not report its figures publicly*. Loudspring has only reported the net sales levels of recent years (see next page) for Swap.com. We have not made a forecast model for the company as without the figures we do not know the outset level for the cost structure and cannot estimate how accurate our forecast is except for net sales. We will, however, make a verbal assessment of the development.

*Loudspring released 14.8.2018 Swap.comin (Group level) netprofit 2017: -19,0 MEUR and 2016: -17,3 MEUR.

Swap.com 3/4

We estimate that net sales growth will stop this year and remain at the current level due to the implemented efficiency measures. We expect the company's sales margin to improve gradually as a result of the changed commission structure (summer 2017). The effect will come with a delay because inventory depletion from products included in the old commission structure will take time. A higher sales margin and possible better inventory turnover based on the company's own actions will release capital to raise the marketing budget moderately, which supports moderate organic growth going forward.

Valuation

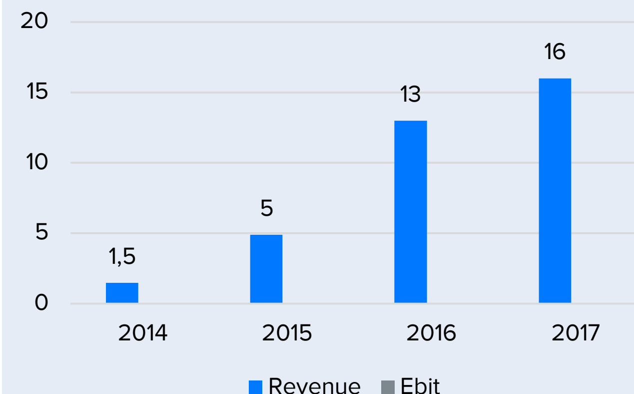
We estimate that the company's historic growth has been expensive and the company focusing on efficiency is the right approach at the moment. We believe that reaching the break-even level would make it easier for the company to gain additional funding and additional funding would, in turn, enable higher growth investments. Through growth, fixed costs can be scaled further. We expect the company is making the right moves to turn profitability around but there is a lot of uncertainty connected with the efficiency of these measures.

Strong net sales growth has, in our view, previously driven the company's valuation, which means that even a high EV/S ratio (around 5x) has been justified with net sales growth figures of over 100% per year. The stop in growth that we expect this year will lower the acceptable valuation level of the company clearly when the valuation 2018e is examined with the EV/S ratio. We would also like to point out that even if the company would achieve the targeted break-even level it is still not enough to justify the valuation with result-based multiples.

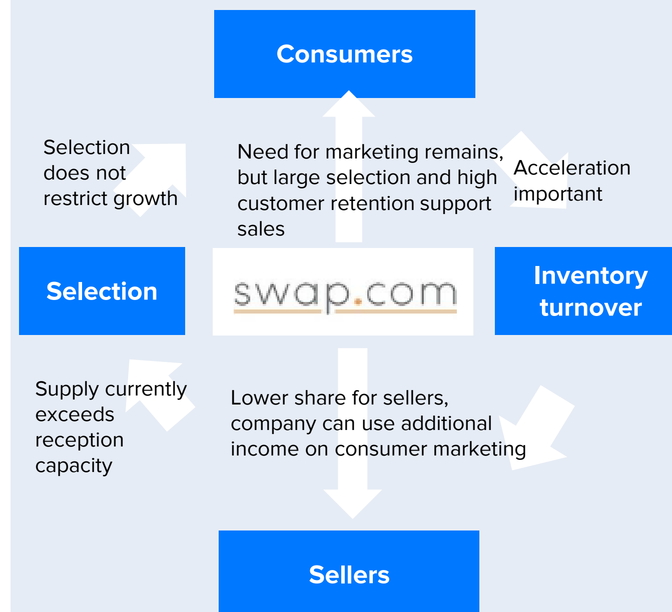
The graph on the following page shows the valuation of large companies operating with the platform business model in relation to predicted net sales growth. The peer group we have constructed includes eBay, Amazon, clothes retailers Zalando and Asos, as well as the smaller Swedish Qliro that owns CDON.com and Nelly.com. The 2019e EV/S ratios of these peers vary between 0.4x and 3.5x, while their growth rate is between 8 and 25%. The size category of the peers is large compared to Swap.com and these companies are making profit. Due to its smaller size and lossmaking, Swap.com should, in our view, be priced at a discount compared to these companies unless Swap's growth rate is clearly higher than that of its peers. In our view, the company's future growth rate is its main value driver.

We have sketched a value matrix for Swap.com if it is able to return to a growth path in 2019 after the efficiency measures. According to the value matrix, for example, a 40% net sales growth would justify an EV/S ratio of 3x and Swap.com's debt-free value would be EUR 59 million.

As a whole, poor transparency concerning the company figures clearly lowers the acceptable valuation level from an investor's viewpoint. There is also uncertainty related to the success of the efficiency measures and there is no visibility in 2019 growth figures. As a result, we value Swap.com very conservatively with a EV/S ratio of 1x based on the actual net sales of 2017 (enterprise value, EV: EUR 14 million). In our view, the company also has some net debt and Loudspring's 6.6% share is valued at around EUR 0,7 million.



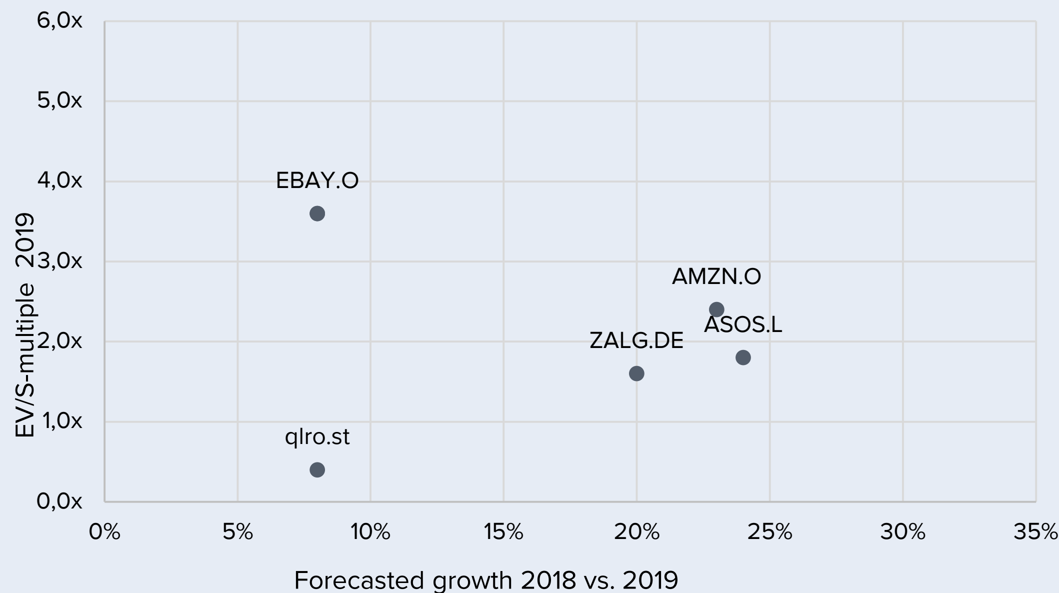
Business model



Swap.com 4/4

Valuematrix (EV)		2019e revenue growth-%					
MEUR		0%	20%	40%	60%	80%	100%
EV/S-multiple	1	14	17				
	2		34	39			
	3		50	59	67		
	4			78	90	101	
	5					126	140
	6						168

The valuation we accept for Swap.com that assumes the company's operating margin is at break-even level (EBITDA% 0 %) in 2019.



Name	Ticker
eBay Inc	EBAY.O
Amazon.com Inc	AMZN.O
ASOS PLC	ASOS.L
Zalando SE	ZALG.DE
Qliro Group AB	qlro.st

Enersize 1/4

Company description and history

Enersize focuses on improving the energy efficiency of industrial compressed air systems. The company's measuring and data collection system and cloud-based software enable analyzing the compressed air systems of customer factories as a whole. Currently, the platform is still operated by Enersize's experts but the company is constantly developing the algorithms of the platform to make them more automated so in the near future, the customer would be able to utilize the system independently. According to the company, the energy saving potential of the measures carried out based on the analysis is 20 to 50% depending on the object and the measures also improve the reliability of the compressed air system.

Enersize was born in 2010 when the Energy unit broke away from Rocca Group Oy. In the same year, Loudspring invested for the first time in the company, EUR 230,000 and gained a 29.8% holding. However, initially customer acquisition did not go as planned and in 2013 a corporate restructuring began in the company. In 2014, Loudspring recruited CEO Sami Mykkänen that started active sales work on the Chinese markets, and in 2015, Enersize started its first important project with Beijing Opto Electronics (BOE1). Loudspring has also supported Enersize's business along the way by granting the company project loans.

At the beginning of 2017, Enersize bagged the big car industry players Scania and Heinz Dürr (main owner of Dürr Group) as investors with help from Loudspring. In June 2017, the company was listed on Stockholm First North at a SEK 173 million valuation collecting SEK 28 million from investors in the IPO. After the listing, Loudspring sold a small chunk of its investment making a 1030% return on investment but due to the small size of the deal the return was small measured in euros. Over the year, Enersize's market value has fallen significantly, which we believe is caused by the fact that the company has not reached the targets set out in the IPO. The company's target was 10 new projects in 2017 and 28 new projects in 2018 but between the beginning of 2017 and May 2018, the company only managed to get 10 new projects. At the same time, conversion of projects to generate net sales has been slow. Loudspring's current undiluted holding in Enersize is 35.6%.

Enormous markets

Industrial compressed air systems consume over 5% of global electricity consumption, thus being one of the less efficient processes in factories. Around 90% of factories use compressed air and the company's potential customers include, e.g. automotive, steel, glass, electronics and the chemical industry. Currently the company faces only little competition. The company claims that this is because OEM manufacturers of compressed air systems have not had incentives to optimize the energy consumption of the system as once the system is made more efficient less compressors are usually needed to produce compressed air.

Since 2014, the company has been active on the Chinese market. We estimate that the Chinese market is one of the hardest markets to conquer, which explains the company's slow progress. Simultaneously, the Chinese market offers big opportunities due to the size of the manufacturing industry in China. The company has progressed clearly over the years as references are important on the Chinese markets and acquiring the first paying customers makes sales a lot easier in our opinion. The company has also been able to find four partners over the years whose contact networks are needed to recognize potential solvent customers and arrange meetings.

This year, Enersize has also activated on the European markets, and the company has started projects in the first factories of the strategic investors Dürr and Scania. The company also has small-scale cooperation with SSAB and Stora Enso in Finland.

Project business model

The company's business model currently relies on project business. In the project model, the cost savings generated from making the compressed air system more efficient are divided between the customer, Enersize and the partner (China). Typically, the contract duration is between 3 and 4 years and we estimate that Enersize's share is around one-half of the savings during the contract period. In the first year, Enersize gets a larger share of the savings and the share decreases gradually over the next years. After the contract period ends, the customer can renew the contract or continue to use the service independently with a monthly charge.

SaaS business model

In future, the company also plans on selling its software as a SaaS service. This requires that the algorithms of the software are made more automated. Part of the money raised in the IPO are directed at this development work. We estimate that the SaaS model will offer the company an interesting opportunity that is better scalable than the project business and the service of smaller factories becomes financially profitable as well.

Enersize 2/4

The company's four person product development department in Lund is currently working with the software and the development work has progressed and the company has already applied for two important patents related to this (press release in March). The company has also announced that it will launch its first SaaS product this year.

Net sales formation

When the company gains a new project, usually an installation and monitoring contract is signed between the company and the factory. This generates front-loaded costs related to the installation of the sensors, adding them to Enersize's cloud service, as well as performing the data analysis. These costs remain as the company's project risk. We estimate that their share is around 20% of the total costs if the project progresses to the next stage. When the right measures to make the compressed air system more efficient are known, Enersize tries to convert the monitoring contract into a savings distribution contract that generates net sales. If the conversion is successful, the company will start the measures in the factory that will generate a bulk of the project costs for the company (man-hours and equipment investments). The customer is billed for the savings achieved as a result of the measures every three months during the contract period. The income generated for the company in relation to the costs are high for projects that move to the savings distribution stage (our sales margin estimate is 80%). The company can also directly make a contract that includes the savings distribution agreement and, in our view, this is typical when Enersize makes agreements with old customers' new factories. This does not generate project risk from front-loaded costs for the company.

Our cash flow estimate for an individual project is described on page 33 and our forecast model is based on it. At least the following factors affect the profitability of a project:

- The energy consumption of the customer's compressed air system and the savings achieved when improving its efficiency. A bigger customer typically offers the company a better ratio between profit and installation costs.
- The negotiated savings distribution between the parties.
- The energy saving achieved with the service grows according to our estimate when the platform develops and, at the same time, we believe that the company's costs will decline as the role of the expert decreases.

Company published a customer list with CMD

Based on the list published in May 2018 with CMD, only three customers (BOE1, Foton, Dürr) have progressed to the savings distribution stage during the company's operating history. Of these, Foton was to start paying already last year but a new car model was taken into production at the car plant, which temporarily interrupted production and delayed the start of payments. In addition, six customers (BOE3, BOE2, Flatglass, Foton Cummins, XinFenming) have, based on the CDM material, agreed with the company on the distribution terms of savings but they had not yet converted into paying customers in May. In addition, monitoring is also, based on the CDM material, ongoing in 4 factories and the company's sales pipe includes 31 factories. In addition in July/August the company also announced Panang Titanium profit sharing and Hankook Tire monitoring contracts. In our opinion, the company should find ways to improve conversion from monitoring projects to projects that generate net sales. In addition to focusing on conversion, we feel the company should continue to take on new installation and monitoring projects as the front-loaded costs are relatively small compared to the income generated from the savings.

In our view, the project business model limits the company's growth potential from net sales generated from projects, but we believe the company is able to launch at least 10 projects that generate net sales per year with its current resources. Based on our estimate, the company should focus on converting BOE's and Foton's other factories because these customers have already been convinced of the value added the service offers. According to our information, BOE has a total of 8 factories and Foton has 10 factories in China. We also believe that Dürr's factories are a potential expansion channel in Europe.

Enersize 3/4

Estimates

The net sales for 2016 and 2017 consisted almost fully of BOE1 and, according to our understanding, this contract ended in Q2'18. We understand that Foton's and Dürr's customer relationships have started accumulating replacement net sales in Q2'18. In addition, we assume in our estimates that BOE3, Foton Cummins and BOE2 will start to generate net sales this year. BOE2 is the most significant of these customers as its size is triple compared to BOE1. We estimate that BOE3 and Foton are in the same size category as BOE1 and Foton Cummins and Dürr are clearly smaller. For 2019 and 2020, we expect the same number of new customer projects (corresponding new net sales and cost structure) to move to income distribution stage as in 2018 (Panang Titianium included in projects that move to income distribution in 2019). Net sales grows clearly in our estimate period because there are no other ending projects in the period apart from BOE1.

In terms of fixed costs, we predict around 30 % growth for the next few years due to recruitment related to R&D, projects and launching sales in Europe. In China, a majority of the company's sales organization consists of partner networks, the use of which does not generate costs for Enersize as they get part of the savings the customer achieves (the partners have some 15 sellers). The company currently employs 7 people in Finland and 4 people in Lund (R&D). The project costs that increase when customers move to savings distribution are visible in the material and services line. We did not include net sales from SaaS business in our estimates at this stage but we see it as a highly interesting opportunity for the scalability of the business. We consider it possible that after 2020, SaaS net sales is the main growth driver. However, this requires success in productization and sales of this service. As a result of the IPO, the company's balance sheet strengthened (2017: liquid funds EUR 1.8 million) and in future, the company can afford to finance projects from its balance sheet and we do not believe new bank loans are required. The biggest uncertainty in our estimate is related to how long existing and new projects take to move to the savings distribution stage and to generate net sales.

Valuation

The company still has a weak track record in converting customer projects into paying customers and we see substantial risk that net sales will grow clearly slower than what we anticipate as customers doubt their buying decisions. On the other hand, new orders can result in a snowball effect and orders will rapidly increase more than we predict. The SaaS model may provide a pillar for net sales in future and we consider this option to somewhat support the valuation. Investors should pay attention to the company's press releases on projects that move to the savings distribution stage as their size and number currently heavily determine the company's value. If the company progresses as we expect, an acceptable valuation level in 2020 is clearly higher than currently (EUR 20-30 million) but this involves considerable uncertainty.

We have decided to price Enersize at its current market value (EUR 10,9 million) in our sum of parts calculation. In our opinion, the stock market value reflects the risks and potentials related to the company's development relatively well. Thus, the value of Loudspring's share is EUR 3,9 million.

MEUR	2017	2018e	2019e	2020e
Revenue	0.22	1.11	3.28	5.18
Materials and services	-0.28	-0.60	-0.80	-0.90
Opex	-0,88*	-1.14	-1.49	-1.93
EBITDA	-0.94	-0.63	0.99	2.34
Depreciations	-0.01	-0.02	-0.02	-0.02
EBIT	-0.95	-0.65	0.97	2.33

Enersize 4/4

Net sales and costs generated for the company in a BOE1 size category project when energy savings amount to 20%*

Expenses: EUR 40, 000 | EUR 140, 000 | EUR 10, 000 | EUR 10, 000

Sales through partners give them some of customer's savings → Installation and monitoring → Year 1 Efficiency measures → Year 2 maintena nce → Year 3 maintenance → Software license

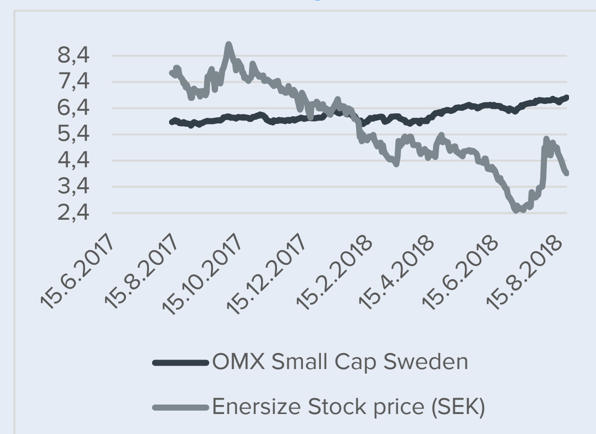
Income: EUR 35 0,000 | EUR 350, 000 | EUR 300, 000 | Monthly billing

Key figures

	Revenue	EBIT	EBIT-%	EV/ Sales	EV/ EBIT
	MEUR	MEUR	%	(x)	(x)
2017	0,2	-1,4	-655 %	49	neg
2018e	1,1	-0,7	-59 %	10	neg
2019e	3,3	1,0	30 %	3	11,0
2020e	5,2	2,3	45 %	2	4,6

Source: Inderes

Enersize's price graph



*IPO 15 June 2017 at the price SEK 6.9 per share (first day +24%).

*** Based on Inderes' estimate**

Nocart 1/5

Company description and history

Nocart provides complete power solutions for small power plants. At the core of this lies the Power Management Unit (PMU). The company's PMU is highly versatile, and it can be connected to different kinds of energy sources (e.g. solar panels, waste-to-energy plants, wind turbines, accumulators and diesel generators) simultaneously. The PMU is also suitable for different purposes of use, and the customer can use it to create their own micro-grid (off-grid) and/or to feed electricity back to the local grid (grid connected).

Emerging markets and other areas that have no reliable public grid system are the company's main market areas. Nocart's power unit enables, for example, bringing electricity to a whole village or improving the availability and reliability of critical power in places such as hospitals. The company was founded in 2010 by its current Managing Director Vesa Korhonen. Loudspring first invested in the company in 2013, acquiring a 10.5% holding with EUR 150,000, and it currently owns 19.4% of the company. Nocart has been growing rapidly in 2014–2017 (CAGR-% 120%).

Market and competition

Small-scale power generation has been based on diesel generators, but hybrid solutions utilizing renewable energy or waste-to-energy plants have quickly become a competitive means of producing electricity. The sharp fall in the production cost of power electronics and in the price of dispersed renewable energy production hardware have led to this transition. In addition, support mechanisms for increasing renewable energy generation are in use in many countries, which clearly supports the market. The market is also going to grow sharply as the introduction of electricity in less developed countries progresses and more developed countries continue to switch to producing energy from renewable sources. The energy production needs of emerging markets and the poor condition of the existing systems play a key role in the continuation of strong demand.

The market segment that Nocart focuses on consists of small power plants in the range of 100 kW–5 MW. So far, many conventional large operators (ABB, Siemens, GE and Danfoss) have not shown much interest in this segment as they mainly focus on large projects (100 MW). However, there are many other operators that offer inverter solutions for power generation in the range that Nocart focuses on, such as Outback Power in the United States and SMA in Germany. Also for example Wärtsilä delivers similar power plant projects to Africa as Nocart. As a result of strong growth in demand, in our view, there are plenty of customers even for a large group of operators and we do not see the company's competitive pressure as a significant threat.

Complete solution provider

Nocart's own product (PMU) comprises power electronics hardware manufactured in Finland through subcontracting and control software manufactured by Nocart. According to our estimate, the company's inverter unit is not the cheapest one available on the market, but its life-cycle cost is competitive due to the durability of the product (a 20-year lifespan). In addition, the electricity produced by the PMU meets the requirements of strict European quality standards, which is a prerequisite for the reliable delivery of electricity-powered devices. The inverter's smart control software enables the customer to optimize their production in real time on the basis of, for example, a price signal or grid capacity. The PMU also has a modular design, and six 5 MW PMUs can be connected to form a 30 MW power plant. The advantage of this is that when one unit malfunctions, the other units will continue operating. The company also sells individual PMUs to other system integrators, and its product portfolio includes 45 kVA container-based solution with solar panels included. We estimate the share of product sales to be roughly 10% of the net sales in 2017.

The clearest added value that Nocart creates for its customers, especially in less developed countries, is through offering an attractive all-in-one package built around the PMU. Such projects form a significant part of the company's net sales (we estimate 90%), and it has been the company's growth driver in recent years. The projects Nocart offers are integrated energy systems that include the technology, financing and customer support needed in energy production. For the projects, Nocart acquired the small power plants suitable for local needs and their installation from its vast supplier network. From such sales, the company also receives the distribution margin. Nocart also uses its own technology in the gasification solutions of biomass-fired power plants and waste-to-energy plants. It is our understanding that the company does not enter external financing arrangements into the books as additional income, however, this is often a prerequisite for the project to move forward as the customer cannot make an investment decision without the financing.

Nocart 2/5

Nocart is also transitioning to using the PPA (power purchase agreement) model in which energy is sold directly to the customer. PPA allows Nocart and its financing partners to maintain ownership of the power plant and generate earnings through a guaranteed price that is based on $/MWh. We view this new business model positively due to our estimate of its higher total profit compared to project-based business and the continuous, more reliable flow of income it provides. The model's negative side is that it ties a lot of capital in investments, however, with the right partners, this will not be a problem.

Project situation

Since it started operations, the company has implemented projects in roughly 15 countries, including Finland, the UK, Belgium, Canada, Nigeria, Kenya, Nepal and Australia. The typical delivery time of an individual project ranges from 12 weeks to 2 years, depending on the size of the project. At present, the company's focus is on Africa and Southeast Asia. Nocart has publicly disclosed that its sales pipeline includes projects worth more than one billion euros in total. Last year, Loudspring announced that the company had secured major projects for delivering power solutions to Kenya, worth EUR 14 million, and Zambia, worth USD 200 million (Since then, Loudspring has repeatedly communicated about delays related to Sambia project). Nocart also recently announced its first PPA, worth EUR 62 million, which will delivered to the city of Mombasa in Kenya.

Case Zambia

In January 2017, Nocart signed a USD 200 million contract for the delivery of a 30–40 MW solar hybrid power plant for a sugar plantation in Zambia. Nocart's delivery is part of a giant USD 11 billion sugar plantation project (cf. 2016 GDP in Zambia USD 20 billion). However, the sugar plantation project has been delayed, which means that Nocart has not been able to deliver the first part of the contract. We estimate that the share of the contract in Zambia from last year's net sales corresponds to the increase in the company's accounts receivable (2017: EUR 25 million vs. 2016: EUR 14.2 million), thus constituting a significant portion of last year's net sales (approximately 40%). The financing need created by the project in Zambia also led to the reduction of money in the bank as the company's cash and cash equivalents at the end of 2017 only amounted to EUR 15,000, while the amount of trade payables took a sharp upward turn (2017: EUR 15.6 million vs. 2016: EUR 3.3 million).

Nocart uses the percentage-of-completion method

The net sales of Nocart accumulate in its profit and loss account in accordance with the percentage-of-completion method it uses. Net sales are accumulated on the basis of the percentage of completion of a project, which is based on actual costs and assumed margin. The amount of net sales is recognized in the balance sheet under accounts receivable until the company receives payment for the delivery. Our understanding is that the company has only entered as income the actual costs (without the margin) of the project in Zambia under the prudence concept. As a result, the EBIT margin is significantly lower than in the previous years (2017: 4% vs. 2016: 36%). It is typical that projects delivered to less developed countries are delayed, especially in Africa. This poses major challenges to financing the company's business.

Financial risks have been minimized, delivery risk remains

According to Nocart, the company does not deliver projects to less developed countries unless it receives an advance payment or a guarantee is issued by a Finnish bank. Nocart receives the money from the bank after the delivery of the export records and the bank collects the money from the customer's financing partner. With this model, Nocart ensures that it gets the money after having made the delivery. This lowers the company's credit risk. However, it does not remove the delivery risk, especially when the delivery is part of a larger project entity. When the customer's project is delayed, it is possible that the customer will refuse to accept Nocart's delivery. In such a case, Nocart can either wait until the project starts moving forward again or sell the finished goods to another project.

Nocart 3/5

Uncertainty associated with accounts receivable

In the 2017 financial statements, the company recorded a credit loss of EUR 4.2 million in the equity section. The loss is attributable to its operating profit in 2016. In our view, the credit loss entry is an indication of the write-down risks associated with accounts receivable. We estimate that there is a write-down risk associated with the current accounts receivable, for example, if the project in Zambia is never completed. This is due to the sunk costs associated with the projects, which will not be recovered even if the products were sold to another project. Also, for example the prices of solar panels have been going down yearly and the company will not necessarily get the same price for the products. In the best case scenario, progress with the project in Zambia could lead to the write-up of accounts receivable (by the amount of the margin).

According to our estimate, a significant portion of the accounts receivable that is not related to the project in Zambia is in fact related to the PPA project in Mombasa. Our understanding is that the company had to make preparations for the project long before the final approval was granted. The write-down risk associated with accounts receivable relating to the PPA model is considerably lower because in this model Nocart's role is that of the client (with a 35% holding). We would like to comment to the investors that our visibility to the previous year's accounts receivable is poor and we do not know exactly what deliveries are included.

Serious need for working capital

At the end of 2017, the company's capital commitment to working capital totaled EUR 10.7 million (including inventory value), which is a substantial amount (around 38% of net sales) and in our view puts a strain on the company's growth. Otherwise, Nocart's business model is capital light, because production is subcontracted, which means that growth can be rapidly scaled. In our view, the company must think of ways to reduce the amount of capital commitment to accounts receivable, in other words, how to better match the company's delivery chain to the customer's schedule. The new PPA model clearly balances the company's income flow, but ties the balance sheet capital to investments in power plants.

Forecasts

Visibility to this year's growth of net sales is limited. Due to growing market demand and increase in the number of personnel, we estimate that the company's net sales will grow in 2017–2019 at an annual rate of approximately 65% (CAGR-%). According to our estimate, the EUR 14 million deal in Kenya announced in December 2017 will be fully visible in net sales in 2018, which serves as the baseline in our forecasts. In addition, according to our estimate, part of the delivery for the project in Mombasa will be visible already in this year's net sales. We estimate that some other, smaller projects will also be ordered from the company. In addition, a small share of the company sales (less than 10%) consists of a steady cash flow from the selling of own products. We must emphasize that a high level of uncertainty is involved in our forecasts on net sales. For example, progress in the project in Zambia could quickly swing the forecast upward by EUR 50 million per year. In our forecast, the company's gross margin is 22% which, according to our estimate, corresponds to the company's usual margin level. At present, Nocart employs 30 people worldwide, which raises the cost level (2017: 20 people on average). In our forecast, operating profit grows in line with the growth of net sales. However, this is conditional on the company avoiding write-downs.

We estimate that the company's working capital stays at a high level (40% of net sales), which increases the financing costs in our forecast and creates a need for capitalization. We estimate that the company will need an additional EUR 10 million of capital by the end of this year to be able to finance its growth. In our model, we have assumed that Loudspring will invest approximately EUR 2 million in Nocart this year with respect to its holdings, but this assumption involves uncertainty.

Company's funding situation has continued to be tight through out the year. Varma even initiated a bankrupty proceedings against Nocart in the beginning of August. This was however withdrawn after Nocart paid its debts. We estimate that the collection of new funding has got considerably easier for Nocart after the Mombasa deal was closed.

Our understanding is that in the power plant project in Mombasa, the standard project margin is applied to Nocart's delivery. After completion, with respect to its holding, Nocart will also have cash inflow from electricity sales based on the guarantee price of 90 $/MWh for 20 years with minimal operating costs. The first 10 MW should start generating cash flow in 2020 and the latter 25 MW in 2023. The cash inflow from electricity sales is not yet visible in our forecasts, but we roughly calculate that the current net value of the investment in Mombasa for Nocart is around EUR 10 million (20% WACC), which makes it a very significant order (cf. total value of Nocart).

Nocart 4/5

Valuation

In general, companies that operate in emerging markets must be priced according to lower valuation multiples due to the higher risk associated with them. According to our estimate, slightly over half of Nocart's net sales consists of project business and the rest of the company's own technology. Companies that rely on project business are usually priced at a discount compared to clean technology companies. Nocart's high level of accounts receivable in the balance sheet lowers the valuation we accept for the company for two reasons:

1. Commitment of additional capital lowers the return on equity (ROE-%).

2. There is a write-down risk associated with the current accounts receivable

In our view, the company must also be priced at a discount in comparison to the peer group presented on the next page due to its small size.

We have decided to price Nocart at the 2018e P/E ratio of 10x, which means that the company's value is EUR 44 million. With the 2018e and 2019e P/E ratio, the earnings-based discount rate would be approximately 40–50% compared to the peers.

The value of Loudspring's current holding of 19.4% is around EUR 6.6 million when taking into account our estimate of the company's additional capitalization. If Nocart was able to reduce the amount of capital commitment to accounts receivable in relation to net sales (without write-downs), our multiple for the company would be significantly higher than the one used here (P/E ratio 15–20x). However, at present the visibility of working capital trends is poor, which is why we want to apply a clear margin of safety in the valuation of Nocart. Investors should monitor the cash flow and development of accounts receivable at Nocart in addition to the development of its net profit.

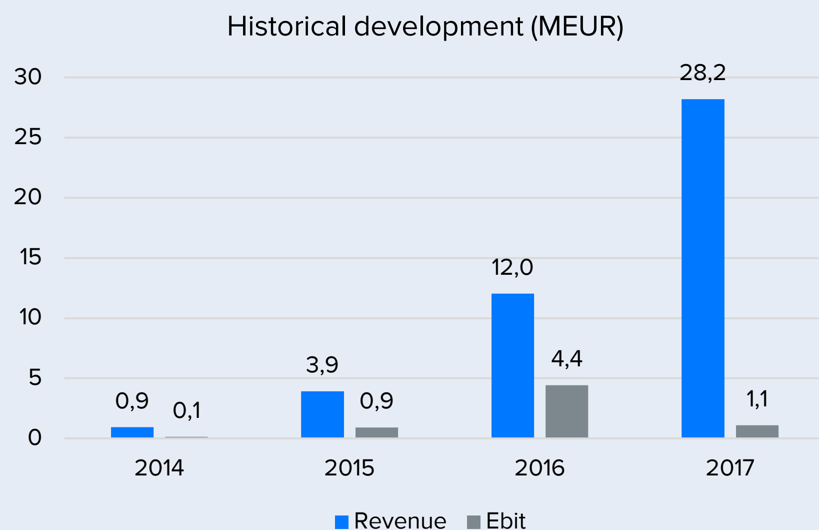
We want to emphasize to the investors that our visibility to Nocart's risks associated with emerging markets is limited and also the visibility for the funding negotiations is limited. As a private company Nocart is not obliged to report these risks. For this reason, we find it justified to apply the margin of safety in the valuation of the company.

Nocart 5/5

	Market cap	P/E 18e	P/E 19e	EV/S 18e	P/B 18e
Siemens AG	102663	16	15	1.3	2.2
ABB Ltd	42628	17	15	1.2	3.2
Schneider Electric SE	40110	15	14	1.8	1.9
Alstom SA	8516	22	20	0.9	2.2
SMA Solar Technology AG	1236	34	32	0.8	1.6
Advanced Energy Industries	2025	12	11	.	-
Eaton Corporation PLC	30228	15	14	2.0	2.0
Enphase Energy Inc	464	58	21	1.8	-
PNE Wind AG	194	28	9	-	0.8
Mitsubishi Electric Corp	25335	12	12	0.8	1.4
Median	**25335**	**17**	**15**	**1.2**	**1.9**
Nocart	44	10.0	7.2	1.0	2.8 *
Difference-%	-99.8%	-40%	-51%	-20%	49%

*assumed EUR 10 million additional capitalization

Source: Thomson Reuters/Inderes 30 July 2018



Source: Inderes

Forecasts

MEUR	2016	2017	2018e	2019e
Revenue	12.0	28.2	50.0	75.0
Materials	-4.2	-24.4	-39.0	-58.5
Employee expenses	-1.0	-1.5	-2.5	-3.8
Depreciation	-0.0	-0.0	-0.1	-0.1
Other expenses	-2.4	-1.2	-2.0	-3.0
EBIT	4.4	1.1	6.4	9.7
Interest	-0.5	-0.4	-1.0	-2.0
Tax	-0.8	-0.8	-1.1	-1.5
Net income	-1,1**	0.6	4.4	6.1

**adjusted with a EUR 4.2 million write-down attributable to credit loss

Venture portfolio

Slow development for companies in the venture portfolio

The venture portfolio contains interesting companies from various industrial sectors. A majority of them are at the beginning of their path and the final business model is being formed even if they have been operational for a longer time. Their valuation involves more uncertainty than usual. Currently, the contribution of these companies in the sum of parts calculation is small so we have not analyzed these companies that thoroughly. The situation can change if one of the companies is successful in realizing its potential. Valuations are primarily based on the company's balance sheet values.

MetGen

MetGen produces enzymes to make industrial processes more efficient. In the paper and pulp industry, the company's enzymes can be used to speed up the production of biofuels. The company's net sales in 2017 was EUR 0.3 million and the loss for the period was EUR -1.0 million. Encouraging in terms of development is that the company signed a license agreement on lignin valorization technology with Sweetwater Energy in September 2017 and the listed US company Ecolab acquired a minority holding in the company in December 2017. Loudspring made its first investment in the company already in 2010 and it now owns 2.4% of the company. At this stage, we estimate Loudspring's holding to be worth **EUR 100,000**.

Oricane

Oricane is a Swedish company of which Loudspring owns 21,2 %. Oricane specializes in developing algorithms used in energy-efficient data transfer. The Internet increase its share of world energy consumption rapidly and there is a clear need for the company's technology. The company has not, however, been successful in commercializing its technology and has shifted its focus towards licensing its technology or selling its patent portfolio. Loudspring made its first investment in the company in 2013. We estimate that Loudspring's holding is currently worth **EUR 190,000** and the value is the same as the company's balance sheet value of which 50% was written down in 2017.

Sansox

Sansox is a company that specializes in water treatment of which Loudspring owns 9.6%. Loudspring made its first investment in the company in 2014. With the help of the company's main product, the oxygen content of water can be raised, which means that, e.g. iron, manganese and impurities can be easily removed from water. The company product can be used, e.g. for waste water purification, in fish farms and industrial plants. According to the company, the product can efficiently replace the oxidation technologies currently used by industry. The company has carried out pilots in the pulp and paper industry. The water oxidation market is estimated to be worth EUR 10-20 billion but the company has not yet found a solution that would be scalable for the wider market. We estimate that Loudspring's holding is currently worth **EUR 100,000**.

Aurelia Turbines

Aurelia Turbines has developed a new micro turbine technology for decentralized electricity production. The company claims that its micro turbines are 30% more efficient than the solutions currently on market. Product development has been made in cooperation with Lappeenranta University of Technology (LUT). The company has patented the technology and mass production has recently started. The company has signed three marketing partnerships and one integrator partnership. Loudspring owns 2.3% in the company and invested in it for the first time in 2014. Aurelia's product is still in its infancy and its likelihood of succeeding is difficult to assess. However, the market is huge (EUR 30 billion) and if the company succeeds in commercializing its technology the potential is high. At the same time, the risk is also high. Last year, the company did not yet have net sales and the loss for the period was around EUR -3 million. At this stage, we estimate Loudspring's holding to be worth around **EUR 300,000**.

Watty Ab

Watty is a Swedish company. The devise and algorithm utilizing AI that the company has developed allows the customer to monitor the individual energy consumption of his/her devices linked to the electricity meter in real time. The service is sold in Sweden as a monthly billed SaaS service (SEK 39 per month) and installation of the service costs SEK 699 to the customer. Company growth has long been slow but in 2017, Watty has been able to increase the number of service users. The company has announced that in 2018 it will focus on opening up new markets in cooperation with European energy sector players.

We believe the product can be scaled to other markets but currently it is only sold in Sweden. Loudspring owns 3.8% of the company. Loudspring made its first investment in the company in 2015 and has been involved in organizing a funding round for the company. At this stage, we estimate Loudspring's holding to be worth around **EUR 300,000**.

Balance sheet and profit and loss account

No net debt on the balance sheet

Loudspring's balance sheet total at the end of 2017 was EUR 24.8 million. Most of the balance sheet assets consist of investments in associated companies (EUR 19.9 million). Other major assets of the firm include cash and cash equivalents (EUR 3.6 million) and loan receivables from associated companies (EUR 0.7 million).

Loudspring has EUR 22.7 million in equity and EUR 2.1 million in debt. The total amount of debt includes EUR 1.5 million in long-term debt, which consists of deferred tax liability, and approximately EUR 0.6 million in short-term debt. In the end of 2017 Loudspring net cash position was 4 MEUR.

Overall, Loudspring's assets are clearly centered in the associated companies, and their balance sheet values can be increased or written down on the basis of the valuation of the most recent funding rounds or, in the case of listed companies, based on the market value. The balance sheet value can also be written down if the firm's outlook is clearly showing a downward turn. On the other hand, revaluations are not made without a valuation derived from a funding round. In 2017, no major changes were made to the balance sheet value, but in 2016, the firm made an audited revaluation of EUR 13.6 million to its holdings (Enersize, Sofi Filtration, Nocart and Nuuka Solutions) in total (based on new funding rounds). According to our valuation, in addition to this, the holdings include hidden value that is not shown on the balance sheet.

Loudspring's balance sheet does not show any debt free and, throughout its history, the firm has not utilized leverage in its investment activities. This is understandable due to the high risk profile of early-stage companies. In our opinion, however, Loudspring could utilize its leverage moderately in upcoming years as its holdings grow in size, especially if the associated companies begin to generate cash flow for Loudspring. At present, the firm has an untapped EUR 3.5 million credit facility issued by Nordea bank.

P&L does not show the development of holdings

We have not created a separate forecast model for Loudspring because the figures of the investee companies are not at present consolidated in the parent company's profit and loss account. This is also the reason why traditional valuation methods like multiples (P/E-ratio, EV/EBITDA) or DCF-calculation cannot be used.

Therefore, the P&L mainly shows the development of group costs. In 2017, the firm's net sales amounted to only EUR 29,000 and its operating profit (EBIT) was EUR -1.3 million. In the previous year (2016), the firm's net sales were significantly higher (EUR 400,000). This was due to billable consultation projects related to the arranging of financing to associated companies. Despite this, the firm's operating profit in 2016 was negative at EUR -1.1 million. We estimate that the standard level of profit from operations for the firm will be negative at around EUR -1.3 million in upcoming years, and we have used this figure to estimate the level of group costs.

The finance income and finance costs that contain non-recurring income and capital losses arising from exits are recognized in the P&L. These lines can vary greatly due to potential exits. The interest income on loans granted to the holdings and the interest expenses incurred from loans taken out from financial institutions are also factored into finance income and finance costs. In our view no significant exits from core holdings will be made in the near future, but the Loudspring has communicated that it is planning partial exits from companies in the venture portfolio. However, our forecasts are not aimed at predicting potential exits in advance because timing them is virtually impossible.

No dividends will be paid in upcoming years

The firm's value creation is based on the growth of the value of its holdings, and investors should not expect the firm to pay dividends in the near future. Based on the firm's excellent track record, it also should use its limited capital to support the growth of its holdings and in capital allocation in order to maximize the shareholder value.

Valuation and recommendation

Sum of parts serves as the baseline for valuation

In our view, the valuation of Loudspring is primarily based on the value of its holdings (separate valuations) and on Loudspring's ability to create shareholder value. Our view is also that an investment company premium can be accepted for the firm due to its excellent track record. In the previous chapters, we have valued different holdings. In this chapter, we focus on the overall valuation of the firm.

We estimate that the gross value of Loudspring's holdings is EUR 29.6 million. To determine the net present value of the group costs, we have used the 20% WACC in discounting them as it equals the average interest rate applied to the holdings. In our calculation, the current net value of group costs is EUR -6 million, which is based on the annual costs of EUR 1.3 million. The sum of parts for the group's components is therefore EUR 23.6 million, or roughly EUR 0.88 per share (with non-listed class K share and the dilutive effect of options considered).

Price premium is justified

In our view, Loudspring's excellent track record has earned it an 20 % investment company premium (instead of the regular investment company discount). Between year-end 2013 and June 2018, the CAGR-% for equity per share that takes into account hidden values is 36%. In addition, the company's businesses are highly diversified and they balance out each other's risks, which also supports the price premium. The 20 % price premium we have used also largely compensates for the negative effect of the group costs in the sum of parts calculation, which is justified as the management of Loudspring provides considerable support to the holdings.

Even a price premium higher than that could be considered justified for the firm on account of its track record. From the perspective of the shareholder value generated by the firm, however, the time series is relatively short, which limits the premium we have accepted for the firm. We point out that if the firm can maintain the equity per share growth rate close to 40%, its value and target price will rapidly increase.

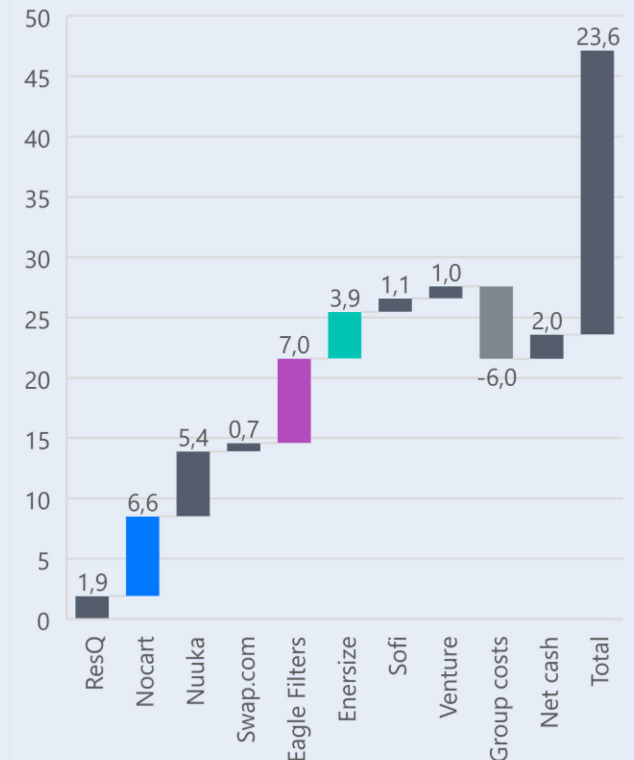
The sum of the parts and the premium we accept leads to our target price 1,05 euros. During this year the Loudspring stock price has fallen considerably. We think the stock is undervalued and initiate the coverage of the company with buy recommendation.

Major growth potential in the sum of parts

In our view, with the investee companies still in their early stages, the current valuations of Loudspring's components are far from reflecting their full potential. Pages 43–45 contain our value matrix and lists of the drivers and risks affecting the valuation of the key holdings.

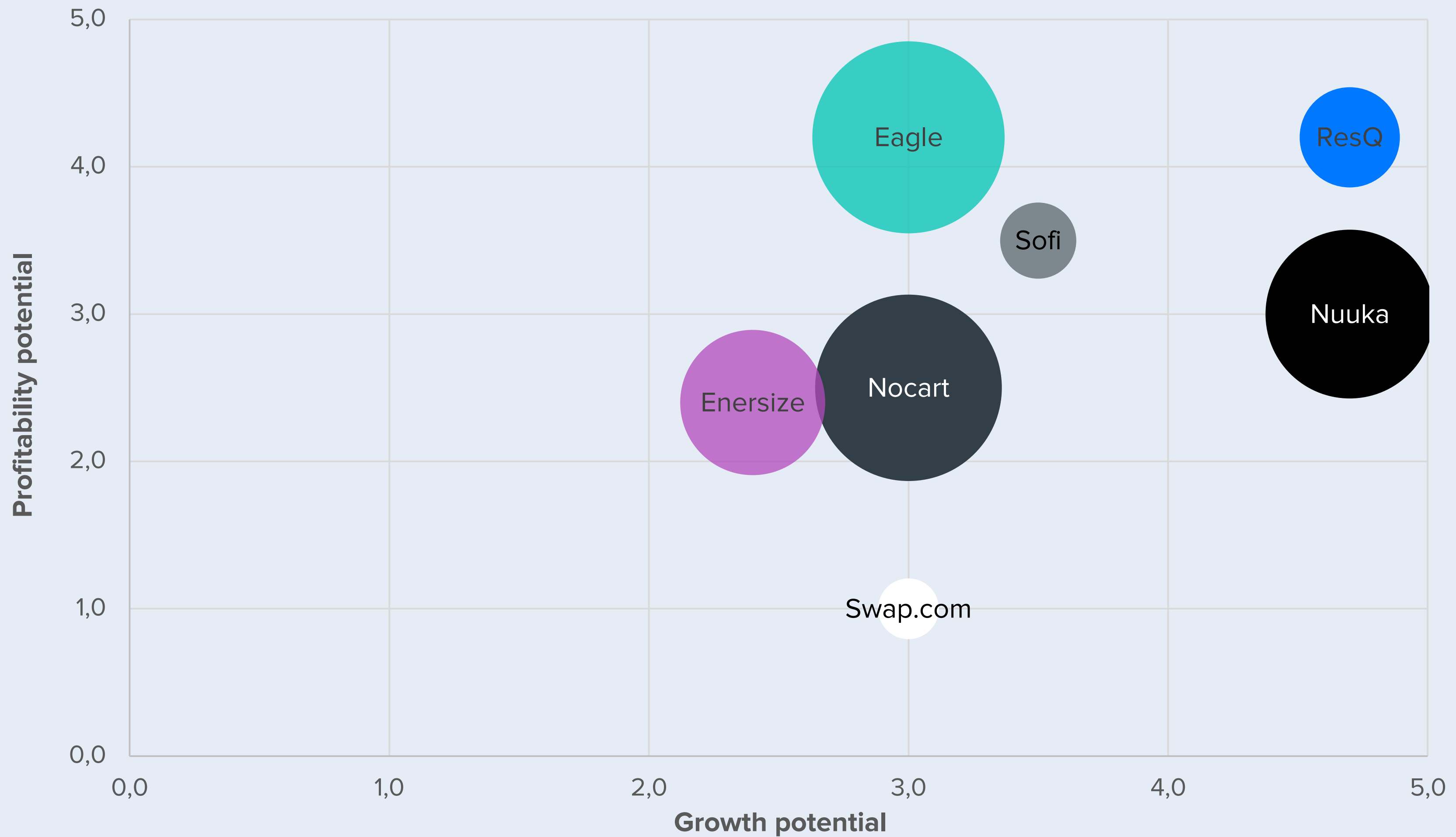
What to follow

During this year, the firm aims to start providing guidance on majority-owned companies, but the final form of the guidance remains unclear. The development of core holdings as well as the development of Loudspring's ownership interest in these companies strongly affect the value of Loudspring. Investors should therefore pay attention to the development of the holdings based on the news about them, as well as on how Loudspring's ownership interest in these companies changes.



Source: Inderes

Value creation ability of investee companies



Source: Inderes; the image is an illustration. The different sizes of the spheres depict the value of Loudspring's investment, and their position refers to the investment's potential to create value.

The potential of investee companies 2020 (whole company value)

Nuuka

Value matrix (EV) MEUR	SaaS net sales growth CAGR-% 2017–2020e					
EV/Sales multiple (for SaaS net sales)	60%	90%	120%	150%	170%	200%
4	4.5	6.4	8.9	12.3	15.1	20.1
6	5.9	8.7	12.6	17.6	21.8	29.2
8	7.3	11.0	16.2	22.9	28.5	38.4
10	8.7	13.4	19.8	28.3	35.2	47.6
12	10.0	15.7	23.4	33.6	41.8	56.8
14	11.4	18.0	27.0	38.9	48.5	66.0

Value drivers

- Growth rate of SaaS net sales
- Strong market growth of smart buildings
- Securing big accounts quickly (HKI, ICA)
- Head start over competitors in open interfaces
- Acquisition card possible

Risk factors

- Small size
- Large IT firms are potential competitors

Eagle

Value matrix (P) MEUR	Net operating profit 2020e					
P/E multiple	0.50	1.00	1.50	2.00	2.40	3.00
14	7.0	14.0	21.0	28.0	33.6	42.0
16	8.0	16.0	24.0	32.0	38.4	48.0
18	9.0	18.0	27.0	36.0	43.2	54.0
20	10.0	20.0	30.0	40.0	48.0	60.0
22	11.0	22.0	33.0	44.0	52.8	66.0
24	12.0	24.0	36.0	48.0	57.6	72.0

Value drivers

- Profitable growth
- Engie is an important reference
- High customer retention
- Capital light business model

Risk factors

- Small size
- Slow historical growth
- Restructuring debt

The potential of investee companies 2020 (whole company value)

ResQ

Value matrix (EV) MEUR	Net sales growth CAGR-% 2017–2020e					
EV/Sales multiple	50%	70%	90%	120%	150%	200%
5	5.1	7.4	10.3	16.0	23.4	40.5
6	6.1	8.8	12.3	19.2	28.1	48.6
8	8.1	11.8	16.5	25.6	37.5	64.8
10	10.1	14.7	20.6	31.9	46.9	81.0
13	13.2	19.2	26.8	41.5	60.9	105.3
15	15.2	22.1	30.9	47.9	70.3	121.5

Value drivers

- Net sales growth is a driver in the valuation, but profitability must be ensured
- Huge market with not much competition at this stage
- Highly scalable, capital light business model
- Securing a new, substantial financing package would give the company the resources to grow faster

Risk factors

- Non-profitable allocation of capital
- Earlier unsuccessful market entry to Germany
- Threat of tightening competition

Nocart

Value matrix (P) MEUR	Net operating profit 2020e					
P/E multiple	4.00	6.00	8.00	10.00	12.00	14.00
5	20.0	30.0	40.0	50.0	60.0	70.0
6	24.0	36.0	48.0	60.0	72.0	84.0
8	32.0	48.0	64.0	80.0	96.0	112.0
10	40.0	60.0	80.0	100.0	120.0	140.0
12	48.0	72.0	96.0	120.0	144.0	168.0
14	56.0	84.0	112.0	140.0	168.0	196.0

Value drivers

- Huge and rapidly growing markets in less developed countries
- PPA model
- The company’s ability to handle large projects

Risk factors

- Operating in emerging markets
- Commitment of capital to working capital
- Delays in large projects (Zambia)
- The uncertainty related to funding

The potential of investee companies 2020 (whole company value)

Enersize

Value matrix (P)		Net income 2020e					
MEUR		0.50	1.00	1.50	2.00	3.00	4.00
P/E multiple	10	5.0	10.0	15.0	20.0	30.0	40.0
	12	6.0	12.0	18.0	24.0	36.0	48.0
	14	7.0	14.0	21.0	28.0	42.0	56.0
	16	8.0	16.0	24.0	32.0	48.0	64.0
	18	9.0	18.0	27.0	36.0	54.0	72.0
	20	10.0	20.0	30.0	40.0	60.0	80.0

Value drivers

- Huge market with not much competition at this stage
- Profitable growth and securing paying customer projects
- Sales in China get easier with every new reference
- Capital light business model
- New SaaS model

Risk factors

- Realized net sales still low
- Customers' conversion has been slow
- Competitors may enter the markets

Balance sheet

Asset (MEUR)	2016	2017	2018e	2019e	2020e
Non-current assets	**20,1**	**20,3**	**20,2**	**20,2**	**20,2**
Goodwill	0,0	0,0	0,0	0,0	0,0
Intangible assets	0,4	0,3	0,2	0,2	0,2
Tangible assets	0,0	0,0	0,0	0,0	0,0
Assciated companies	19,7	20,0	20,0	20,0	20,0
Other investments	0,0	0,0	0,0	0,0	0,0
Other non current assets	0,0	0,0	0,0	0,0	0,0
Deferred tax assets	0,0	0,0	0,0	0,0	0,0
Current assets	**2,0**	**4,6**	**3,3**	**2,0**	**1,0**
Inventories	0,0	0,0	0,0	0,0	0,0
Other current assets	0,6	0,9	0,9	0,9	0,9
Receivables	0,2	0,1	0,1	0,1	0,1
Cash and equivalents	1,2	3,6	2,3	1,0	0,0
Balance sheet total	**22,2**	**24,9**	**23,5**	**22,2**	**21,2**

Lähde: Inderes

Liabilities (MEUR)	2016	2017	2018e	2019e	2020e
Equity	**19,8**	**22,7**	**21,4**	**20,1**	**18,8**
Share Capital	0,1	0,1	0,1	0,1	0,1
Retained earnings	-4,3	-5,8	-7,1	-8,4	-9,7
Shares repurchased	0,0	0,0	0,0	0,0	0,0
Revaluation reserve	12,7	11,8	11,8	11,8	11,8
Other equity	11,3	16,7	16,7	16,7	16,7
Minorities	0,0	0,0	0,0	0,0	0,0
Non-current debt	**2,1**	**1,5**	**1,5**	**1,5**	**1,5**
Deferred tax liabilities	2,1	1,5	1,5	1,5	1,5
Provisions	0,0	0,0	0,0	0,0	0,0
Long term debt	0,0	0,0	0,0	0,0	0,0
Convertibles	0,0	0,0	0,0	0,0	0,0
Other long term liabilities	0,0	0,0	0,0	0,0	0,0
Current debt	**0,3**	**0,6**	**0,6**	**0,6**	**0,9**
Short term debt	0,0	0,3	0,3	0,3	0,6
Payables	0,3	0,4	0,3	0,3	0,3
Other current liabilities	0,0	0,0	0,0	0,0	0,0
Balance sheet total	**22,2**	**24,9**	**23,5**	**22,2**	**21,2**

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Recommendations

2017
Recommendations

2018
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