

# Penneo

## Digital compliance in signing & AML workflows

- Expanded product offering facilitates ARR growth
- New capital to continue delivering strong SaaS metrics
- DKK 30-60 FV range derived from intl. and Nordic peers

### Leveraging audit vertical ownership into adjacent industries

Penneo is a B2B SaaS (Software-as-a-Service) provider originally established to help primarily the auditing industry with digital document signatures, thereby replacing pen and paper with a digital solution. In October 2020, Penneo added onboarding and KYC & AML compliance to its product offering via the acquisition of CLA Reply, thereby expanding its offering to facilitate further upselling to existing clients and to cater for adjacent industries governed by AML regulation such as financial institutions. Penneo is present in Denmark, Sweden, Norway, Finland, Belgium, and Germany.

### Capital raise to continue scaling the business at a rapid pace

Focusing on subscriptions revenue, Penneo is ARR-driven (annual recurring revenue) and guides for ARR of DKK 56-60m in '21, corresponding to y-o-y ARR growth of 51-62%. The high growth is a result of low churn of ~2%, high uplift of existing clients of ~32% and ~32% growth from new clients. With a proven product market fit, Penneo intends to raise DKK 100m to continue scaling the business rapidly through roll-out of its KYC solution to existing clients in the auditor vertical and new customers in AML regulated industries while securing its audit vertical ownership in current countries. Penneo plans to migrate to Nasdaq Copenhagen in connection with the publication of its annual report in Q1 2022. The intended capital raise of DKK 100m is to be concluded no later than by the official listing on Nasdaq Copenhagen.

### DKK 30-60 FV range derived from intl. and Nordic SaaS peers

We derive the high end of our fair value range via a '23e EV/Sales multiple that is 20% lower than that of DocuSign, the global market leader and direct competitor, at 17.3x, which on a fully diluted basis yields a fair value of DKK 60 per share. The low end of our fair value range arises from a comparison with a group of less comparable and more slowly growing Nordic SaaS companies, indicating a fair value per share of DKK 30 on a fully diluted basis.

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DKKm	2019	2020	2021e	2022e	2023e
Sales	28	36	57	88	128
EBITDA	-0	-13	-20	-15	3
EBITDA margin (%)	-0.8	-37.0	-34.6	-16.9	2.4
EBIT adj	-2	-16	-24	-20	-3
EBIT adj margin (%)	-7.8	-45.7	-42.3	-23.1	-2.4
Pretax profit	-3	-17	-25	-21	-4
EPS rep	-0.09	-0.43	-0.78	-0.63	-0.01
EPS adj	-0.03	-0.33	-0.64	-0.45	0.20
Sales growth (%)	na	28.8	59.1	55.1	46.5
EPS growth (%)	high	-382.3	-81.4	20.1	98.6

Source: ABG Sundal Collier, Company data

Reason: Initiating coverage

Company sponsored research

Not rated

Share price (DKK) 01/09/2021 35.0  
Fair value range (per share) 30-60

IT, Denmark  
PENNEO.CO/PENNEO DC

MCap (DKKm) 880  
MCap (EURm) 118  
Net debt (EURm) 3

No. of shares (m) 25.1  
Free float (%) 43  
Av. daily volume (k) 11

Next event Q3 report: 25 Nov

### Performance



Absolute (%) 1m 3m 12m  
-20.9 -25.6 27.3

Source: FactSet

	2021e	2022e	2023e
P/E (x)	-44.6	-55.8	-4,115.7
P/E adj (x)	-54.7	-78.1	177.2
P/BVPS (x)	25.61	55.76	56.66
EV/EBITDA (x)	-54.1	-73.0	351.4
EV/EBIT adj (x)	-44.2	-53.5	-346.3
EV/sales (x)	18.70	12.33	8.45
ROE adj (%)	-41.3	-53.0	37.4
Dividend yield (%)	0	0	0
FCF yield (%)	-2.9	-2.2	-0.4
Lease adj. FCF yld (%)	-3.0	-2.2	-0.4
Net IB debt/EBITDA	-1.0	-2.9	15.7
Lease adj. ND/EBITDA	-0.2	-1.9	10.6

Please refer to important disclosures at the end of this report

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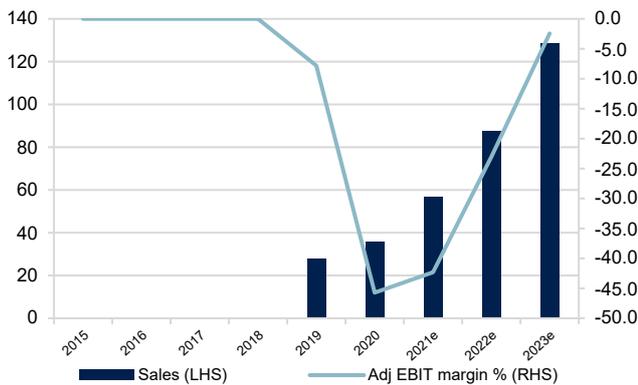
### Company description

Penneo is a SaaS provider originally established to support primarily the auditing industry with digital document signatures thereby replacing pen and paper with a digital solution. In October 2020, Penneo added onboarding and know-your-customer (KYC) & AML compliance to its product offering via the acquisition of CLA Reply thereby expanding its offering to facilitate upselling to existing clients and to cater for adjacent industries governed by AML regulation such as financial institutions. Penneo is present in Denmark, Sweden, Norway, Finland, Belgium and Germany.

### Risks

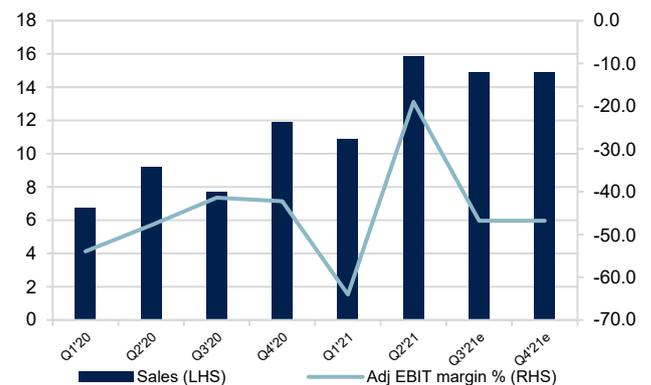
The market for Penneo’s solutions is highly competitive and some competitors have more financial strength and greater broader global distribution while their technical and marketing resources may put them in a better position to respond more swiftly and effectively to new opportunities and technologies. Larger players may begin to offer or further develop their solutions targeted at the auditing vertical potentially forcing Penneo into a price war. Lower levels of digitisation and national adoption rates of eIDs outside the Nordics may make expansion outside the Nordics more difficult.

#### Annual sales and adj. EBIT margin



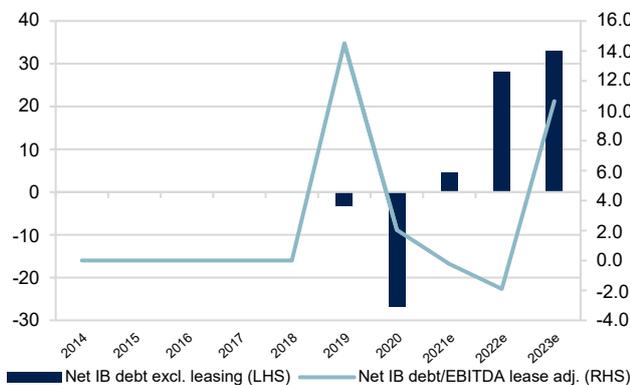
Source: ABG Sundal Collier, Company data

#### Quarterly sales and adj. EBIT margin



Source: ABG Sundal Collier, Company data

#### Lease adj. net debt and ND/EBITDA



Source: ABG Sundal Collier, FactSet

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## Penneo in brief

**Penneo is a SaaS company offering solutions for digital signatures with a strategic focus on the auditing industry. While Penneo initially only had a digital signature solution, today it has an end-to-end solution covering onboarding and know-your-customer (KYC), document collection and handling, and digital signatures. The company is present in six markets, including all the Scandinavian countries, Belgium and Finland, and guides for an annual recurring revenue of DKK 56-60m in 2021 (reported DKK 48m in H1 2021). Penneo was listed on First North in June 2020 and has expressed an intention to list on the main market in connection with its 2021 annual report publication in early 2022.**

### Penneo's vision

*"A world where being accountable for the way you do business is a matter of course"*

### Penneo's mission

*"We want to make it easy and beneficial to companies to meet regulatory compliance requirements"*

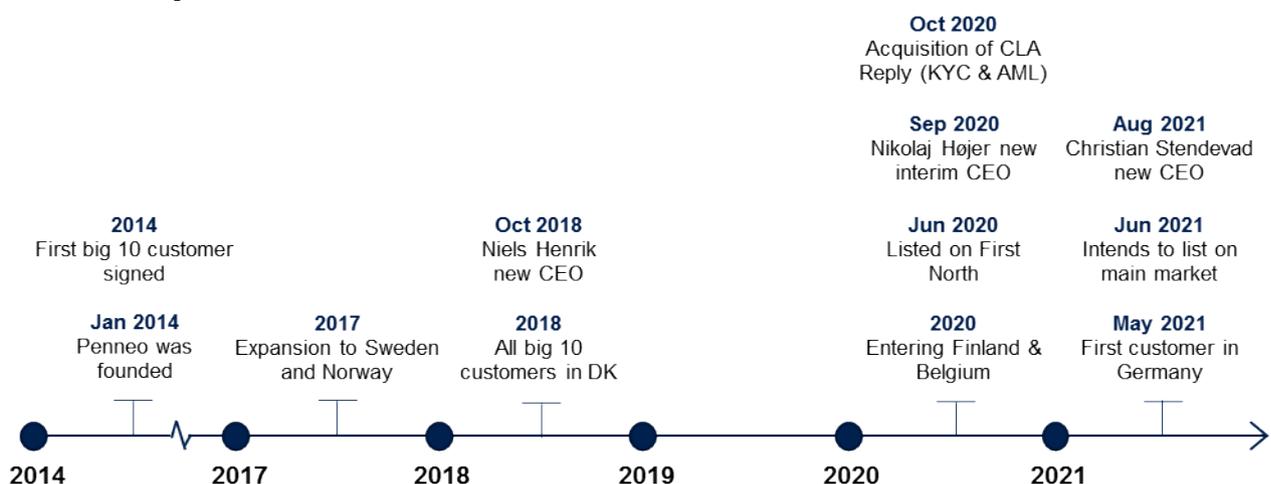
Penneo was founded in 2014 by six entrepreneurs who created the digital "pen" (new pen = Penneo), allowing its users to use NemID (Danish governmental eID) to sign documents digitally. From the very beginning Penneo has had a strategic focus on the auditing and accounting industry and is aiming at becoming the de facto standard within annual report signing. The company has already achieved this in Denmark, where it was used to sign more than 66% of all annual reports in 2020. Through Penneo's relationship with auditors, the company benefits from strong network effects as the auditors' clients, who are decision makers from various industries, experience the benefits of Penneo's solutions. As such, network effects facilitate cross-industry sales opportunities.

Penneo started its internationalisation journey in 2017, when it entered Norway and Sweden. In 2020, the company was listed on First North while raising DKK 50m to fuel its expansion into new markets such as Finland and Belgium in late 2020, and Germany in May 2021.

In October 2020, Penneo acquired CLA Reply to add onboarding and know-your-customer (KYC) as well as AML compliance to its product offering. Thus, Penneo today has an end-to-end solution, offering not only digital signatures but also data collection and handling, client onboarding with know-your-customer (KYC) and AML compliance. This has enabled it to target new, adjacent industries that are subject to AML legislation, such as financial institutions.

Today, Penneo has achieved an ARR of DKK 48m (H1'21), has 84 employees and serves more than 2,000 customers across Denmark, Norway, Sweden, Belgium, Finland, and Germany.

### Penneo's history in brief



Source: penneo.com, ABG Sundal Collier

In June 2021, Penneo announced its intention to list on the main market (Nasdaq Copenhagen) in connection with releasing its 2021 annual report during the first quarter of '22. At the same time, the company updated its strategy to focus on three revenue streams for generating further growth:

- Roll out KYC/AML product to existing audit customers in the Nordics.
- Penetrate the financial vertical with its KYC/AML and signing product in Denmark.
- Secure audit vertical ownership in current countries.

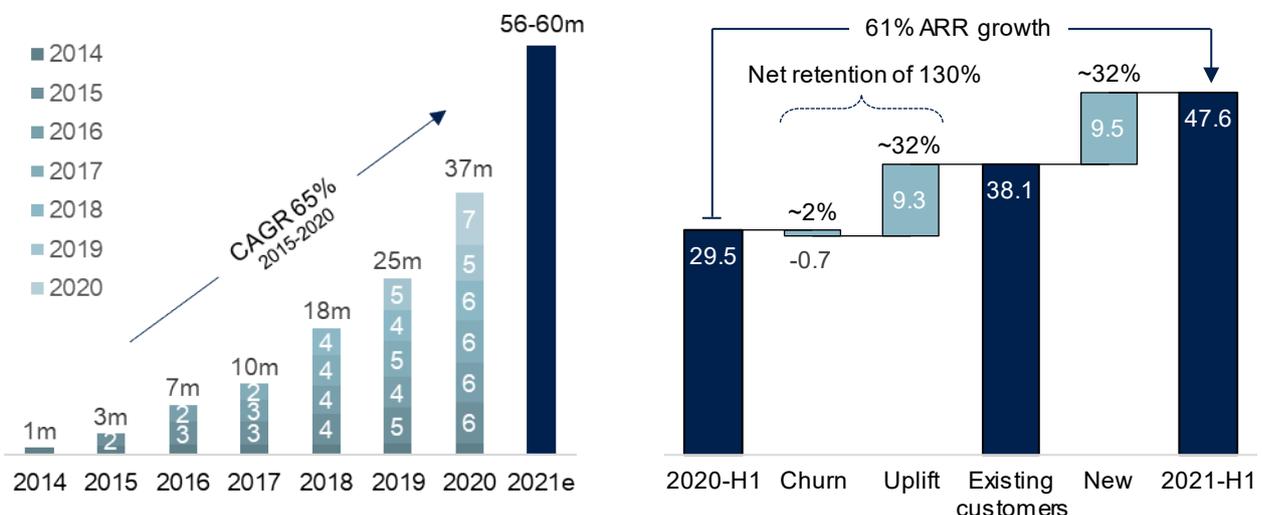
Together, these three revenue streams are expected by management to help Penneo reach its guidance of DKK 56-60m ARR in 2021 and to fuel further growth in subsequent years.

**Penneo is a fast-growing SaaS company**

Penneo is an ARR-based SaaS company, meaning that it focuses on its recurring, or subscription, revenue. In 2020, 68% of its revenue was subscription revenue, based on its new three-tier subscription model (Basic, Advanced, and Premium).

Since its foundation, Penneo has been fast-growing with a revenue CAGR from 2015-2020 of 65%. With the DKK 50m raised in connection with the IPO in June 2020, Penneo managed to increase its ARR growth from 40% in 2019 to 48% in 2020 and is expecting ARR growth of 51-62% in 2021. Scaling fast and conquering market share is paramount for a SaaS company like Penneo. In the last twelve months Penneo has on average paid ~DKK 21,700 for acquiring a new customer, while the new customers only contribute an average of ~DKK 18,800 in ARR during the first year. Thus, Penneo loses ~DKK 2,900 on each customer in the first year. However, the company historically has managed to increase ARR from its customers by an average of 17.5% (incl. churn). So, after 1.2 years on average, the customer acquisition cost has been recovered. While it has been growing the existing customer base, Penneo has been able to maintain a low churn level of ~2-4%. In addition, the company has been able to attract many new customers, lifting ARR by ~26% in 2019, 27% in 2020 and 32% in the last 12 months (H1 2021) from new clients alone. These SaaS metrics are what makes Penneo a successful scalable business. It is only when it becomes difficult to scale much further that profitability becomes a priority.

**ARR from 2014-2020 cohorts (left) and ARR development 2020-H1 to 2021-H1 (right)**



Note: all numbers in DKKm  
Source: company reports, ABG Sundal Collier

## Business model

*Penneo is a SaaS company that focusing on creating an ecosystem for digital automation solutions that include e-signatures, document workflow and onboarding using know-your-customer (KYC) processes with a strategic focus on the auditing industry. Penneo has a premium product and corresponding pricing, reflecting the focus on larger customers with higher upselling potential. Moreover, the focus on the auditing industry strengthens Penneo's growth opportunity by using its customer relationships with multinational clients to penetrate new markets as well as to benefit from network spillover effects into other industries.*

Penneo is a SaaS company offering digital solutions that digitises and automates business workflows related to onboarding of clients, signing of documents, and handling of those documents in a secure, efficient and compliant manner. Penneo's two main product solutions are named "Signing & Data Collection" and "KYC & AML Compliance". Together, these two solutions indicate Penneo's intention to create end-to-end solutions for workflow automation.

### Signing & Data Collection

Signing & Data Collection refers to electronic signatures (e-signatures) and the data collection and handling mainly of those documents that need to be signed. This was Penneo's first product on the market. Likewise, the name Penneo originates from the idea of a new (neo) "digital" pen.

#### What are customers' needs and key criteria?

The ongoing digitisation of businesses including the incorporation of digital workflows such as document handling and electronic signatures mitigates many of the challenges related to manual paper-processing work. When assessing electronic signature (e-signature) solutions, some of the key criteria for companies are:

- **High security and data privacy:** Eighty-one percent of business users consider e-signatures their most important tool for security of their daily operations<sup>1</sup>. Therefore, e-signatures must live up to certain security and verification standards depending on the use. While the demand for some e-signing solutions tends to be focused on speed and, to a lesser degree, security, attention has increasingly turned to high security and verification standards, such as two-factor authentications.
- **Customer experience:** According to a survey<sup>2</sup> in Finances Online, the most important driver for e-signatures is customers' expectation to have digital interactions. Digital interactions and the specific case of e-signatures improve the customer experience because it is much simpler and more flexible in terms of remote working and remote signing.
- **Integrated solutions:** On average, a company has five systems for handling content<sup>3</sup>. It is important for many businesses to ease this issue by having one

<sup>1</sup> Cygnature. *How Logistics Industry Can Leverage with e-Signatures?*

<sup>2</sup> Allan bay. *57 Essential e-Signature Statistics: 2020/2021 Market Share Analysis & Data.* FinancesOnline

<sup>3</sup> AIIM. *10 Things You Need to Know About Digital Transformation.*

solution that easily integrates into all other systems. The larger the business the larger the need for integration into already existing systems.

- **Critical IT infrastructure:** Companies in document-heavy industries, such as the auditing industry, have become increasingly reliant on software systems, which in today’s digital world has become critical IT infrastructure. Therefore, it is important to maintain uptime as well as swift service when needed.
- **Staying competitive:** A very important aspect of any decision in a business concerns how to stay competitive. In terms of handling and signing documents, this may include all of the abovementioned aspects. Furthermore, staying competitive in terms of digitalisation involves following technological developments and adopting more sophisticated solutions. Lastly, it is always in the interest of any business to cut unnecessary costs and time through optimisations.

**Penneo’s solution**

Penneo’s first product was the signing solution, i.e. what Penneo sometimes refers to as the digital “pen”. Since then, the offering has expanded by focusing on a more workflow-oriented perspective. Today, Penneo’s solution covers several workflow solutions built on top of the signing solution.

**Penneo’s Signing & Data Collection solution covers digital signing, workflow automation, and identity verification and data collection**

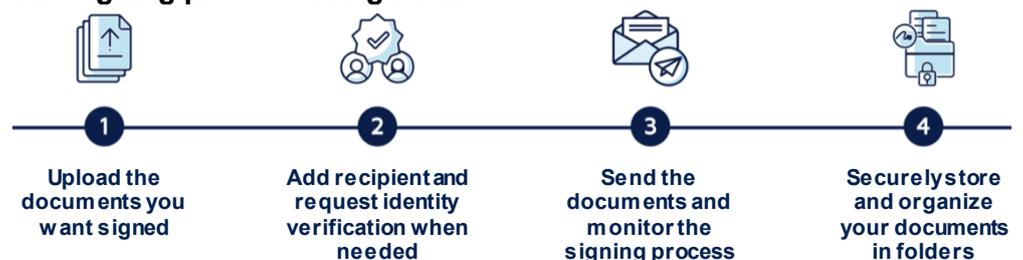
Digital Signing	Workflow automation	Identity verification and data collection
<ul style="list-style-type: none"> <li>• Sign on the go</li> <li>• Limit access to sensitive information</li> <li>• Store and share documents in a secure way</li> </ul>	<ul style="list-style-type: none"> <li>• Simple and advanced signing flows</li> <li>• Automatic reminders</li> <li>• Process overview</li> </ul>	<ul style="list-style-type: none"> <li>• Identity verification (allowing clients to upload pictures etc.)</li> <li>• Filling of forms</li> </ul>

Source: penneo.com, ABG Sundal Collier

*There is a distinction between digital signatures and electronic signatures. The term ‘electronic signatures’ is broader and encompasses all signatures which are in some way electronic. However, this also includes just writing your name electronically or checking a box, which does not have high security precautions implemented. An e-signature is considered a “digital signature” only if it fulfils certain EU criteria and standards.*

The idea behind **digital signing** is to be able to sign anywhere, limit access to sensitive information and store documents in a secure way, among other things. When signing documents with Penneo, the process is as follows:

**The signing process using Penneo**



Source: penneo.com

During the signing process, it is important to be able to verify the identity of the signatory. There are several methods of identity verification including document scanning (passport, driver's license, national ID, etc.), national electronic IDs (eIDs), social logins (Google, LinkedIn, etc.), photo verification, biometric live video verification, etc. Important aspects of identity verification include the level of security and the user experience. Penneo relies mainly on electronic identification (eID) signatures but also offers 'touch signatures' (digital handwriting). However, the eID signatures ensure the identity of the signer, allow for two-factor authentication and are compliant with the EU's eIDAS regulation, which ensures the same legality in all of the EU. As such, eIDs represent one of the most secure and user-friendly e-signature solutions.

Penneo has incorporated eIDs into its solution for all of its existent markets except Germany, which is still in a test phase. This includes the eIDs NemID (soon MitID) in Denmark, BankID in Sweden, BankID in Norway, ITSME in Belgium, and Finnish Trust Network (FTN) in Finland. The eIDs are regulated by the EU's eIDAS regulation, which was put into force in July 2016. eIDs are especially well adopted in the Scandinavian countries, with adoption rates of over 80%, making it a clever choice of signing and verification method for Penneo.

Penneo's digital signatures meet the eIDAS regulations requirement for advanced electronic signatures (AES) and are built on an ETSI PAdES Standard (Advanced Electronics Signatures for PDF documents). We refer to Appendix I for a comparison of the three levels of signatures SES, AES, and QES. One main feature of the PAdES standard is its long-term validation (LTV), because the signature's validity is stored as an 'attachment' to the PDF.

From March 2021, Penneo entered a partnership with Intesi Group, which is a Qualified Trust Service Provider (QTSP) under the eIDAS regulations. Intesi Group secures signatures through Penneo with seal certificates for the authentication of the signer as well as a timestamp for the signature. Previously, Penneo used Globalsign, a trusted service provider (TSP) for AES, as its main provider and continues to use it as a backup provider.

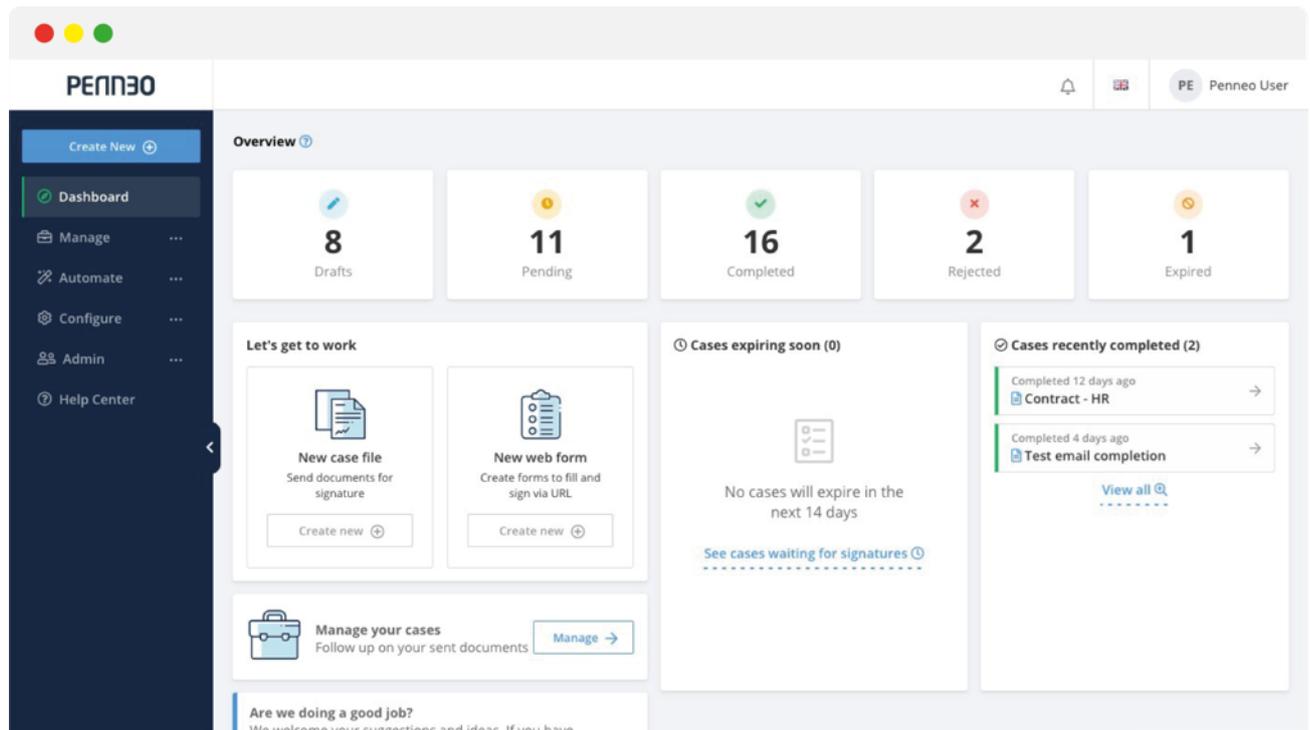
**Workflow automation** relates mainly to signing flows, automatic (signing) reminders, and process overview.

Signing flows are when multiple people must sign a document in a specific order. Doing this manually can be excessively time-consuming due to waiting time between each signer and ensuring the right signing order. Penneo has automated this process by creating more complex signing flows that respond to the regulation of different industries. As such, Penneo already has some pre-defined signing flows which, for example, can be used in the process of signing annual reports. It is also possible for Penneo to tailor a signing flow if none of the existent ones fit.

In addition, Penneo provides reminders for those people who need to be reminded to sign on time. This happens through automated reminders to the signer based on the signing flow, and in intervals decided by the user thereby limiting unnecessary waiting time.

The customer can always keep track of the process using Penneo's dashboard. Via the dashboard, illustrated below, it is easy to keep track of the various stages of all relevant document and signing flows. Furthermore, it provides a detailed overview of the signing process, in terms of who has and who has not yet signed.

### Penneo's dashboard



Source: penneo.com

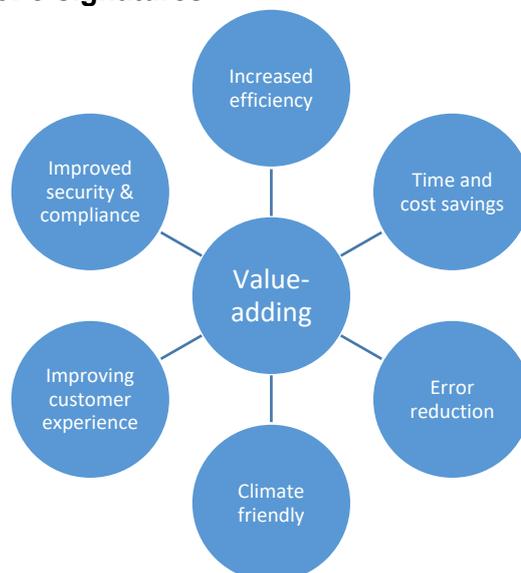
**Identity verification and data collection** refers to the ability to let clients upload pictures to verify themselves and the creation of forms based on several industry-specific templates which can help ease and automate the data collection process.

The identity verification process has been extended with the client onboarding (KYC) software, which will be touched upon in a later section.

#### How does Penneo add value?

Penneo's e-signing and data collection solution adds value for its customers in various ways. In the illustration below, we highlight six key benefits.

#### Value creation of e-signatures



Source: penneo.com, ABG Sundal Collier

### Increased efficiency

According to Penneo, the turnaround time is reduced by 80% using e-signatures, with an average time of 37 minutes for obtaining the signature compared to up to several days in the traditional way. Within the auditing industry, Penneo estimates that a company can save one auditor hour per annual report per year using Penneo's solutions. This is increasingly important when dealing with documents that require multiple signatures and more advanced signing flows, such as an annual report.

Furthermore, an estimated 86% of an auditor's workflow has automation potential<sup>4</sup>. This highlights that much of the document handling processes besides signing has automation potential. Moreover, this potential extends much further than the auditing industry.

### Improved security & compliance

High regulatory requirements for e-signatures (such as eIDAS) ensure a high level of security as the identity of the signer is verified through the signature. Furthermore, Penneo stores all documents securely and is fully compliant with the GDPR regulation concerning data privacy in document handling. Knowing that Penneo is compliant with all relevant regulations eases the mind of customers in relation to their document handling.

### Time & cost savings

According to Penneo, some of its largest customers have cut up to 93% of their costs related to approving, signing, and filing financial reports by adopting Penneo's solution. On a more general note, companies switching from manual paper processes to e-signatures can save 55-78% of costs, which corresponds to USD 20 per document<sup>5</sup>, when taking into account the material, administration, shipping and subscription costs. In addition, on average, 1-2% of the revenue of a document-heavy business, such as the auditing industry, is spent on paper and ink<sup>6</sup>, which can be eliminated by adopting an e-signing solution.

### Improving customer experience

Crucial parts of any digital document and e-signing solution are the third-party integrations and the ability to support a company's existing digital infrastructure. Each company may need different specific software integrations relating to anything from integrations with CRM, ERM, accounting software, workflow software, social accounts, etc. Penneo offers 19 different integrations, with some being directed at the auditing industry, such as cloud accounting integrations. Besides integrations, Penneo adds value for its customers by offering a tailored solution regarding signing flows, forms, etc.

Moreover, adopting an e-signing solution can improve the customer experience for companies' clients. Thus, it can improve a company's net promoter score and has the potential to increase customer loyalty substantially<sup>7</sup>.

### Error reduction

Migrating to e-signatures and digital document handling from manual paper handling eliminates several errors relating to physical handling of paper. On average, businesses can reduce processing errors by up to 90% and scanning

<sup>4</sup> Chui, M., Manyika, J. and Miremadi, M. *Where machines could replace humans—and where they can't (yet)*, McKinsey Quarterly, 2016

<sup>5</sup> Lunarpen. *Electronic signature statistics. 2020*

<sup>6</sup> Grand View Research. *Digital Transaction Management market 2019-2025, 2019*

<sup>7</sup> Allan bay. *57 Essential e-Signature Statistics: 2020/2021 Market Share Analysis & Data. FinancesOnline.*

errors by 92%. Likewise, companies can also reduce the number of missing files up to 66% and the extent of duplicates substantially by going digital<sup>8</sup>.

### **Climate friendly**

By converting to 100% paper-free document handling, the carbon footprint of paper is eliminated. An average employee uses 10,000 pieces of paper each year<sup>9</sup> corresponding to 0.8 trees and the equivalent of 400kg CO<sub>2</sub><sup>10</sup>. Thus, Penneo has until now saved more than 10 tonnes of paper, or the equivalent of 80 tonnes of CO<sub>2</sub>, by providing its digital solutions.

### **KYC & AML Compliance**

In 2020, Penneo acquired CLA Reply, which added know-your-customer (KYC) software to Penneo's offering. KYC processes are used by companies to identify and screen their customers (KYC) or the ultimate beneficial owner (UBO) of a business during the onboarding phase.

#### **What are customers' needs and key criteria?**

Six anti-money laundering (AML) directives in the EU determine the requirements for KYC processes in several industries (see Appendix E for full overview). Initially, only banks were obligated to comply with the AML directives, but the regulation has expanded to encompass a wide range of different entities. These include:

- Credit and financial institutions (banks, insurance companies, investment firms)
- Auditors, external accountants, and tax advisors
- Trust or company service providers
- Notaries and other independent legal professionals
- Gambling services providers
- Estate agents
- Other persons trading in goods valued over EUR 10,000

The AML directives generally include four essential AML requirements: (1) customer due diligence (CDD), (2) record-keeping, (3) monitoring and reporting of suspicious activities, and (4) creation of policies, procedures, and controls. Onboarding and KYC solutions such as Penneo's can help companies automate steps 1-3.

Failing to meet these requirements can lead to substantial fines. Between 2015 and 2020 there have been 115 significant cases of failing to meet the CDD requirements and 109 cases of failing to meet the requirements for AML management. The average fine was USD 1.8m from 2015 to 2018, although this was impacted by a few huge fines<sup>11</sup>.

Due to the risk of being fined, companies subject to the AML directives have high incentives to invest in digital solutions that can help them stay compliant and avoid fines.

<sup>8</sup> Lunarpen. *Electronic signature statistics. 2020*

<sup>9</sup> good energy. *Good stats on carbon saving*

<sup>10</sup> PaperSave. *Waste at work - paper use in the office.*

<sup>11</sup> ComplyAdvantage. *2020 AML Fines, 2020.*

**Penneo’s solution**

Penneo’s KYC & AML compliance solution helps businesses comply with current regulations while improving efficiency in onboarding through automation of data collection. Penneo describes the process in five simple steps:

**Visualisation of onboarding steps using Penneo**



Source: penneo.com

Through these five steps, Penneo guides the company through the KYC process or know-your-business (KYB) process in case the company’s client is a business. See Appendix H for an overview of the full onboarding and KYC/KYB process. In case the client is a business, the company must determine the ultimate beneficial owners (UBO) of the company. Through automated register look-ups, Penneo simplifies and automates this process by retrieving the company’s ownership structure and data such as company name, type, address, incorporation date, etc.

Furthermore, one of the main parts of the KYC process is the customer due diligence (CDD), which range from simple (SDD) to enhanced (EDD), depending on the risk profile of the client. Penneo guides through the risk assessment of a client and has automated look-ups in PEPs (politically exposed persons), EU sanctions and other public lists and registers, to help determine the level of risk.

The KYC process requires the company to gather data on its clients. This includes their full name, address, gender, phone number, mailing address, etc. Penneo offers forms that its customers can use to easily and efficiently obtain information from their clients, who can submit their information from any device. Alternatively, the client can import data to Penneo via various ERP integrations.

Penneo stores all records in a secure and GDPR-compliant manner and includes automatic documenting of all activities so that the full onboarding process is documented.

Lastly, Penneo automatically checks for changes in the different public registers and lists and notifies its client in case of changes. This automation of data monitoring helps Penneo’s customers to always maintain AML compliance.

**How does Penneo add value?**

Generally, there are three benefits of implementing automatised KYC processes.

- **Compliance**

If the company is obligated to comply with AML requirements, Penneo’s solution facilitates this compliance. Ensuring the company is fully compliant prevents the risk of AML fines due to inadequate KYC processes or misconduct.

- **Customer experience**

Avoiding time-consuming manual steps by digitalising the onboarding also enhances Penneo’s customers’ clients’ experience. It makes the onboarding process easy and professional from the clients’ perspective.

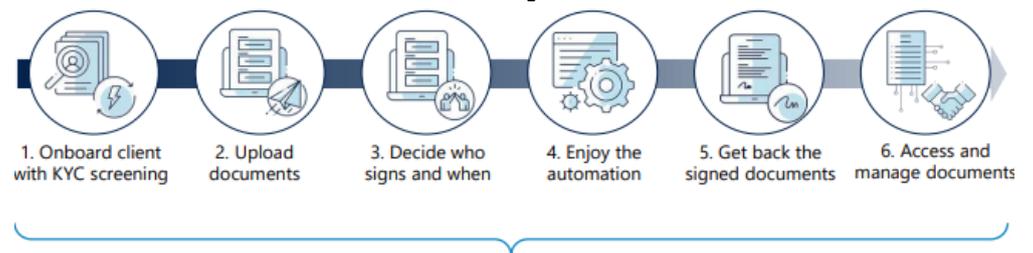
- **Increasing efficiency**

According to Penneo, a traditional onboarding of a client takes six weeks on average and bank employees spend an estimated 1.5 days a week doing onboarding and related activities. Roughly 40-50% of that time is typically spent on data collection from manual paperwork. Penneo optimises these processes by automating the data collection for CDD, UBO determination, PEP lists, and a guided risk evaluation.

**End-to-end solution strengthens value proposition**

Having a signing & data collection solution, as well as a KYC/AML solution creates synergies and is also value-adding for customers, who receive a more comprehensive end-to-end solution. In the below chart, we show Penneo’s end-to-end process, and highlight nine key benefits of the combined solution.

**Penneo’s end-to-end solution and key benefits**



**Penneo’s value creation for the customer**

<p><b>Smooth operations</b></p> <p><b>Automation</b> Guarantees a smoothly executed process while improving productivity</p> <p><b>Agility</b> Improving workflows through collaboration among teams</p> <p><b>Real-time</b> Following the document workflow process and reporting in real-time</p>	<p><b>Efficient workflows</b></p> <p><b>Signing</b> Combine several documents into one transaction by multi-signing</p> <p><b>Integration</b> Reduce time on data entry through API integration</p> <p><b>Customization</b> Personal experience through customized emails and branding</p>	<p><b>Secure RegTech platform</b></p> <p><b>Compliance</b> Compliant automation and digital certifications to signers</p> <p><b>Security</b> All authentication to encryption follows highest security standards</p> <p><b>Legislations</b> Ensures to comply with all applicable laws and regulations</p>
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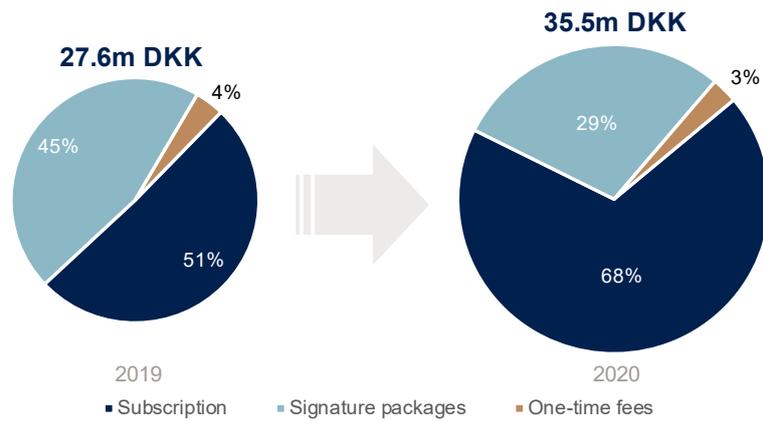
Source: penneo.com

**Pricing model**

**New subscription model**

Penneo used a different pricing model when the product offering only comprised signature solutions. Back then, customers bought signature packages, which work similar to a 10-journey ticket. However, in more recent years, Penneo has changed to a new subscription model. In 2020, the subscription model accounted for 68% of revenue, up from 51% in 2019.

Revenue streams, 2019 & 2020



Source: company report, ABG Sundal Collier

Penneo’s subscription model includes three tiers: Basic, Advanced and Premium. Having only three tiers is somewhat atypical compared to some of Penneo’s peers and other SaaS companies. However, this is also an indication that the main focus for Penneo, in terms of product development, is on the more advanced and tailored solutions in Penneo Premium.

An overview of what is included in each of the packages can be seen below:

Penneo’s three-tier pricing model

	Penneo Basic	Penneo Advanced Signing & data collection	Penneo Advanced AML & KYC Compliance	Penneo Premium
Price	€129/month	Price/no. of clients	Price/no. of clients	On request
Digital signing	One eID & Touch	All eIDs & Touch		
Users	2 max.	Unlim.	Unlim.	
No. of signers	3 max.	Unlim.		
Case files	General	Industry specific		
Online document archive	✓	✓		Everything included in both Advanced packages further tailored to the company's needs
Data collecting via forms		✓		
Onboarding		✓	✓	
UBO identification			✓	
Document collection (KYC)			✓	
Risk assesment			✓	
Data monitoring			✓	
Customization		✓	✓	
Help center	✓	✓	✓	
Customer support		✓	✓	

Source: penneo.com, ABG Sundal Collier

**Basic** is the only predefined membership (DKK 999 / EUR 129 per month), targeted at small businesses allowing up to two users. Due to developments in technology, more basic e-signatures solutions have become a commoditised product. Thus, the segment for basic signature solutions has become less attractive for Penneo. Furthermore, as Penneo has added more advanced and tailored solutions to its

*Penneo's gross churn, or customers leaving Penneo, has historically fluctuated between 2% and 4%. Penneo's management does not see churn at these levels as threatening, as it mainly concerns small customers that are not value-adding for Penneo in terms of upselling potential.*

offering, it has become less relevant to target small enterprises. Thus, the market for basic e-signatures is less attractive and the Basic product package is not of crucial importance to Penneo, as there is little potential for upselling to most of those customers. The gross churn, typically at roughly 3-4%, is also mainly attributed to customers of a relatively small size.

**Advanced** is divided into two groups, one for signatures and data collection and the other for KYC and AML processes. Both memberships are paid for per client based on an agreed price. Basing the price on the number of clients is quite atypical for most SaaS companies. It is generally more common to base the price on the number of users, just like how the Penneo Basic package is limited to two users. However, in the market for document workflow and e-signing it is also common to base the price on volume, i.e., how much the software is used instead of how many people are using it.

**Premium** is the most comprehensive package and is only on request. It contains everything from the Advanced package, i.e., both signing, data collection and KYC, as well as more tailoring than the customisation in the Advanced package to fit the customer's needs. It is the Premium package that mainly drives the product development of Penneo, as it includes cooperating with customers to create new automation solutions.

### **Product development fuels ARR growth**

Product development is a crucial aspect of Penneo's business, not only to stay competitive, but also to achieve upselling to current customers thereby increasing ARPA (annual revenue per account). In connection with its IPO, Penneo highlighted various examples of how to increase ARPA. Besides the addition of KYC solutions, it included BI analytics for upselling to customers, tech development of new services to existing customers, development of integrations for partners and solutions, AI-driven data analytics for user adoption rate, etc.

Midsized and larger companies represent the largest potential for upselling, which is why Penneo does not see itself targeting smaller companies with more generic and simple needs.

There are two indications that point to the successful extension of Penneo's product offering either via product development or the acquisition of CLA Reply in October 2020. First, the ARR in the first year for new clients has increased from DKK 13,627 in Q3 2020 to DKK 18,845 in Q2 2021, indicating that customers have become larger and/or that increased product offerings have led to higher prices for each customer. Secondly, Penneo is increasing the ARR of extant customers through upselling, either via new solutions or higher volumes (e.g. an increase in clients in advanced packages).

### ARPA, net retention, and ARR from new clients trending upwards

	Q3 2020	Q4 2020	Q1 2021	Q2 2021
New clients	89	133	149	171
Average ARR in the first year for new clients, DKK	13,627	14,525	17,027	18,845
Customer acquisition costs (CAC <sup>1</sup> ), DKK	(20,828)	(22,220)	(22,511)	(21,523)
Net ARR retention rate <sup>2</sup>	114%	121%	123%	130%
Average Revenue Per Account (ARPA), DKK	17,770	19,120	19,988	21,444

1) CAC is defined as inbound lead spend and staff costs directly related towards onboarding new customers; 2) Net retention is the yearly ARR development of the existing customer base. Source: Company information, ABG Sundal Collier

### Pricing lower than customer acquisition cost (CAC)

In the last 12 months, the average ARPA of new customers was DKK 17,000. This is generally lower than the cost of acquiring a new customer (CAC), which has averaged DKK 22,000 over the last 12 months. This is an indication of an aggressive growth strategy, which is beneficial in the long run, since the customer lifetime value (CLV) is much higher than the cost of acquiring a new customer today.

### Customer segments

From the very beginning Penneo has had a focus on the auditing industry and an ambition to develop a complete end-to-end solution, which is depicted below. Initially Penneo was mainly capable of handling the third step in the process chart, mainly concerning the approval of the annual report. When it added the capability of KYC and AML compliance in October 2020, it added to the first step in the below process, mainly concerning client onboarding. With regard to the second step, the creation of annual reports, Penneo has integrated API solutions. For example, Penneo integrates with cloud-based accounting software such as Silverfin, Wolters Kluwer, QWM and CaseWare.

### Penneo's end-to-end solution for auditors



Source: adapted from penneo.com, ABG Sundal Collier

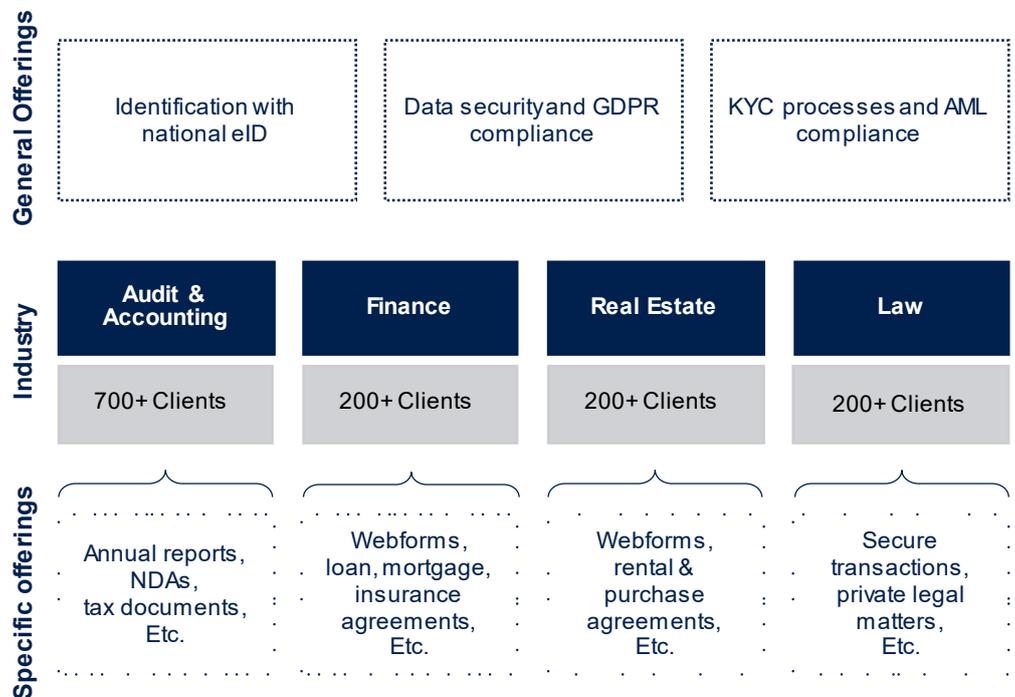
**Big 10 customers**

Penneo has 20 out of 30 big 10 Scandinavian auditing firms as customers: all big 10 auditors in Denmark, seven big 10 customers in Norway and three big 10 customers in Sweden. Furthermore, Penneo has one big 10 auditing customer in Finland and one in Belgium.

Penneo has chosen to focus on the auditing and accounting industry to choose a more “niche” market (annual report signatures) with relatively low competition compared to the entire market for digital signatures, document handling and/or KYC/AML. Through the niche market strategy Penneo positions itself somewhat differently from its peers, thus creating a strategic advantage. This has allowed Penneo to penetrate the market and become the de facto standard in Denmark, where 66% of all annual reports were signed with Penneo in 2020. Likewise, Penneo argues that the market for annual report signatures is a “winner-takes-all” market. While this may hold true for annual report signatures, considering Penneo’s ability to conquer the Danish market, there is no evidence supporting that it should be the case for signature and document handling solutions in general.

As Penneo has grown and incorporated KYC/AML software into its product offering, it has broadened the scope of potential customers, paving the way especially for financial institutions but also for companies in the real estate and law industries where AML compliance is required.

**Penneo’s generic and industry-specific offerings**



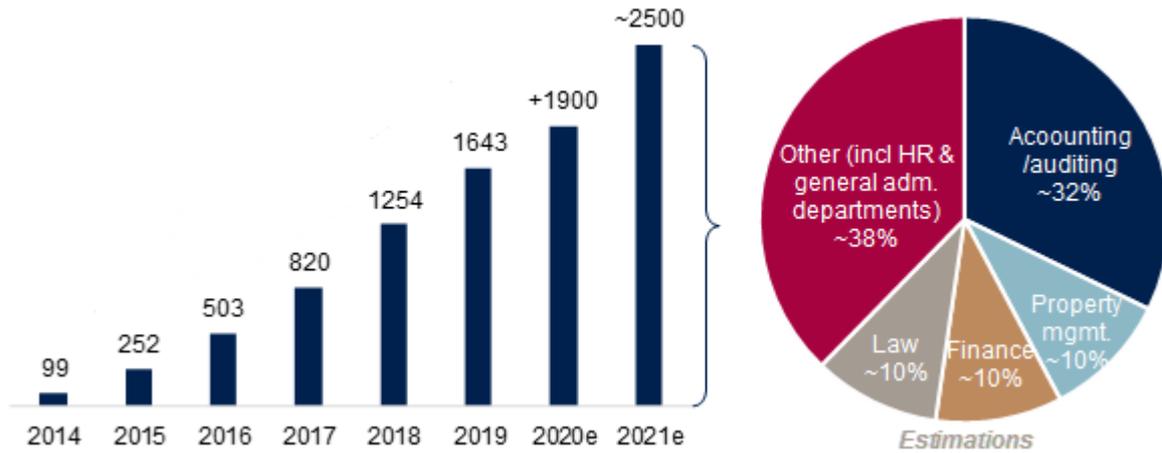
Note: The four industries shown do not represent an exhaustive list of the customer groups. Source: penneo.com, ABG Sundal Collier

Some of Penneo’s (current) digital solutions are core elements which are applicable in all industries. This includes the digital signatures through identification using eIDs, the data security and GDPR compliance in document handling, and the need for KYC & AML compliance. However, Penneo offers more specialised product offerings for each industry. This includes the annual report focus in the auditing vertical, collection of data through web forms in e.g. the finance industry, or agreement contracts specific to each industry (NDA, insurance agreement, rental agreement, etc.). Furthermore, Penneo distinguishes between its customers based on departments. With the onboarding and KYC features, Penneo has attracted many HR departments.

Today, Penneo has more than 2,000 customers. Despite targeting several different industries, Penneo’s main customer group remains the auditing and accounting

industry. In 2019, 31% of the customers were auditing and accounting firms, which has been ranging between 28% and 43% since 2014.

**Development in number of customers and customer split**



Source: Company reports, ABG Sundal Collier

**The auditing industry remains focal point for Penneo**

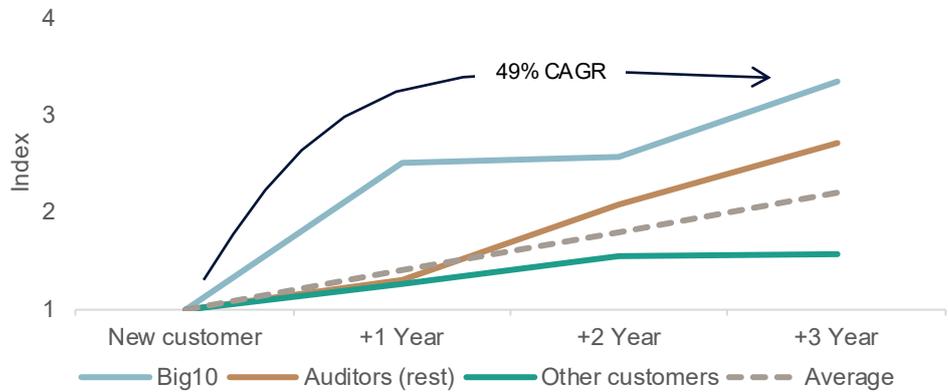
Penneo has started targeting new industries, but there are reasons why the auditing industry still is the most important customer group to Penneo, and is likely to remain so in the future:

- Dominated by large players:** Penneo only targets businesses of a certain size. The auditing industry across countries is typically dominated by 10 big companies which account for a large part of the market. In Denmark the 10 biggest auditing companies have a combined 50% market share based on revenue<sup>12</sup>. These companies have special requirements and needs for their digital solutions, which makes Penneo stand out from more generic solutions. These large auditing and accounting customers give Penneo the opportunity to develop new solutions in close corporation which also increases the ARPA. Furthermore, the auditing customers have higher ARPA compared to the rest of the customers. Based on 2019 numbers, the ARPA for auditing clients was ~DKK 18,000, which is 30% higher than the remaining customers at ~DKK 14,000.
- Higher potential for upselling:** Based on Penneo’s experience with its current customers, the big 10 auditing firms have significant higher ARR uplifts. On average, a big 10 customer has 49% annual upselling over a four-year period, i.e. three years of upselling. In comparison, a non-big-10 auditing customer has ~40% annual upselling and all non-audit customers have ~16% upselling. On

<sup>12</sup> Revision i Danmark. Revisorbranchen under 20 milliarder i omsætning. 2019

average, Penneo has ~30% annual upselling during the first three years of a client relationship.

**Annual recurring revenue per account (ARPA) estimates**



Source: company reports, ABG Sundal Collier

- Growth opportunities through network effects:** In 2019, more than 167,000 annual reports were signed with Penneo, and in Denmark alone Penneo was used by more than 550,000 people. This emphasises the huge opportunity to use network effects to attract customers from other industries.
- Growth opportunities through foreign subsidiaries:** The big 10 auditing companies often have subsidiaries in several of Penneo’s prospect markets, allowing Penneo to use the connection as an approach to internationalisation. This strategy has been quite successful with the Big 10 firms in the Nordic countries.

**Internationalisation and growth strategy**

Before its IPO in 2020 Penneo had limited funding to fuel its growth journey. Therefore, Penneo was only present in three markets (Denmark, Norway and Sweden) prior to the IPO. Since then, the DKK 50m of raised capital has helped fuel the expansion into Belgium and Finland shortly after the IPO.

Penneo’s internationalisation and growth strategy is best summarised in four steps, as visualised below.

**Penneo’s growth and internationalisation strategy**



Source: adapted from Penneo investor presentation

- Step 1 – Market entry through existing customers**  
 Penneo uses its current relationships with auditor clients, often big 10 clients that are present in several markets, to enter new markets through the subsidiaries of the current customer. However, the first customer in a new market need not be a current client, as seen with VGD in Belgium.
- Step 2 – Targeted by Penneo’s “SWAT” task force**  
 Penneo designates a task force, or “SWAT” team, to thoroughly examine the market before entering on full scale. For example, Penneo has secured its first customer in Germany, but is yet to incorporate one of the German eIDs (e.g. YES, Verimi, Authada) onto its platform. This first customer is a ‘test-client’ to test the German market fit for Penneo’s solution.
- Step 3 – Regional set-up**  
 When a market has proven to be attractive, Penneo sets up a regional team consisting of sales representatives. The focus remains on the auditing industry but is shifting away from the big 10 auditing firms towards the rest of the auditing market over time. Thus, audit companies will tend to make up close to the entire customer group in new markets in the early stages. Penneo’s presence in Belgium is currently in this phase.
- Step 4 – Established market with spillover effects**  
 Late in the process, network effects will create spillovers to customers from other industries. This happens if someone becomes familiar with Penneo as a signer. These network effects work like free promotion for Penneo among all the stakeholders interacting with Penneo’s solution spanning many different industries. Penneo’s solution has so far been used by more than 650,000 individuals, indicating the magnitude of the exposure Penneo gets. This stage of the growth process is what is currently unfolding in Penneo’s more established markets such as Denmark, Sweden, and Norway.

Penneo’s four-step internationalisation and growth strategy is rather cautious but entails little risk, in our view, as the company does not fully commit to a market until it has proven to have potential. Yet, this also limits the potential for growth to a certain level.

The strategic focus on the auditing industry also proves beneficial in terms of existing network effects due to the nature of auditors' interactions with many different stakeholders and industries.

**New strategy focusing on penetration of current markets**

Penneo's board of directors updated Penneo's strategy in connection with its announcement in June 2021 of the intention to migrate to the main market (Nasdaq Copenhagen). The new strategy focuses to a lesser degree on growth through expansion into new markets and to a higher degree on penetration of current markets and current customers.

**Penneo's updated strategy**



Source: company announcement, ABG Sundal Collier

The strategy includes rolling out the KYC/AML product to existing Nordic audit customers, penetrating the financial vertical in Denmark, and securing the audit customers in current countries.

## Markets and trend drivers

**Penneo operates in three distinct markets: digital identity (digital signatures), digital transaction management (DTM), and business process automation (BPA). All three markets are driven by an increased need and demand for digitisation, new digital-oriented legislation, and climate change. Legislation such as the eIDAS regulation, GDPR, AML, European Single Electronic Format (ESEF), and the Digital Single Market drive the demand for digitisation. Additionally, companies, and in particular large enterprises, expect their spending on tech and IT to increase significantly over the coming years. In all, this is forecast to drive the three markets by CAGRs of ~13-27%, with the market for digital signatures having the strongest growth.**

As previously mentioned, Penneo envisions itself building a digital eco-system which competes in three markets: DI, DTM, and BPA. However, the market for digital identity (DI), covers much more than e-signatures, which is less relevant for Penneo. For example, it includes all biometric solutions for identity verification, such as face or fingerprint recognition as well as digital identity solutions on-premise. Therefore, we emphasise that the market for digital identity (DI) and digital signature (DS) should not be confused with each other and that the DS market fits more into Penneo's business.

While the early stages of the company's growth journey has focused mostly on digital signatures (DS/DTM), and document archival (DTM), Penneo intends to venture more into the Business Process Automation market, which it paved the way for with the acquisition of KYC/AML software from CLA Reply.

### Market description of the DS, DTM, and BPA market

#### DS Digital Signatures (Digital Identity)

- Identity verification
- On-premise or cloud
- Software, hardware or services
- Single- or two-factor authentication

#### DTM Digital Transaction Management

- Document archival
- Workflow automation
- E-signatures
- Authentication

#### BPA Business Process Automation

- Business function: HR, sales/marketing, finance & accounting, etc.
- Platform, consulting, or deploy & integrate
- KYC checks & employee on-boarding
- Contract management
- Invoicing
- Document approval

Source: ABG Sundal Collier

The DTM market is the focal market which Penneo operates in with its current offering. It covers both the digital signature market as well as document archival, authentication, and workflow automation.

Penneo has only just started to target the BPA market with the onboarding and KYC software acquired from CLA Reply. However, Penneo envisions itself exploring the market further through collaboration with some of its larger clients.

The main idea behind BPA is relatively simple: automating processes which were originally carried out manually to cut costs and improve efficiency. This is applicable in an array of business functions, including HR, finance & accounting, legal and sales & marketing departments. Generally, there are three different approaches to process automation. It can either be (1) based on a platform solution, (2) based on consulting services, or (3) be services concerning deploying, integrating, and maintaining software.

According to McKinsey, 50% of current work activities are automatable by adapting current technologies and 15% (midpoint estimate) of the workforce could be displaced by automaton by 2030<sup>13</sup>.

## Trend drivers

Penneo mentions three trend drivers that have been important for the development of the business in the past and will continue to be in the future.

- **Digitisation** – Increased digitalisation and automation in the public and private sector increases work efficiency and cost saving opportunities.
- **Legislation** – Through regulations such as eIDAS, GDPR, and AML, the EU aims to support and ensure legal recognition of digital identity authentication.
- **Climate change** – Increased focus on climate impact of paper waste. Can be eliminated through digitisation of document-heavy processes.

## Digitisation

Of the three trend drivers, digitisation is by far the most important as it comes with high potential for business optimisation to save both money and time. There are several important aspects of digitisation including:

1. Convergence of business and public digitisation
2. Adoption of IT automation technologies
3. Increasing share of budgets allocated to IT

### Convergence of business and public digitisation

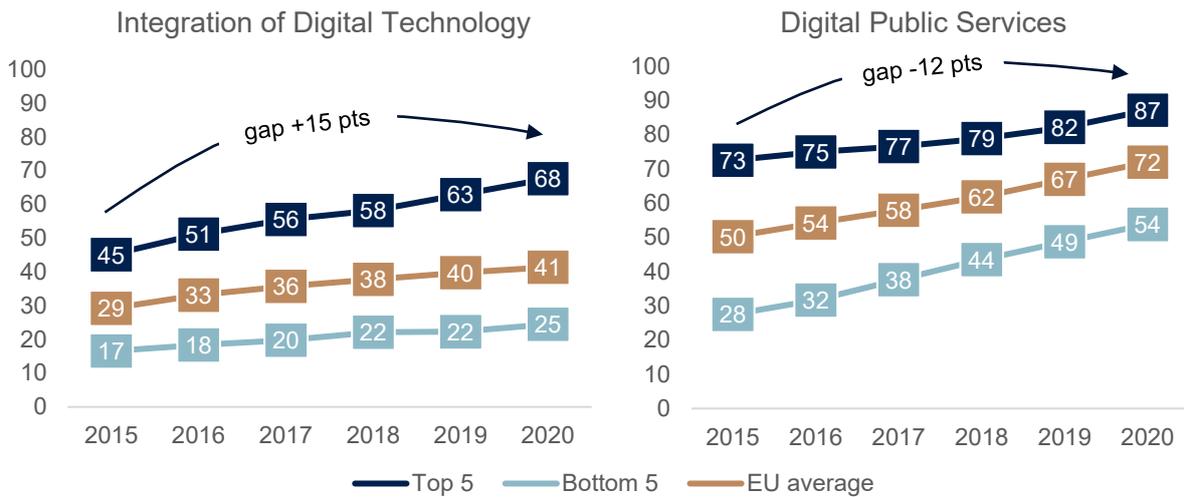
Zooming in on the development of the scores of the DESI subcategories indicates a contrasting development across best and worst performing countries within business and public digitisation. The public digitisation is measured by the fifth subcategory of the DESI index, digital public services. The business digitisation is proxied by the fourth DESI subcategory, integration of digital technology.

Within integration of digital technology, the last six years show a divergence between the top and bottom five countries, increasing the gap by 15 points. Contrastingly, the scores for digital public services for the top and bottom five countries have converged, reducing the gap by 12 points.

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<sup>13</sup> Manyika, James; Lund, Susan; Chui, Michael; Bughin, Jacques; Woetzel, Jonathan; Batra, Parul; Ko, Ryan; Sanghvi, Saurabh. *What the future of work will mean for jobs, skills, and wages*. McKinsey Global Institute, 2017

### Digital Economic & Social Indicator (DESI), 2015-2020



Source: DESI, ABG Sundal Collier

While both the level of public and business digitisation is increasing, it is worrying that the business digitisation for the low-score countries is progressing slower than the top performing countries. The low performing countries are predominantly Eastern European countries. In the period 2015-2020, all countries ranking among the five worst in at least one year are Bulgaria, Romania, Hungary, Poland, Greece and Latvia.

On the other hand, the countries in the top five in at least one year in the period 2015-2020 include Ireland, Finland, Belgium, Netherlands, Denmark, and Sweden.

The level of digitisation in public services is relatively higher than the integration of digital technology and business digitisation. Furthermore, the top five countries in the period include Estonia, Spain, Denmark, Finland, Latvia, Portugal, Lithuania, and Malta, while the bottom five countries include Romania, Greece, Slovakia, Croatia, and Hungary.

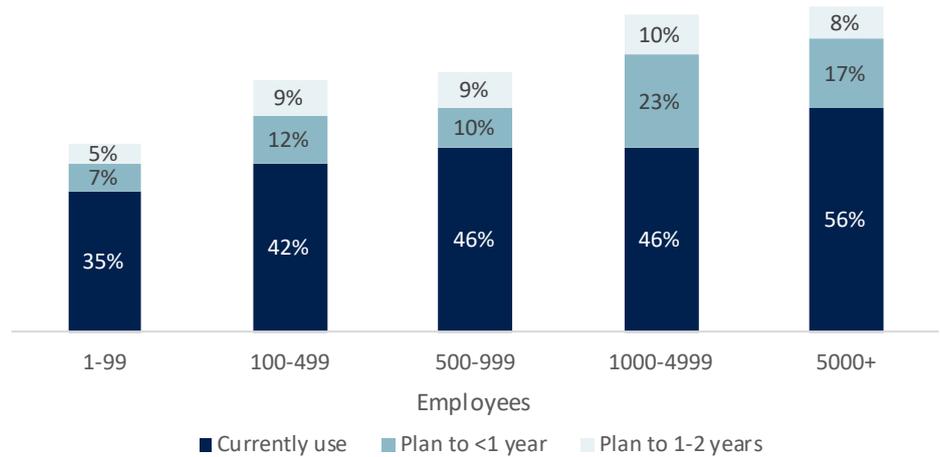
The high level of public digitisation highlights the readiness for most countries to increase the digitisation in a business context as the foundation for a digital ecosystem has been created.

#### Adoption of IT automation technologies

Despite the trend drivers impacting companies in all size classes, there is a clear distinction between the demand for IT and process automation for SME and multinational enterprises.

While only 35% of small companies (1-99 employees) currently have adopted an IT automation technology, 56% of large-scale companies (5,000+ employees) have adopted an IT automation technology. It corresponds to a 60% higher likelihood for a large company to have IT automation than a small company.

**Survey: Adoption of IT automation technology by company size (2021)**



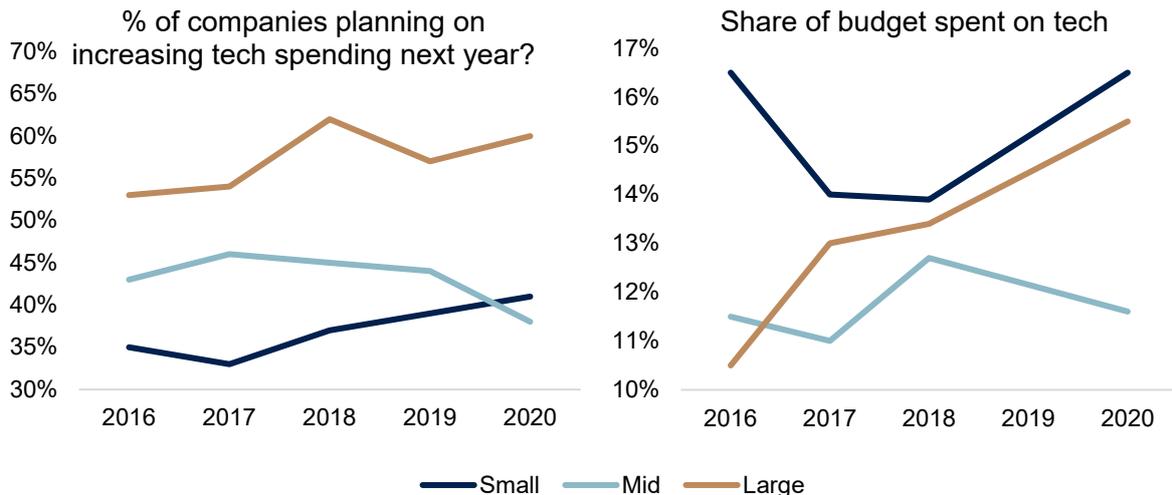
Source: SWZD's "The 2021 State of IT", ABG Sundal Collier

Within the next two years 12% of the smallest companies expect to adopt IT automation while it is more than twice as high (33% and 25%) for larger companies (1,000-4,999 and 5,000+ employees). On average across firm size, this corresponds to a ~50% increase in the number of firms with IT automation technology in the next two years.

**Increasing share of budgets allocated to IT**

The increased focus on IT automation highlights the need for firms to increase their IT spending to accommodate technology developments. The below graphs show the estimated share of budget spent on IT and plans for increasing the budget over the last five years. The graphs are based on annual surveys from Accounting Today.

**Survey: Tech spending by company size, 2016-2020**



Note: There is no available data for tech spending share of budget in 2019.  
Source: Accounting Today, ABG Sundal Collier

Looking at the last five years, we see a clear picture that larger companies have a higher motivation to increase tech spending. 60% of large companies are planning on increasing tech spending in 2021 compared to 41% and 38% of small and mid-size companies, respectively.

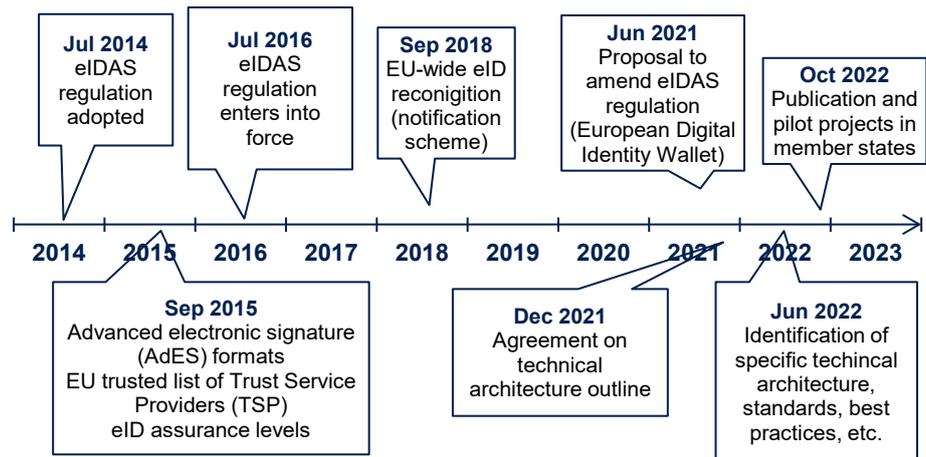
While the development of tech spending’s budget share has been mixed for both small and medium-sized companies in the last five years, it has only increased for large companies. Standing at 10.5% in 2016, it has increased to 15.5% in 2020, corresponding to a 10.2% CAGR in tech spending of large companies, assuming the size of the budget stays the same.

### Legalisation driving digitisation

A number of EU regulatory initiatives have substantial impact on the industries which Penneo targets through increasing incentives to further digitise workflows. The regulations drive digitalisation in different ways, including digitisation of identities and signatures (eIDAS), KYC processes (AML), digitisation of the auditing industry (ESEF), and data protection (GDPR), while the more broadly defined Digital Single Market initiative contributes as well.

- eIDAS:** The eIDAS regulations, which govern the rules for national and cross-border eIDs, was first adopted in 2014 and entered into force in 2016. In the future, the EU is aiming at designing one EU-wide digital identity wallet as a replacement for the current eID scheme, which is characterised by national eIDs. A digital wallet pilot project is projected to be initiated in October 2022.

### Timeline of eIDAS regulations



Source: Europe Commission, ABG Sundal Collier

- Digital Single Market:** The Digital Single Market (DSM) is a European Commission strategy from 2015 which aims at ensuring better access for consumers and businesses to online goods and services across Europe. This is achieved through minimising barriers to cross-border e-commerce, creating better digital infrastructure, and enhancing digital skills across all member states.
- AML:** The six Anti-Money Laundering (AML) directives from 1991 to 2020 aim at hindering anti-money laundering and terrorism financing. The directives determine the scope of financial and certain non-financial entities (banks, accountants, lawyers, etc.) with AML obligations to perform customer due diligence (spanning from simple to enhanced) as well as the creation of public

Ultimate Beneficial Ownership (UBO) registers and Politically Exposed Person (PEP) lists. See Appendix E for a full overview of the six AML directives.

- **GDPR:** The General Data Protection (GDPR) regulation came into force in May 2018 and aims at strengthening the protection of personal data in the EU. The GDPR regulation has increased the need for compliance handling and storing of personal data in companies. Breaches of the GDPR regulation can result in a fine reaching up to 4% of global annual sales. Since it entered into effect, more than 220 fines totalling more than EUR 500m have been imposed.
- **ESEF:** The European Single Electronic Format (ESEF) directive is directed at all regulated companies in the EU, which is required to file annual reports in xHTML format with an inlineXBRL technology for financial statements, making it structured and machine-readable. For most companies in the EU, this replaces the previously used PDF format. The regulation was meant to take effect from annual reports in 2020 but most countries have opted for a one-year postponement due to the COVID pandemic.

Future developments in regulations concerning digitisation and data privacy is only expected to strengthen Penneo's positions and improve its value proposition as the incentive for investing in solutions like Penneo's increases.

## Market sizes and growth

The markets sizes and forecast CAGRs for digital signatures (digital identity), DTM and BPA are summarised in the below table.

### Market sizes, developments, descriptions, and key drivers

Digital Signatures	Digital Transaction Management	Business Process Automation																																										
<table border="1"> <caption>Digital Signatures Market Size (USDbn)</caption> <tr><th>Year</th><td>'21</td><td>'22</td><td>'23</td><td>'24</td><td>'25</td><td>'26</td></tr> <tr><th>Value</th><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>8</td></tr> </table> <p><b>Market Description</b></p> <ul style="list-style-type: none"> <li>• Identity verification</li> <li>• Software, hardware or services</li> <li>• Cloud or on-premise</li> <li>• Single- or two-factor authentication</li> </ul> <p><b>Key Drivers</b></p> <ul style="list-style-type: none"> <li>• Need for multilevel authentication</li> <li>• Increased remote working</li> <li>• Demand for improved efficiency and transparency in key processes</li> </ul>	Year	'21	'22	'23	'24	'25	'26	Value	2	3	4	5	6	8	<table border="1"> <caption>Digital Transaction Management Market Size (USDbn)</caption> <tr><th>Year</th><td>'21</td><td>'22</td><td>'23</td><td>'24</td><td>'25</td><td>'26</td></tr> <tr><th>Value</th><td>8</td><td>9</td><td>12</td><td>14</td><td>18</td><td>22</td></tr> </table> <p><b>Market Description</b></p> <ul style="list-style-type: none"> <li>• Document archival</li> <li>• Workflow automation</li> <li>• E-signatures</li> <li>• Authentication</li> </ul> <p><b>Key Drivers</b></p> <ul style="list-style-type: none"> <li>• Increasing workflow efficiency</li> <li>• Reducing costs and errors</li> <li>• Enhancing customer experience</li> <li>• Ensuring compliance</li> </ul>	Year	'21	'22	'23	'24	'25	'26	Value	8	9	12	14	18	22	<table border="1"> <caption>Business Process Automation Market Size (USDbn)</caption> <tr><th>Year</th><td>'21</td><td>'22</td><td>'23</td><td>'24</td><td>'25</td><td>'26</td></tr> <tr><th>Value</th><td>10</td><td>11</td><td>12</td><td>14</td><td>16</td><td>18</td></tr> </table> <p><b>Market Description</b></p> <ul style="list-style-type: none"> <li>• Business functions: HR, finance &amp; accounting, legal, etc.</li> <li>• Platform, consulting or deploy &amp; integrate service</li> <li>• E.g. KYC, on-boarding, document approval, invoicing.</li> </ul> <p><b>Key Drivers</b></p> <ul style="list-style-type: none"> <li>• Customer experience</li> <li>• Improved process efficiency</li> <li>• adding value-added processes</li> <li>• Staying a head or on pace with competition</li> </ul>	Year	'21	'22	'23	'24	'25	'26	Value	10	11	12	14	16	18
Year	'21	'22	'23	'24	'25	'26																																						
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Year	'21	'22	'23	'24	'25	'26																																						
Value	8	9	12	14	18	22																																						
Year	'21	'22	'23	'24	'25	'26																																						
Value	10	11	12	14	16	18																																						

Source: Research & Markets, Market Research, Mordor Intelligence, Adroit Market Research, P&S Intelligence, Fortune Business Insights, TechSci Research, Verified Market Research, and Grand View Research, ABG Sundal Collier

The overall estimated value of Penneo’s relevant markets is ~USD 17bn in 2021. This contains the DTM and BPA market, but not the market for digital signatures as this is already counted towards the DTM market. The two markets combined have a CAGR of 17.9%. This is comparable to Penneo’s historical average and expected longer-term annual upselling to current customers of 17.5%.

The market estimates are based on several reports spanning from 2018-2021 by a wide range of different providers. The market estimates are then the average of the collected estimates. All estimates can be seen in Appendix G.

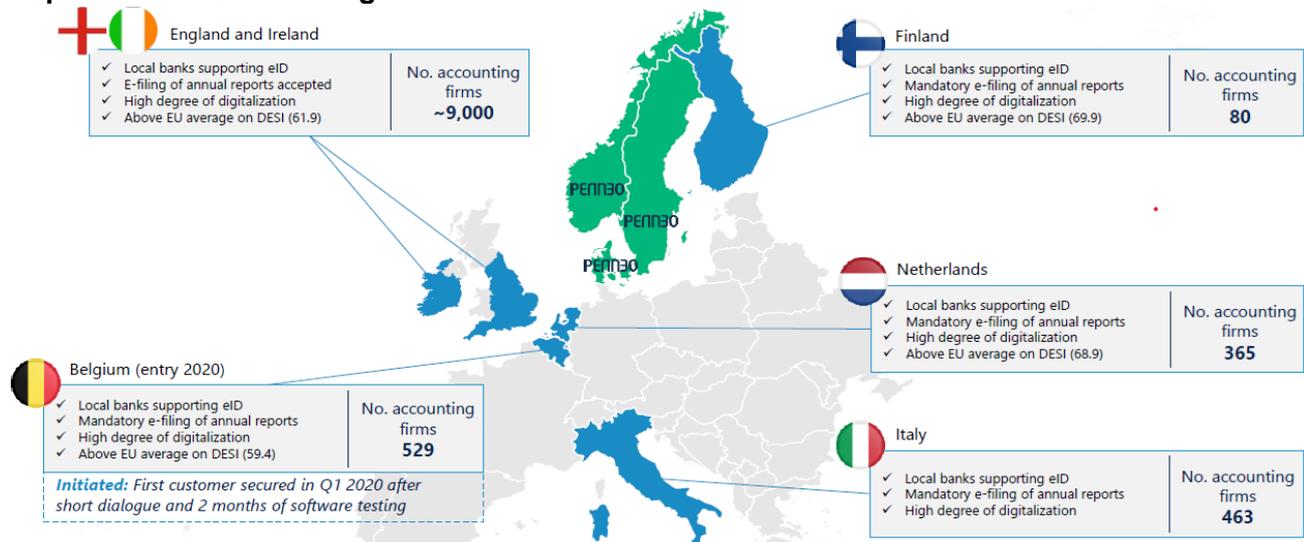
Furthermore, the market for digital transaction management stands at an estimated USD 7.6bn in 2021, and roughly one third of the market is related to eSignatures. The lower CAGR of the DTM market compared to that of the digital signature market indicates that the share of digital signatures in the DTM market is increasing.

# Addressable markets

Penneo is present in Scandinavia and entered Finland and Belgium shortly after its IPO in 2020, and Germany in May 2021. Penneo requires three things from prospect markets: 1) a developed eID, 2) a high degree of digitisation and 3) the e-filing of annual reports. Generally, the Nordic countries are the most digitised countries in Europe and have by far the highest adoption of eIDs ranging from 79% to 89%. Penneo itself has designated the Netherlands, Ireland, England and Italy as potential markets. Based on the fulfilment of the aforementioned requirements, we believe Spain, France and Lithuania are also high potential markets in which Penneo is not yet present.

Due to Penneo’s relatively cautious internationalisation journey, there are several markets in Europe it has not yet entered. In connection with the IPO, Penneo highlighted six markets ready to be targeted. Excluding Finland and Belgium, which it entered in 2020, this leaves England, Ireland, the Netherlands and Italy.

## Prospect markets according to Penneo



Note: Penneo has entered Belgium and Finland.  
Source: company presentation, ABG Sundal Collier

When Penneo assesses the potential of new prospect markets there are three main criteria which need to be fulfilled for a market to be relevant. These include:

1. High degree of digitisation
2. A developed national electronic ID (eID) scheme
3. Digital filing of annual reports

The next three sections cover the three requirements to evaluate prospect markets and compare them to those pointed out by Penneo itself.

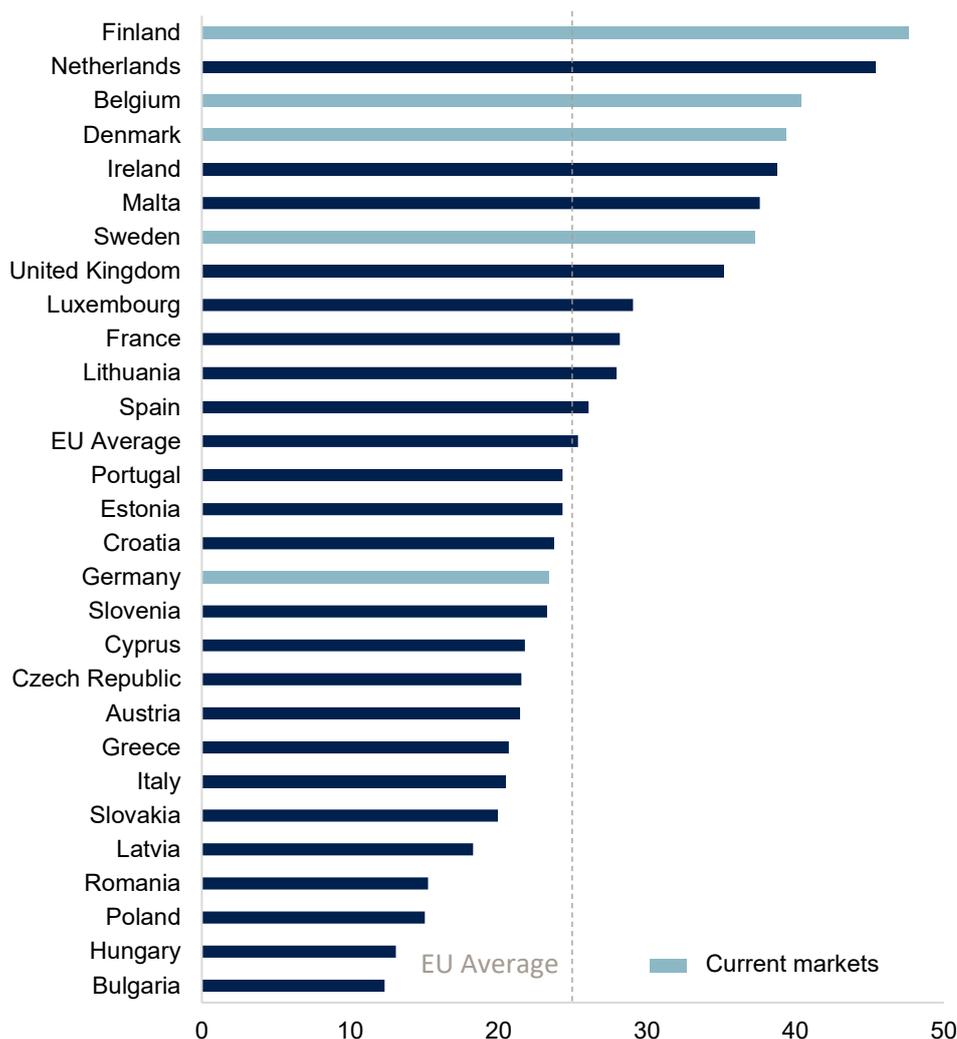
## Digitisation

It is important for a country to be relatively digitised to accommodate the solutions that Penneo brings to the table. Penneo has been able to penetrate the Danish market because Denmark is among the most digitised countries both when it comes to public services and private businesses. Penneo’s management has estimated that most of Europe is 3-4 years behind the Nordic countries when it comes to digitising society.

The European Commission monitors relevant digitisation indicators of all EU member states via the Digital Economy and Society Index (DESI) score. The index is a composite of five subcategories: connectivity, human capital, use of internet, integration of business, and digital public services. The composite score of all countries is presented in Appendix D.

Out of the five subcategories, *integration of digital technology (4)* is most relevant in this connection. This subcategory consists of an even more relevant subcategory, *business digitisation (4a)*, which covers electronic information sharing, social media, big data, and cloud.

### DESI - Business digitisation (4a), 2020



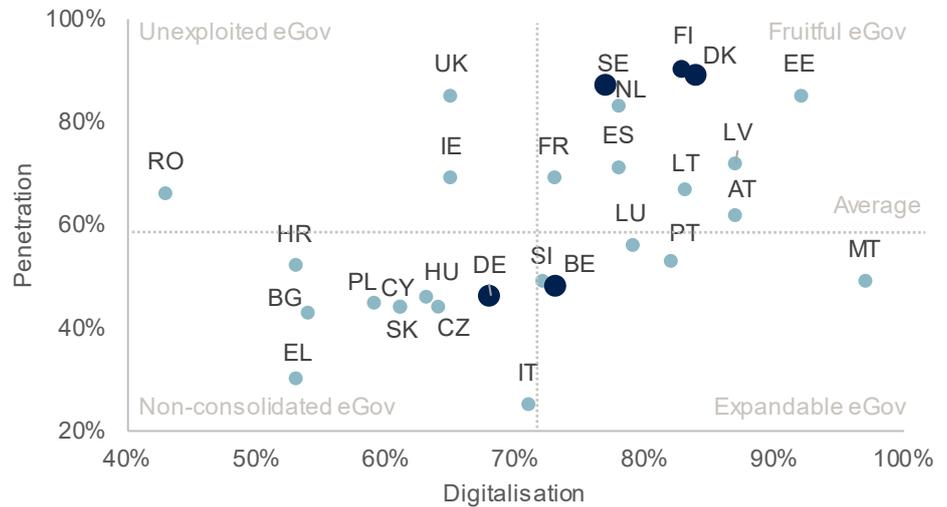
Note: Present markets marked with light blue. Norway is not included in the DESI index.  
Source: DESI, ABG Sundal Collier

All Penneo’s current markets except Germany are above the EU average of 25 within business digitisation. Finland is leading with a score of 48 closely followed by Belgium (40), Denmark (39) and Sweden (37). Germany stands at 23, or the 17<sup>th</sup> highest when ranked.

All Penneo’s designated prospect markets, except Italy (20), are above the EU average (25). The Netherlands (45) has the second highest score while Ireland (39) and the UK (35) are in 5<sup>th</sup> and 8<sup>th</sup> place, respectively.

Besides business digitisation, public digitisation is also crucial for a digital ecosystem to emerge. Each year the European Commission publishes an eGovernment Benchmark report, assessing the digitalisation of public services in EU member states much in line with the fifth category of DESI, digital public services. However, besides the digitalisation aspect, the report(s) also address the extent to which the digital public services are used, i.e. penetration.

**Public digitisation & penetration – eGov Benchmark 2020**



Note: the average is an EU + UK average.  
 Source: The European Commission: eGov Benchmark 2020, ABG Sundal Collier

Based on the two dimensions and the EU average of both scores, the plot is divided into four quadrants. The eGovernment Benchmark report describes the upper right-hand corner as fruitful eGovernment, with a high level of both digitalisation and penetration. The three Nordic countries Denmark, Sweden, and Finland (Norway is not included in the report) are all located in the fruitful eGov quadrant.

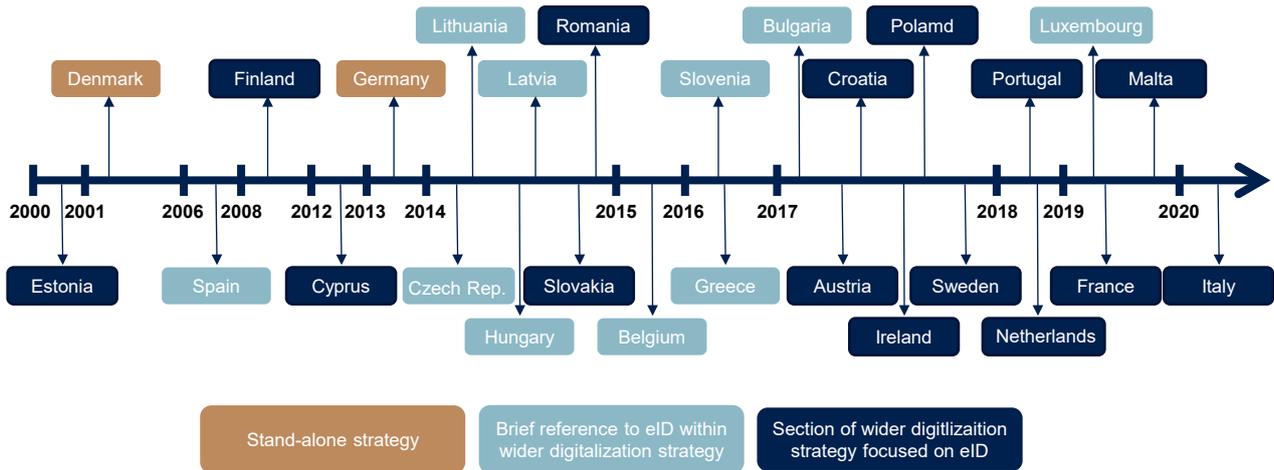
Belgium is above average in digitalisation while having a lower than average penetration of its digital public services. Likewise, Germany is below average in terms of penetration. However, Germany is also below average in terms of digitalisation, placing it in the non-consolidated eGov quadrant.

Among the prospect markets designated by Penneo itself, the Netherlands is placed in the fruitful eGov quadrant, while Italy has a lower than average penetration and is average in terms of digitalisation.

**National electronic ID (eID)**

The second market criterion is the existence of an eID. A vast majority of the countries in the EU have at least one type of eID and only two countries do not (yet) have any kind of eID (Bulgaria and Cyprus). However, there is great variation in the digitalisation and eID strategy of each country. This is possibly explained in each country’s history with eID. Those with a long record of eID strategies and means may be more likely to have a more developed eID solution.

### eID strategies roadmap



Source: European Commission: "Overview of Member States' eID strategies"

As is indicated from the roadmap above, some of the Nordic countries, including Denmark and Finland, have been early at developing an eID strategy. Norway is not on the map but began working on its eID solution in 2000, which was adopted by its first user in 2004.

Although the roadmap may appear to indicate whether an eID solution in a country should be well developed, this is far from the case. For example, in Romania, the strategy was presented in 2014, but not before August 2021 did a pilot project begin. Therefore, the roadmap is not indicative of a successful implementation of electronic IDs.

Besides the differences in the link to national digitalisation strategies, there are several factors which distinguish the eIDs of different countries.

- Provider of eID:** In some countries (10) the state is the primary identity provider, such as in Denmark, Ireland, Austria, and seven other member states. However, in a majority of the countries (16) it is a mix of the state and private service providers, where the state is the identity broker. Such countries typically have national eID cards while also having private providers of other eID solutions such as MobileID, BankID, PostID, etc. This model includes countries such as Belgium, Germany, France, Italy, the Netherlands, Spain, Sweden, and nine other member states. Finland is the only country where there are only private providers of eID.
- Mandatory eID:** In some countries the eID is mandatory (Spain, Latvia, Estonia, Portugal). In a few others it is only mandatory for all new IDs (Poland, Croatia, Malta). However, in most countries it remains voluntary.
- Mobile/app solution:** Most of the European countries (19/27 EU countries as well as the UK, Switzerland, and Norway) have launched an app (or mobile) solution for at least one of its eID solutions.

Besides the strategy itself, there is also considerable variation in how well the eID is adopted by the population, similar to the penetration in the eGovernment benchmark. Obviously, if the eID is mandatory it will have a higher adoption rate

compared to countries with voluntary eID solutions. However, the mandatory eID is likely not the most relevant eID solution for use of Penneo’s product. Often if the eID is mandatory it is in a country with a mixed model, where there are private service providers of more relevant eID solutions which have a mobile ID solution or similar. One exception is Spain, where the mandatory eID ‘DNle’ is well integrated and includes an app solution.

**National eID(s) in the EU (plus Norway, the UK & Switzerland)**

Country	# of eIDs	App/Mobile	Name of relevant eID	% of population
Spain	2	Yes	DNle	94%
Denmark	2	Yes	NemID	89%
Finland	4	Yes	FTN	87%
Luxembourg	2	Yes	LuxTrust	86%
Sweden	5	Yes	BankID	84%
Netherlands	2	Yes	DigID, eHerkening	80%
Norway	4	Yes	BankID	79%
Lithuania	3	Yes	Smart ID	55%
Ireland	2	No	MyGovID	52%
Hungary	1	No	eSzemelyi	47%
Latvia	5	Yes	Smart ID	39%
France	4	Yes	France Connect	34%
Germany	4	Yes	Verimi, Yes, etc.	31%
Italy	3	No	SPID	29%
Estonia	7	Yes	Smart ID	29%
Belgium	3	Yes	ITSME	25%
Austria	4	Yes	E-ID	22%
Switzerland	1	Yes	SwissID	22%
Poland	5	Yes	Trusted Profile, etc.	13%
United Kingdom	1	Yes	GOV.UK Verify	12%
Portugal	3	Yes	Digital Mobile Key	12%
Slovakia	3	Yes	Slovak Citizen eCard, MeID	8%
Czech Republic	2	Yes	BankID	n.a.
Slovenia	3	Yes	Mobile identidy smsPASS	n.a.
Croatia	21	Yes	mToken	n.a.
Malta	1	No	National eID	n.a.
Romania	1	No	Pilot project phase	n.a.
Greece	1	No	Pilot project phase	n.a.
Bulgaria	0	n.a.	Under development	n.a.
Cyprus	0	n.a.	Under development	n.a.

Source: Europe Commission: “Overview of Member States’ eID strategies”, and national government websites, ABG Sundal Collier

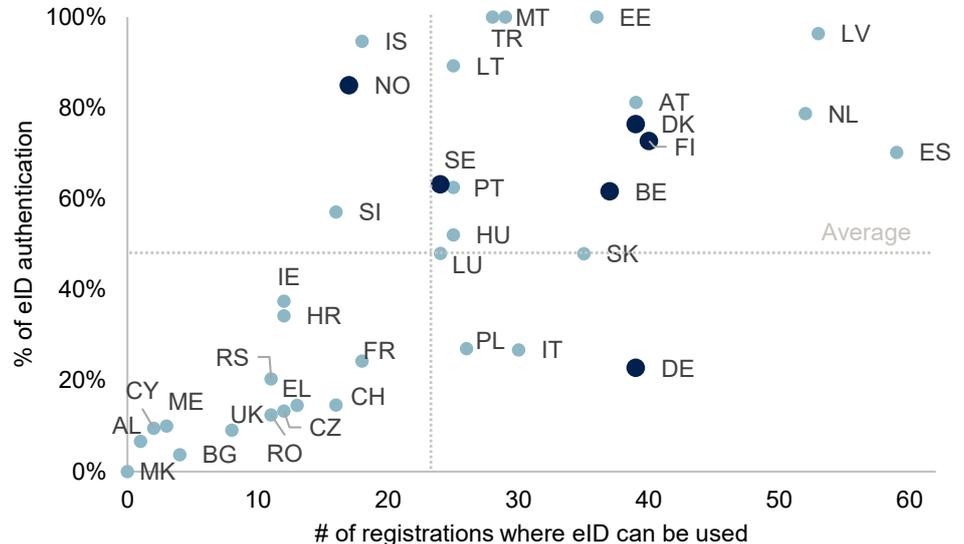
The Scandinavian countries all rank among the highest adoption rates, ranging from 79-89%. The table also shows the modest adoption of eID in most member states outside the Nordics. Large countries such as Germany and France have approximately a third of the population with an eID solution. Furthermore, most countries in Eastern Europe are lagging significantly behind in the implementation and adoption of eIDs.

One way to assess the adoption of eIDs across Europe is to examine the incentives for using them indicated by the government’s implementation of eIDs into public service registrations.

The below chart illustrates the degree of eID use in public services both regarding the absolute scope (number of registrations requiring authentication and where eID is possible) and the relative scope (share of eID authentications out of all registrations requiring authentication).

The graph illustrates different countries' use of eIDs in online public service registrations. The x-axis shows the total number of registrations of life events (e.g. moving, car, marriage. etc.) using an eID. The y-axis shows the share of registrations with an eID out of all registrations that require authentication.

**eID authentication use in public service registrations**



Source: eGov Benchmark 2020, ABG Sundal Collier

The use of eID schemes in public services shows a similar picture as the digitisation vs. penetration matrix, indicating that the Nordic and Baltic countries have a high degree of digitisation and adoption. In contrast to the previous graph, Norway is included above and also shows a high level of digitisation with 85% of the authentications being possible using eID. Furthermore, it also illustrates how a low relative use of eIDs in public service registrations may be a possible reason for Germany's relatively low adoption of its eIDs (31%). Furthermore, it is also clear how most Eastern European countries have a low level of eID authentication possibilities both nominally and relatively, pointing to the general low adoption rates.

**Digital filing of annual reports**

The last requirement for a prospect market is the use of digital filing of annual reports. In 13 out of the 27 EU countries, e-filing is mandatory, however the method of filing varies. In some countries, this simply means uploading a PDF file, while in some other countries it is required to file it in the XBRL format. In the remaining countries e-filing is optional but may still have a high adoption rate. There is no country in the EU where it is not possible to file the annual report electronically. Therefore, it also indicates that the requirement for electronic filing of annual reports is not the breaking point for the assessment of market attractiveness.

Concerning public companies, the EU has regulated on the filing of annual reports. Public companies are subject to the European Single Electronic Format (ESEF) harmonising the filing of annual reports across all EU member states. The ESEF regulation requires companies to file their annual reports in the xHTML format, and if subject to IFRS, the company must also adopt the inlineXBRL (iXBRL) format to highlight financial statements (income statement, balance sheet, statement of cash flows, etc.). Due to the COVID-19 pandemic countries have been given the opportunity to postpone the implementation of ESEF one year, starting with annual reports for 2021 instead of 2020.

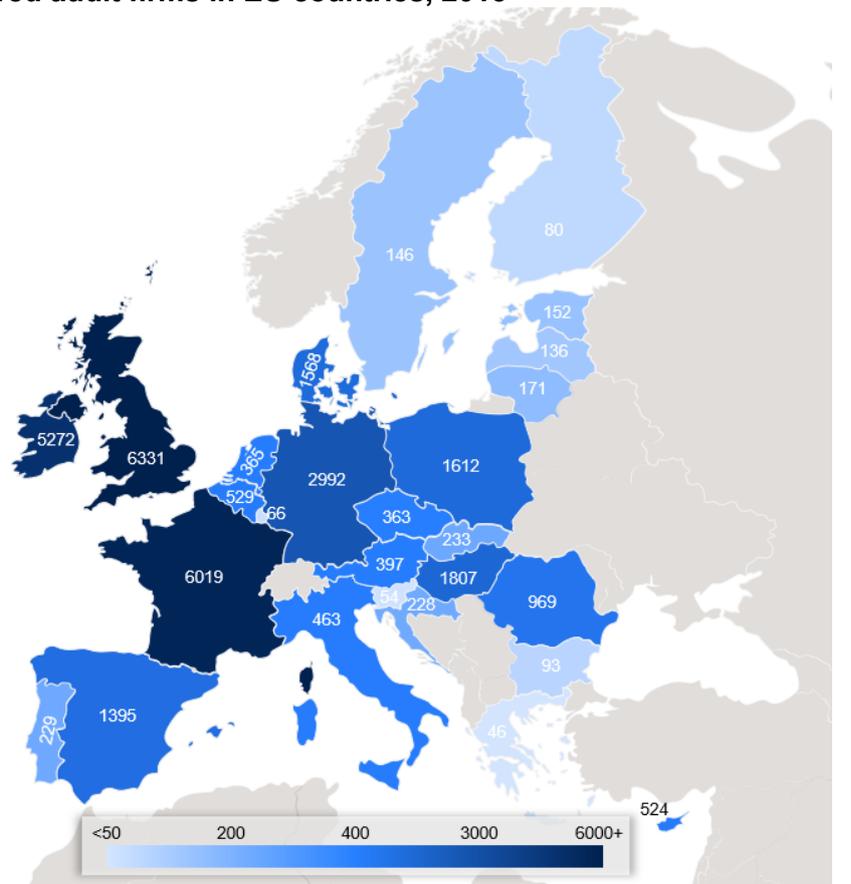
## Prospect markets and market size

### Size of addressable markets

Besides fulfilling all three requirements a crucial internationalisation decision-making factor is the size of the market. While it may not be of high importance in the early stage of entering a market, due to links with already existent clients through subsidiaries, it is relevant to assess the market potential in the longer run.

Since Penneo initially targets auditing firms via its growth strategy, it may prove beneficial to assess a market based on the number of potential auditing clients. One way to assess this is by counting the number of registered audit firms in each EU member state (and Norway, UK, and Switzerland).

### Registered audit firms in EU countries, 2015



Source: Europe Commission, ABG Sundal Collier

This number may not rightfully reflect the correct number of auditing firms Penneo can target (based on right size, etc.), but it serves as a good proxy for the market size. In reality, the number of auditing firms in each country is likely to be significantly higher when including those audit firms not registered. That said, these firms are most likely very small in size and not the most relevant target group for Penneo. Moreover, many of the registered audit firms are also likely to be too small to have client potential for Penneo.

The European Commission has published two reports on statutory auditing of PIEs (public-interest entities) reporting the number of registered audit firms in the EU in 2015 (report from 2018) and 2018 (report from 2021). From 2015 to 2018 the number of registered auditing firms in the EU declined from 32.3k to 30.5K, or by 5.6%. The most recent country-specific count of registered audit firms is from 2015, which highlights the uncertainty of the true number today, six years later.

### Which markets are ready to be targeted?

Combining the three requirements, 1) high degree of digitalisation, 2) national eID, and 3) E-filing with the market potential measured by the number of registered audit firms, a clearer picture of the markets with the most potential emerges.

The table below summarises each country's performance or (lack of) fulfilment of each requirement as well as the market size for audit firms.

### Overview of markets based on criteria and market size estimates

Country	1. Digitization rank*		2. eID	3. E-filing	Market size		
	Business	Public	Adoption	Mandatory?	Registered audit firms	ARS value** (DKK€m)	Mkt. Value (DKK€m)
<b>Current markets Totals excl. Germany</b>					<b>2,323</b>	<b>83</b>	<b>1,279</b>
Denmark	4 (39)	5 (84%)	89%	Yes	1,568	8	240
Norway	n.a.	n.a.	79%	Yes	n.a.	11	224
Sweden	7 (37)	12 (77%)	84%		146	27	374
Finland	1 (48)	6 (83%)	87%		80	11	185
Belgium	3 (40)	13 (73%)	25%	Yes	529	25	257
Germany	17 (23)	17 (68%)	31%		2,992	52	2,972
<b>Prospect markets</b>					<b>19,553</b>	<b>361</b>	<b>5,913</b>
Netherlands	2 (45)	10 (78%)	80%	Yes	365	25	589
Ireland	5 (39)	18 (65%)	52%	Yes	5,272	7	216
United Kingdom	8 (35)	18 (65%)	12%		6,331	122	2,433
Spain	12 (26)	10 (78%)	94%		1,395	78	1,010
France	10 (28)	13 (73%)	34%		6,019	125	1,561
Lithuania	11 (28)	6 (83%)	55%		171	4	104
<b>Other markets</b>					<b>7,438</b>	<b>260</b>	<b>5,422</b>
Italy	23 (20)	16 (71%)	29%	Yes	463	85	1,243
Estonia	15 (24)	2 (92%)	29%	Yes	152	5	58
Malta	6 (38)	1 (97%)	n.a.	Yes	66	1	23
Luxembourg	9 (29)	9 (79%)	86%	Yes	66	2	64
Austria	21 (21)	3 (87%)	22%	Yes	397	8	396
Latvia	25 (18)	3 (87%)	39%		136	5	78
Portugal	14 (24)	8 (82%)	12%		229	20	330
Switzerland	n.a.	n.a.	22%		n.a.	13	535
Slovenia	18 (23)	15 (72%)	n.a.		54	3	59
Croatia	16 (24)	25 (53%)	n.a.		228	6	105
Czech Republic	20 (22)	20 (64%)	n.a.		363	15	304
Cyprus	19 (22)	n.a.	n.a.	Yes	524	2	54
Hungary	28 (13)	21 (63%)	47%	Yes	1,807	18	286
Slovakia	24 (20)	22 (61%)	8%		233	11	148
Romania	26 (15)	27 (43%)	None		969	28	396
Poland	27 (15)	23 (59%)	13%	Yes	1,612	13	869
Greece	22 (21)	25 (53%)	None	Yes	46	11	268
Bulgaria	29 (12)	24 (54%)	None		93	16	207

\* The digitisation scores are ranks with the actual score in parenthesis. The business digitisation is the DESI 4(a) subcategory (score from 0 to 100). The public digitisation is from the eGovernment Benchmark (from 0% to 100%).

\*\* Annual report signatures (ARS) market value

Source: Eurostat, Europe Commission, ABG Sundal Collier

We can estimate the average price of a signature in an annual report. In 2019, Penneo was used to sign 167,300 annual reports. The ARR in 2019 was DKK 25m, of which 37% was attributed to auditing customers. This gives an average price per signature of DKK 55. Thus, the market for signatures in annual reports in the EU & UK is estimated to be DKK 756m based on an average signature price of DKK 55 and the number of active enterprises (excl. sole proprietorships).

The value of Penneo's existing markets (excl. Germany) is DKK 83m (see Appendix G). In 2019, Penneo's revenue from auditing and accounting customers equalled DKK 9m.

However, the market potential for Penneo spans more than just annual report signatures. To estimate the market size for Penneo's full set of offerings, including signing, data collection, and KYC/AML compliance, we first estimate the number of relevant customers (see Appendix G for a full overview). There are more than 275,000 companies in the EU & UK with more than 10 employees and that are deemed relevant to Penneo<sup>14</sup>. In Penneo's current markets (excl. Germany) there are 24,000 such companies. Penneo's ARPA as at H1 2021 was DKK 21,444, but Penneo has not penetrated its customers fully, given that few have Penneo's KYC/AML product now. As a proxy we estimate that the KYC/AML product is more expensive than the signing and data collection solution, and we assume that Penneo has penetrated its customers by 40% in the (unlikely) case where all customers adopt the KYC/AML product. Together, these assumptions lead to a market value estimate of DKK 15.6bn in the EU & UK. For current markets (excl. Germany) that is DKK 1,279m. Furthermore, this market value will increase somewhere between 13% to 23%, which are the estimated CAGRs for the business process automation and digital transaction management markets, respectively. Historically, Penneo's net upselling (upselling incl. churn) has been 17.5%, indicating growth in between the two CAGRs.

Concerning new market entries, the Netherlands, Ireland, the UK, Spain, France, and Lithuania seem to be good prospect markets. The value of these markets is estimated to be DKK 361m for annual report signatures and DKK 5.9bn for other relevant markets/industries. However, there are a few hurdles in almost all of these countries, which to some degree reduce the market potential:

- **The Netherlands** seems to be the most obvious choice for expansion. The national eID scheme, DigiID (eHerkenning for businesses), is well adopted among the population and the country scores second highest on business digitisation.
- **Ireland** scores relatively high on business digitisation and has a more than acceptable penetration of its eID scheme, MyGovID. However, when it comes to the general digitisation of public services, Ireland lags the rest of the countries. However, this may not be a relevant issue as long as the adoption of MyGovID is satisfactory. Lastly, the Irish market for auditing is also one of the five largest in Europe.
- **The United Kingdom** has the highest number of registered audit firms with over 6,000. However, the national eID scheme, GOV.UK Verify, lacks

<sup>14</sup> Four industries based on NACE codes: Financial and insurance activities except activities of holding companies, real estate activities, legal and accounting activities, activities of head offices, management consultancy activities (see Appendix G).

penetration with only 12% of the population having registered themselves. Just like Ireland the digitisation of public services is lower than the EU average and may explain the low adoption rate of GOV.UK Verify.

- **Spain** is the only country on this list which has a mandatory eID scheme, DNle, which has recently received a fourth upgrade to DNle 4.0. This explains the highest adoption rate of 94% (for the portion of the population above the age of 14). Furthermore, Spain scores slightly above average on all digitisation measures.
- **France** uses a network of providers called FranceConnect, which is used by roughly a third of the population. Furthermore, France is one of the largest auditing markets in Europe and (similar to Spain) has a slightly better than average digitisation score within businesses and public services.
- **Lithuania** is the only non-Western European country on the list. Just like Spain and France, Lithuania has a higher-than-average digitised society (both business and public services) and a higher adoption rate of SmartID of 55% (a Baltic-wide eID scheme) than the eIDs of the UK, France, and Ireland. Yet, the Lithuanian market for auditing is small, with less than 200 registered auditing firms.

In contrast to the above countries, Penneo's own designated prospect markets at the time of the IPO, Italy, and the most recent market entry, Germany, seem to be less obvious choices for expansion due to a lower level of digitisation. Together, these markets have an estimated potential market value of DKK 137m for annual report signatures and DKK 4.2bn for the total market. However, there are reasons why it may not be easy to penetrate these markets.

- **Germany** is a country that Penneo currently only has few customers in and the company has yet to implement a German eID into its offering. As previously illustrated, the country is performing below average on digitisation, which could be problematic for Penneo. However, the German market is one of the largest in Europe (only exceeded by France, the UK, and Ireland). There are a few eID schemes in the German market, including Verimi and YES. The adoption rate is 31%.
- **Italy** is among the least digitised countries in Western Europe, according to the DESI scores for both business digitisation and public services. The national eID scheme, SPID, has an adoption rate of 29%.

## Competitive landscape

*Penneo is the only company in the DI, DTM, and BPA markets which has a strong strategic focus on the auditing industry, but it is challenged by three close competitors. DocuSign, Scrive, and Connective offer virtually the same solutions as Penneo and they do also offer some, although fewer than Penneo, relevant integrations for the auditing industry, such as Silverfin. Besides, there are several other competitors, including GetAccept, ZignSec, and Signicat, which challenge Penneo on some of the core products, e-signing and/or KYC processes but to less of an extent in the auditor segment.*

The three markets of interest – digital signatures, digital transaction management, and business process automation – overlap a lot in the sense of the companies that provide solutions for each of the markets.

The market for electronic signatures is a relatively mature market characterised by high fragmentation. Thus, there are a multitude of companies providing similar solutions, although dominated by one large player, DocuSign. Due to the digital format of the solutions, often a platform business, it is relatively easy for companies to expand globally in an early phase. Likewise, many of Penneo's competitors have expanded globally quite quickly and much faster than Penneo. The market is best differentiated between the size of the targeted customers (individuals, small enterprises, and large enterprises) and the strategic focus. Typically, companies focus either on a pure identity solution with a "global leader" vision or an end-to-end solution (often overlapping with the DTM market) targeted at more specific industries or department functions.

The markets for digital transaction management and, in particular, business process automation are both early-stage markets that are evolving quickly with technology developments. There are relatively few companies in the market, and it is crucial that companies keep up with technology developments to stay ahead of the competition.

The most relevant competitors to Penneo in all three markets have been selected based on three criteria:

- **Product offering similarities:** Digital solutions with focus on e-signatures, document automation & handling, and onboarding & KYC. Furthermore, focus on flexible and tailored B2B solutions similar to Penneo's.
- **Geographical market presence:** Geographical presence is more difficult to determine for software-based companies like Penneo and its competitors, which tend to compete on a global scale. However, due to Penneo's (and some of its competitors') dependency on eID solutions, this creates market boundaries.
- **Customer segment focus:** Penneo's strategic focus is the auditing industry. Thus, competitors with more focus on this industry are more relevant to Penneo. The integration options of the different companies may serve as an indicative measure of their industry focus. Furthermore, only competitors that also target medium-sized and large enterprises are relevant. This is best indicated from the product description and pricing tiers.

## Overview of competitors

Based on the segmentation of competitors from the three requirements, we assess Penneo's six closest competitors to be DocuSign, Connective, Scrive, GetAccept, ZignSec, and Signicat. A brief comparison of Penneo and the six chosen competitors is presented below.

### Overview of competitors

	Penneo	DocuSign	Connective	Scrive	GetAccept	ZignSec	Signicat
<b>Short description</b>	<i>Digital signing, document automation &amp; handling, and KYC/AML compliance</i>	<i>Global e-signature leader with an extensive 'Agreement Cloud' platform</i>	<i>Streamlining digital transactions using Identity Hub, eSignatures, and smart documents</i>	<i>Automating workflows using eSignatures and digital Identity verification</i>	<i>"Sales on autopilot" with content creation, document tracking and eSignatures</i>	<i>Identifying and onboarding customers using eIDs and register checks</i>	<i>Identity solutions for every step from onboarding to authentication to eSigning</i>
<b>Public</b>	✓	✓				✓	
<b>Founded</b>	2014	2003	2014	2010	2015	2015	2007
<b>HQ Country</b>	Denmark	USA	Belgium	Sweden	California, US	Sweden	Norway
<b>Market(s)</b>	DK, NO, SE, FI, BE, DE	Global	Mainly Europe	40+	50+	Europe, US & Singapore	Europe
<b>Revenue DKK (2020)*</b>	35m	~9.5bn	15-30m	90-160m	50-140m	~45m	190-220m
<b>Customers</b>	2000+	1m+	1000+	5000+	5000+	400+	1300+
<b>Employees</b>	80+	6200	50+	150+	150+	85+	~240
<b>Offices</b>	1 <i>Copenhagen, Denmark</i>	17 <i>US (5), AU (2), BR, FR, EG, DE, IR, IL, JP, SG, SE</i>	6 <i>BE, NL, US, FR, DK &amp; ES</i>	4 <i>SE, DK, NL &amp; NO</i>	7 <i>SE (2), US (2), NO, DK &amp; FR</i>	4 <i>SE, SG, CZ &amp; US</i>	11 <i>PT, BE, DK, FI, DE, NL, NO (3), SE &amp; UK</i>

\* Estimated by D&N Street, dealinfo, Owler, Zoominfo  
Source: company websites, ABG Sundal Collier

- DocuSign:** DocuSign is the global e-signatures market leader with presence in 180 countries and a revenue at \$1.5bn in 2020. DocuSign solutions spans everything from e-signatures, contract lifecycle management (CLM), document generation, document analytics, identification (KYC) and much more. The solutions are packed together on the 'Agreement Cloud' platform. DocuSign targets all sizes of customers with a price ranging from a personal USD 10/month solution to enterprise plans. Through 132 partnerships and more than 350 integrations DocuSign targets a wide variety of industries, including the auditing industry with Silverfin and Wolters Kluwer integrations.
- Connective:** Connective was founded in Belgium in 2014 and is now present in more than 50 countries with offices in six, including an office in Denmark. Connective has three core solutions which it refers to as eSignature, Identity Hub, and Smart Documents, thus offering solutions very similar to those of Penneo. Similar to Penneo, Connective is only focused on the B2B market with customers of a certain size. In contrast to Penneo, Connective does not have a pre-defined package. Connective also relies on the use of eID as a means of verification and authentication in the signing process. Connective offers eight eID integrations in addition to the ones offered by Penneo (including being the only e-signature provider integrated with FranceConnect).

- Scrive:** Scrive is a Swedish-founded company with presence in more than 40 countries and more than 4,000 customers, making it the self-proclaimed leader in the Nordic e-sign market with its two main products: e-sign and eID hub. The e-sign part of the business focuses on e-signatures mainly based on the Keyless Signature Information (KSI) technology, which Scrive argues is better and safer than the PAdES format used by Penneo. Additionally, Scrive acquired Esignatur, one of the largest e-signature providers in Denmark, in July 2021. The Scrive eID hub focuses on authentication mainly related to onboarding of clients and KYC processes.
- GetAccept:** GetAccept was founded in Sweden but is today headquartered in California (US) and is present in more than 50 countries. GetAccept is an all-in-one sales engagement platform, which features content creation, sales interaction, document tracking and management, and e-signatures. GetAccept is not directly in competition with Penneo and does not feature any integration relevant for the auditing industry. However, GetAccept and Penneo share many similarities in regard to the e-signature part of their businesses.
- ZignSec:** ZignSec was founded in Sweden in 2015 and is focused on the market for verification and onboarding services. In 2021 ZignSec acquired Web Shield Ltd and added client due diligence and monitoring to the business to achieve a more end-to-end solution. ZignSec is currently present in seven European countries (incl. Sweden and Germany, thus overlapping with Penneo's presence), the US, and Singapore. ZignSec is mostly focused on onboarding and compliance, which reduces its direct competition with Penneo.
- Signicat:** Signicat was founded in Norway in 2007 and is today present across several European countries with 11 offices (incl. Denmark, Norway, Sweden, Finland, Belgium, Germany). Signicat offers a complete set of identity solutions spanning everything from onboarding, verification and secure authentication in e-signing. Signicat has more than 30 verification options including several eID solutions. Signicat offers much of the same solutions as Penneo (onboarding, KYC, e-signing), but lacks integrations with auditing-related software.

## Product overview

All presented competitors provide similar solutions and all of them have e-signatures as a core element in their product range. The table below highlights how the different solutions, and the prices, may be compared.

Four out of the six competitors offer a pre-defined package with a pre-defined price, which seem to be comparable to the Penneo Basic solution. However, several of the cheaper solutions from DocuSign, Scrive, and GetAccept have fewer functions and indicate that they also target small enterprises (e.g. family businesses) or individuals, in contrast to Penneo. Besides the predefined packages, all of them offer enterprise plans.

**Product overview of Penneo and its competitors**

	Penneo	DocuSign	Connective	Scrive	GetAccept	ZignSec	Signicat
<b>Prices</b>							
Pre-defined package	✓	✓		✓	✓		✓
Price/month	\$150*	\$10-\$480		\$30-\$1500	\$0-\$49		\$80-\$275
<b>Solutions</b>							
eSignatures	✓	✓	✓	✓	✓	✓	✓
KYC/Onboarding	✓	✓	✓	✓		✓	✓
Document automation	✓	✓	✓	✓	✓		
<b>Integrations</b>							
Silverfin	✓	✓	✓				
CaseWare	✓						
Wolters Kluwer	✓	✓		✓			
WorkPoint	✓						
<b>Total integrations</b>	<b>19</b>	<b>350+</b>	<b>48</b>	<b>50</b>	<b>43</b>	<b>n.a.</b>	<b>n.a.</b>

\* Official price at EUR 129 or DKK 1,000  
 Source: company presentation, ABG Sundal Collier

*Silverfin, founded in London in 2013, aims to digitise the work of accountants through cloud accounting software solutions. Silverfin has 650+ customers across eight countries with several large customers such as Deloitte, BDO, and VGD. Silverfin is integrated with six digital signature solutions, including Penneo, DocuSign, and Connective.*

The closest competitors in terms of overlap in solution offerings are DocuSign, Connective and Scrive. All three companies offer not only e-signatures, but also KYC processes for onboarding and document automation and handling. Additionally, these companies are the only competitors to have integrations with any of the auditing-related software that Penneo offers (such as Silverfin). DocuSign has integration with both Silverfin and Wolters Kluwer, while Connective (Silverfin integration) and Scrive (Wolters Kluwer integration) only offer one integration, each related directly to the auditing industry.

The three other competitors, GetAccept, ZignSec, and Signicat, offer solutions that do not overlap with Penneo’s as much as the three others. GetAccept has a stronger focus on sales and marketing and does not include KYC software in its solution. ZignSec and Signicat is more focused on the digital identity market and does not offer the same document automation handling solutions as Penneo.

**Signature & verification solutions**

The nature of the signature solutions from Penneo and its competitors varies relatively, but all of them have integrated eID verification solutions. The table below gives an overview of the different signature and verification solutions offered by the companies as well as their eID integrations.

DocuSign offers both Simple, Advanced, and Qualified Electronic Signatures (SES, AES, and QES) depending on the need of the customer. Furthermore, DocuSign is a Qualified Trust Service Provider (QTSP) so it can ensure the highest level of security in the verification process.

Connective also focuses on the use of eID signatures, similar to Penneo, but also offers qualified e-signatures (QES) through video verification and SMS one-time-passwords (OTP). Furthermore, Connective has one of the most extensive lists of eID integrations and is the only e-signature provider that supports FranceConnect.

**Signature and verification solutions and eID integrations of Penneo and its competitors**

	Penneo	DocuSign	Connective	Scrive	GetAccept	ZignSec	Signicat
<b>Signatures</b>							
Signature format	PADES	Offers SES, AES & QES	Offers SES, AES & QES	KSI			PADES
Security Level	AES			AES			AES
QTSP certificate	Yes	Yes	Yes	Yes	n.a.	n.a.	Yes
Certificate Authority	Intesi Group	DocuSign	Swisscom Trust	3rd party			Signicat
<b>Identity solutions</b>							
Document scan		✓			✓	✓	
eID	✓	✓	✓	✓	✓	✓	✓
SMS/Email OTP		✓	✓	✓	✓	✓	✓
Third-party	✓	✓			✓		✓
Photo/video			✓				
<b>eID integrations</b>							
Denmark NemID	✓	✓	✓	✓	✓	✓	✓
Norway BankID	✓	✓	✓	✓	✓	✓	✓
Sweden BankID	✓	✓	✓	✓	✓	✓	✓
Finland FTN	✓	✓	✓	✓		✓	✓
Belgium ITM SE	✓	✓	✓	✓		✓	✓
Netherlands iDIN		✓	✓	✓		✓	✓
Germany Verimi			✓	✓			✓
France FranceConnect			✓				
Spain DNIe			✓				
Others		Australia Post Digital ID	ChamberSign, Certigna, LuxID & .beID			Smart-ID	DigiD, .beID, yes, Smart-ID, EstEID, and more

Source: ABG Sundal Collier, company websites

Scrive lives up to the AES standards of the eIDAS regulation, just like Penneo, but uses another technology called Keyless Signature Infrastructure (KSI), which it claims is better and more secure than the PAdES format used by Penneo. Scrive is also cooperating with a QTSP to provide signature certificates but is seeking to become a QTSP itself at some point in the future. Just like Penneo, Scrive relies mainly on eID integrations in its signing solution and supports the same eIDs as Penneo and iDIN (Netherlands) and Verimi (Germany).

GetAccept and ZignSec both to a large degree rely on scanning/pictures of documents as an identification and verification method, although eIDs are supported. GetAccept only supports the three Nordic countries Denmark, Norway, and Sweden, while ZignSec supports the same eIDs as Penneo and iDIN (Netherlands) and Smart-ID (Baltic countries).

Signicat offers the most identity solutions with a total of more than 30 options, including more than 15 eID integrations. SMS and Email OTP, and third-party integrations (Microsoft, Salesforce, etc.). Signicat uses the PAdES technology format like Penneo, which lives up to the AES standards. However, Signicat is a QTSP and thus capable of providing signature certificates that ensure the verifications and timestamps.

# Estimates

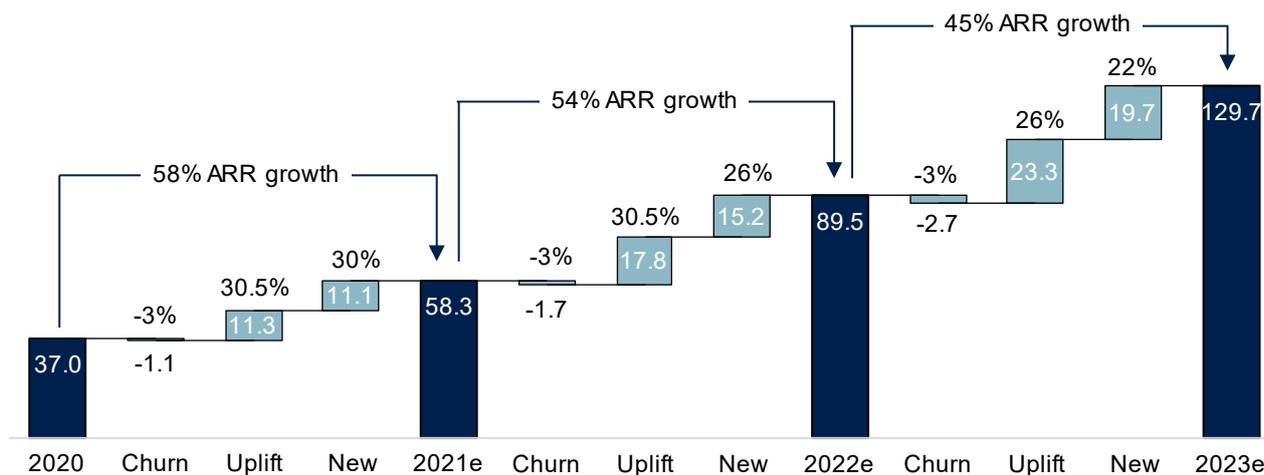
## ARR and sales estimates

We estimate Penneo’s ARR in line with the company’s reporting by dividing the growth into three parts: churn, uplift, and ARR from new customers, with the first two metrics making up net upselling/retention. We refer to the tables at the end of this section for historical and estimated numbers.

We estimate the 2021 ARR slightly above the mid-point of Penneo’s guidance (DKK 56-60m) at DKK 58.3m, or the equivalent of growth of 58%. This is based on a slight slowdown compared to Q2 2021, when it rose by 61% y-o-y. We expect net uplift and new customers to drive approximately an equal amount of growth in 2021, due to upselling the KYC/AML product to current auditing customers and penetrating new customers from the Nordic financial industry in accordance with the new strategy from June 2021. Furthermore, the estimated churn of 3% corresponds to historical averages, although higher than the 2% achieved in H1 2021.

We expect the upselling of the KYC/AML product to also affect the ARR in 2022, keeping the net upselling at 27.5%. Furthermore, we believe that the growth coming from ARR of new customers will decline slightly over the three years.

### Waterfall chart of ARR estimate development, 2021-2023



Source: ABG Sundal Collier

Overall, this gives ARR growth rates of 58%, 54% and 45% in 2021e through 2023e, reaching an ARR of DKK 129.7m in 2023e.

When translating ARR into revenue, we estimate that reported revenue (in accordance with IFRS 16) will correspond to 100% of ARR in 2024. There are two reasons for this assumption. First, Penneo recognises 90% of the invoiced revenue immediately, while the remaining 10% is spread over the following year (of one-year contracts). Secondly, in 2018 and 2019 Penneo’s sales team focused on invoicing rather than boosting ARR, which in some cases resulted in it giving discounts for a three-year plan instead of signing one-year plans. With the focus on solely selling one-year plans from 2020, the reported revenue will eventually converge towards the ARR as only 10% of the invoicing is recognised over time. In our estimates this share of ARR is assumed to increase by 1pp per year from 96% in 2020 (reported) to 100% in 2024.

### Sensitivity analysis

The ARR of DKK 58.3m, 89.5m, and 129.7m in 2021e, 2022e, and 2023e, respectively, form the base case on which we construct our valuation. However, these estimates entail a high degree of uncertainty. The sensitivity analysis below is based on the ARR and reported revenue in various scenarios of net uplift (uplift less churn) and growth in ARR from new customers.

### Sensitivity analysis of 2021e ARR and reported revenue

'21 ARR		Net uplift (%)				
		24.5%	26.0%	27.5%	29.0%	30.5%
New ARR (%)	27.0%	56.1	56.6	57.2	57.7	58.3
	28.5%	56.6	57.2	57.7	58.3	58.8
	30.0%	57.2	57.7	<b>58.3</b>	58.8	59.4
	31.5%	57.7	58.3	58.8	59.4	59.9
	33.0%	58.3	58.8	59.4	59.9	60.5

'21 Rev.		Net uplift (%)				
		24.5%	26.0%	27.5%	29.0%	30.5%
New ARR (%)	27.0%	54.4	54.9	55.5	56.0	56.5
	28.5%	54.9	55.5	56.0	56.5	57.1
	30.0%	55.5	56.0	<b>56.5</b>	57.1	57.6
	31.5%	56.0	56.5	57.1	57.6	58.1
	33.0%	56.5	57.1	57.6	58.1	58.7

Note: All numbers in DKKm  
Source: ABG Sundal Collier

Penneo guides for ARR of DKK 56-60m in 2021. As seen above, we estimate that the guided ARR range implies a range for net uplift of approximately 24.5-30.5% and a new ARR range of 27-33%.

With no guidance beyond 2021, the estimates become more uncertain. Both the estimated net upselling of 27.5% (2022) and 23% (2023) and the estimated new ARR of 26% (2022) and 22% (2023) are subject to a high degree of uncertainty. Therefore, the sensitivity analysis below shows how the ARR and the reported revenue change for 2022 and 2023 if the estimated SaaS metrics are changed by +/- 4pp.

For our 2023 estimates the sensitivity analysis illustrates that lowering both SaaS metric estimates by 4pp for both 2022 (i.e. 23.5% net upsell and 22% from new ARR) and 2023 (i.e. 20% net upsell and 19% from new ARR) results in DKK 116.2m ARR compared to the base case of DKK 129.7m. Likewise, the upside potential reaches DKK 144m ARR when the metrics are raised by 4pp.

### Sensitivity analysis of '22e and '23e based on changes in SaaS metric assumptions

'22 ARR		Net uplift (%)				
		-4%p	-2%p	0%p	2%p	4%p
New ARR (%)	-4%p	84.8	86.0	87.1	88.3	89.5
	-2%p	86.0	87.1	88.3	89.5	90.6
	0%p	87.1	88.3	<b>89.5</b>	90.6	91.8
	2%p	88.3	89.5	90.6	91.8	92.9
	4%p	89.5	90.6	91.8	92.9	94.1

'22 Rev.		Net uplift (%)				
		-4%p	-2%p	0%p	2%p	4%p
New ARR (%)	-4%p	83.1	84.2	85.4	86.5	87.7
	-2%p	84.2	85.4	86.5	87.7	88.8
	0%p	85.4	86.5	<b>87.7</b>	88.8	89.9
	2%p	86.5	87.7	88.8	89.9	91.1
	4%p	87.7	88.8	89.9	91.1	92.2

'23 ARR		Net uplift (%)				
		-4%p	-2%p	0%p	2%p	4%p
New ARR (%)	-4%p	116.2	119.5	122.8	126.2	129.7
	-2%p	119.5	122.8	126.2	129.7	133.2
	0%p	122.8	126.2	<b>129.7</b>	133.2	136.8
	2%p	126.2	129.7	133.2	136.8	140.4
	4%p	129.7	133.2	136.8	140.4	144.0

'23 Rev.		Net uplift (%)				
		-4%p	-2%p	0%p	2%p	4%p
New ARR (%)	-4%p	115.0	118.3	121.6	125.0	128.4
	-2%p	118.3	121.6	125.0	128.4	131.9
	0%p	121.6	125.0	<b>128.4</b>	131.9	135.4
	2%p	125.0	128.4	131.9	135.4	138.9
	4%p	128.4	131.9	135.4	138.9	142.6

Note: All number in DKKm  
Source: ABG Sundal Collier

Going below the revenue line, we estimate cost of sales to grow in line with revenue in line with history, yielding an 80% gross margin.

Other external expenses, covering e.g. marketing, maintenance of ERP and CRM systems and hardware, are estimated to reach 27% of sales in 2021 (2020: 24%), thereafter decreasing to 24% of sales in 2023 given scalability.

Staff costs are the most significant cost line in the income statement. As at H1 2021, Penneo had 88 employees, up from 54 in 2020. The increase follows investments made after the IPO in June 2020. We understand that the company intends to increase headcount further following the contemplated capital raise of DKK 100m, but management is unwilling or unable to further specify the number of employees it intends to hire. We factor in an increase to 108 employees in 2022. At an assumed average staff cost of ~DKK 550,000, staff costs comprise 67% of sales in 2022, which decreases rapidly given scalability to 51% in 2023 despite an increase in headcount to 116 in 2023 on our estimates.

### Quarterly reported numbers and estimates, Q2'2020-Q4'2023e

SaaS metrics	'20	'20	'20:	'21	'21	'21	'21	'22	'22	'22	'22:	'23	'23	'23	'23
DKKm	Q2	Q3	Q4:	Q1	Q2	Q3e	Q4e	Q1e	Q2e	Q3e	Q4e	Q1e	Q2e	Q3e	Q4e
ARR (DKKm)	30	33	37	41	48	52	58	63	73	79	89	91	106	115	130
Churn (%)	3%	4%	4%	3%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Churn (DKKm)	n.a.	n.a.	1	1	1	1	1	1	1	2	2	2	2	2	3
Uplift (%)	15%	22%	25%	23%	32%	31%	31%	31%	31%	31%	31%	26%	26%	26%	26%
Uplift (DKKm)	n.a.	n.a.	6	6	9	10	11	12	15	16	18	16	19	21	23
New ARR (%)	26%	24%	27%	32%	32%	30%	30%	26%	26%	26%	26%	22%	22%	22%	22%
New ARR (DKKm)	n.a.	n.a.	7	9	10	10	11	11	12	13	15	14	16	17	20
<b>Income statement</b>															
DKKm	Q2	Q3	Q4:	Q1	Q2	Q3e	Q4e	Q1e	Q2e	Q3e	Q4e	Q1e	Q2e	Q3e	Q4e
Revenue	9	8	12	11	16	15	15	22	22	22	22	32	32	32	32
Cost of sales	-2	-1	-2	-2	-3	-3	-3	-4	-4	-4	-4	-6	-6	-6	-6
Other external expenses	-2	-3	-3	-4	-3	-4	-4	-6	-6	-6	-6	-8	-8	-8	-8
<b>Gross profit</b>	<b>6</b>	<b>4</b>	<b>7</b>	<b>4</b>	<b>10</b>	<b>8</b>	<b>8</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>18</b>
Staff costs	-8	-6	-10	-9	-11	-13	-13	-15	-15	-15	-15	-16	-16	-16	-16
Other income	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other operating expenses	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation, amortisation, impairment	-1	0	-2	-2	-2	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2
<b>Operating profit</b>	<b>-4</b>	<b>-3</b>	<b>-5</b>	<b>-7</b>	<b>-3</b>	<b>-7</b>	<b>-7</b>	<b>-5</b>	<b>-5</b>	<b>-5</b>	<b>-5</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>
Financial income	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Financial expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Profit before tax</b>	<b>-5</b>	<b>-3</b>	<b>-5</b>	<b>-7</b>	<b>-3</b>	<b>-7</b>	<b>-7</b>	<b>-5</b>	<b>-5</b>	<b>-5</b>	<b>-5</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>
Tax for the year	0	1	3	1	1	0	0	1	1	1	1	1	1	1	1
<b>Profit for the year from continuing operations</b>	<b>-5</b>	<b>-3</b>	<b>-2</b>	<b>-6</b>	<b>-2</b>	<b>-7</b>	<b>-7</b>	<b>-5</b>	<b>-5</b>	<b>-5</b>	<b>-5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Adj. EBITDA	-2	-2	-3	-5	-1	-6	-6	-3	-3	-3	-3	2	2	2	2

Source: ABG Sundal Collier, company reports

## Annual reported numbers and estimates, 2019-2024e

Income statement (DKK m)	2019	2020	2021e	2022e	2023e	2024e
Revenue, % of ARR			97%	98%	99%	100%
Revenue	28	36	57	88	128	188
Cost of sales	-5	-7	-11	-18	-26	-38
Other external expenses	-5	-9	-15	-23	-31	-41
<b>Gross profit</b>	<b>18</b>	<b>20</b>	<b>30</b>	<b>47</b>	<b>72</b>	<b>109</b>
Staff costs	-17	-29	-47	-59	-65	-72
Other operating expenses	0	-2	-1	-1	-1	-2
Depreciation, amortisation, impairment	-3	-5	-7	-8	-8	-9
<b>Operating profit</b>	<b>-2</b>	<b>-16</b>	<b>-24</b>	<b>-20</b>	<b>-3</b>	<b>26</b>
Financial income	0	0	0	0	0	0
Financial expenses	-1	-1	-1	-1	-1	-1
<b>Profit before tax</b>	<b>-3</b>	<b>-17</b>	<b>-25</b>	<b>-21</b>	<b>-4</b>	<b>25</b>
Tax for the year	0	4	2	3	4	0
<b>Profit for the year from continuing operations</b>	<b>-3</b>	<b>-13</b>	<b>-23</b>	<b>-19</b>	<b>0</b>	<b>25</b>
Adj. EBITDA	1	-9	-17	-12	7	37

Cash flow (DKK m)	2019	2020	2021e	2022e	2023e	2024e
Operating profit/loss	-2	-16	-24	-20	-3	26
Depreciation, amortisation, impairment	3	5	7	8	8	9
Share-based payment expense	0	1	1	1	1	1
Change in working capital	-1	1	-3	-1	-2	-2
Income taxes received	0	1	2	3	4	0
Financial income received	0	0	0	0	0	0
Financial expenses paid	-1	-1	-1	-1	-1	-1
<b>Cash flow from operating activities</b>	<b>-1</b>	<b>-9</b>	<b>-19</b>	<b>-11</b>	<b>8</b>	<b>33</b>
Investments in intangible assets	-3	-9	-12	-12	-12	-12
Investments in property, plant & equipment	-0.2	-0.6	-0.1	-0.1	-0.1	-0.1
Deposits	-1	0	0	0	0	0
Acquisitions of business	0	-4	0	0	0	0
<b>Cash flow from investing activities</b>	<b>-5</b>	<b>-13</b>	<b>-12</b>	<b>-12</b>	<b>-12</b>	<b>-12</b>
Proceeds from borrowings	4	5	0	0	0	0
Repayment of borrowings	0	-5	0	0	0	0
Payment of principal portion of capital lease liabilities	0	-2	-1	0	0	0
Transaction costs from capital increase	0	-4	0	0	0	0
Cash increase from capital	7	52	0	0	0	0
<b>Cash flow from financing activities</b>	<b>10</b>	<b>46</b>	<b>-1</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: ABG Sundal Collier, company reports

## Valuation

***We derive the high end of our fair value range of DKK 30-60 via a '23e EV/Sales multiple that is 20% lower than that of DocuSign, the global market leader and direct competitor, at 17.3x, which on a fully diluted basis yields a fair value of DKK 60 per share. The low end of our fair value range arises from a comparison with a group of less comparable and more slowly growing Nordic SaaS companies, indicating a fair value per share of DKK 30 on a fully diluted basis.***

With its current installed base and strong SaaS metrics, we believe Penneo has proven the attractiveness of its business model and product. For a SaaS company in this situation, it makes sense to invest in accelerated customer acquisition and growth to gain market share, even if it squeezes profitability and cash flow in the short term. Via a subscription-based model, revenues are collected over the lifetime of the customer and over time the recurring revenue generated from the customer will exceed the cost paid to acquire the customer (i.e. the CLV exceeds the CAC) provided that the customer does not churn. As such, the profits from investing in acquiring a customer are harvested over a long period of time.

The typical SaaS growth model, as outlined above, complicates valuation based on earnings and cash flow as both will be negative. Instead, the company's ability to grow revenues via customer acquisition and net retention increases in importance. We therefore rely on sales-based multiples when assessing the fair value of Penneo.

### **DocuSign is the key peer**

As outlined in the *Competitive landscape* section, DocuSign, Scrive and Connective offer virtually the same solutions as Penneo although Penneo is specifically targeted towards the auditor vertical via its suite of integrations (such as Silverfin, Wolters Kluwer and CaseWare). Out of these competitors, only the market leader DocuSign is publicly listed.

DocuSign is the global e-signatures market leader with presence in 180 countries and revenue of USD 1.5bn in 2020 versus Penneo with presence in six countries and 2020 revenue of USD 6.6m. Like Penneo, DocuSign's solutions include e-signatures, identification (KYC) and document automation. Through 132 partnerships and more than 350 integrations, DocuSign targets a wide variety of industries, including the auditing industry with Silverfin and Wolters Kluwer integrations.

DocuSign is forecast by FactSet consensus to grow at 41%, 30% and 29% in '21, '22 and '23, respectively. This is somewhat below our Penneo sales growth estimates of 59%, 55% and 46% for '21, '22 and '23, respectively.

While DocuSign has been EBITDA negative historically, it is estimated by FactSet consensus to report EBITDA of USD 417m in '21 (20.3% margin). As such, DocuSign appears to be a step ahead of Penneo as we do not forecast Penneo to report positive EBITDA (adj.) before '23.

Given DocuSign's established track record of market leadership and superior profitability pathway while maintaining strong growth (albeit lower than Penneo), we believe Penneo should trade at a lower EV/sales multiple. When comparing with DocuSign and looking at EV/sales multiples that are lower by magnitudes of 20% to 40% for '21e, '22e and '23e sales, we see Penneo trading fairly in a range from DKK 33 to DKK 60 per share on a fully diluted basis:

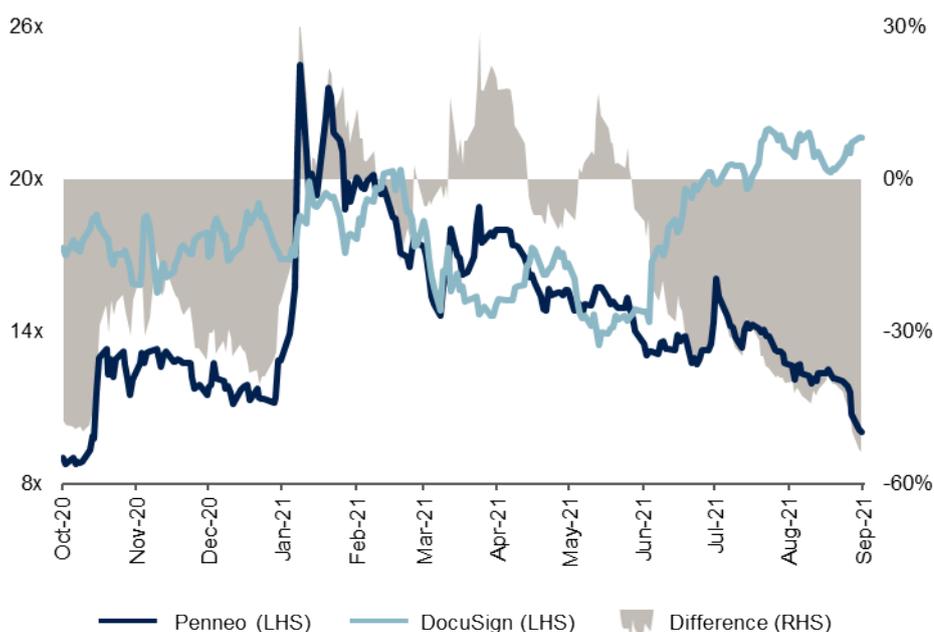
**Penneo versus DocuSign indicates fair value of DKK 33-60 per share**

	2021e	2022e	2023e
DocuSign EV/Sales (x)	28.9x	22.3x	17.3x
<i>Penneo EV/Sales '21e-23e (x)</i>			
20% lower	23.1x	17.9x	13.8x
30% lower	20.3x	15.6x	12.1x
40% lower	17.4x	13.4x	10.4x
<i>Penneo share price '21e-23e (DKK), fully diluted</i>			
20% lower	44	53	60
30% lower	39	46	52
40% lower	33	40	45

Source: ABG Sundal Collier for Penneo estimates, FactSet for DocuSign estimates

While Penneo traded somewhat in line with DocuSign in the first half of '21, we have seen an increasing divergence in valuation levels in the second half of '21:

**Penneo versus DocuSign EV/Sales '22e**



Source: ABG Sundal Collier for Penneo, FactSet for DocuSign

**Joining cBrain and SimCorp on Nasdaq Copenhagen**

Penneo has communicated an ambition to migrate to Nasdaq Copenhagen from First North and to raise up to approximately DKK 100m to support continued growth. The listing process is expected to be carried out in connection with the publication of Penneo's annual report for 2021.

By migrating to the main market, Penneo will join the likes of cBrain and SimCorp, the only listed software companies on Nasdaq Copenhagen. Both are under our coverage.

While both companies have SaaS characteristics, SimCorp is much larger and more established globally. cBrain is more comparable in terms of size and its aspiration to

leverage its leading market position in Denmark in international markets. cBrain boasts rapid growth, albeit slower than our forecasts for Penneo. Penneo reports churn of around 2% as of H1 2021, which is in line or slightly above cBrain, while Penneo's subscription share of revenue is higher at 68% versus cBrain at 51%. While it is easy to get carried away by cBrain's ability to sign multi-year contracts of up to 10 years with public entities (versus Penneo signing primarily one-year contracts), we note that cBrain clients can scale the number of licenses and modules up and down within the signed contract at any time, thereby not providing any revenue certainty for cBrain.

### Penneo versus cBrain and SimCorp

	Penneo	cBrain	SimCorp
<b>Description</b>	Digital signing, document automation, and KYC/AML compliance	Standardised case management software for digitisation of public bureaucracy	Investment management and multi-asset solutions provider to the investment industry
<b>Revenue '21e</b>	DKK 57m	DKK 158m	DKK 3,701m
<b>Growth '21e</b>	59.1%	31.6%	9.1%
<b>EBIT '21e</b>	neg.	19.2%	26.9%
<b>Employees</b>	84	131	1,914
<b>Main markets</b>	Nordics, Belgium, Germany	Denmark, Germany, UAE, France, US, UK	Global
<b>Main customer segment</b>	Private / B2B	Public / B2B	Private / B2B
<b>Churn</b>	~2% <sup>1</sup>	< 2% <sup>2</sup>	2.4% <sup>3</sup>
<b>Subscription share of revenue</b>	68% <sup>4</sup>	51%	~52% <sup>5</sup>
<b>Upselling</b>	32% <sup>6</sup>	Not reported	~5% <sup>7</sup>
<b>Contract lengths</b>	1 year	Up to 10 years <sup>8</sup>	Typically 5-8 years

1) As of H1 2021; 2) ABGSCe based on management discussions; 3) Measured as the number of Dimension clients lost in 2020 as a percentage of the total number of Dimension clients; 4) As of Q4 2020; 5) Reported ARR as a percentage of sales; 6) ARR upselling as of H1 2021; 7) Measured as our estimated increase in additional license sales as a percentage of the installed base; 8) Clients can scale the number of licenses and modules up and down within the signed contract at any time, thereby not providing revenue certainty throughout the period.

Source: ABG Sundal Collier estimates for Penneo, FactSet consensus for cBrain and SimCorp.

While we believe cBrain should trade at a higher multiple than Penneo given its profitability while growing fast with sticky demand from public clients, we remain puzzled by the size of its sales multiples for '21e through '23e versus Penneo.

## EV/Sales '21e – '23e versus cBrain and SimCorp

	'21e	'22e	'23e
Penneo	15.6x	10.1x	6.9x
cBrain	52.9x	40.9x	31.8x
SimCorp	9.2x	8.4x	7.8x

*Note: Multiples are on a non-diluted basis. Adjusting for dilution will increase Penneo's multiples by ~18%. Source: ABG Sundal Collier estimates for Penneo, FactSet consensus for cBrain and SimCorp*

## A look into Nordic SaaS peers

While DocuSign is the key peer to Penneo in terms of similarities, and SimCorp and cBrain are the only Danish software companies listed on the main market, it may also be appropriate for valuation purposes to take into account some of the Nordic SaaS or SaaS-like peers.

## Penneo and Nordic SaaS companies' broker estimates

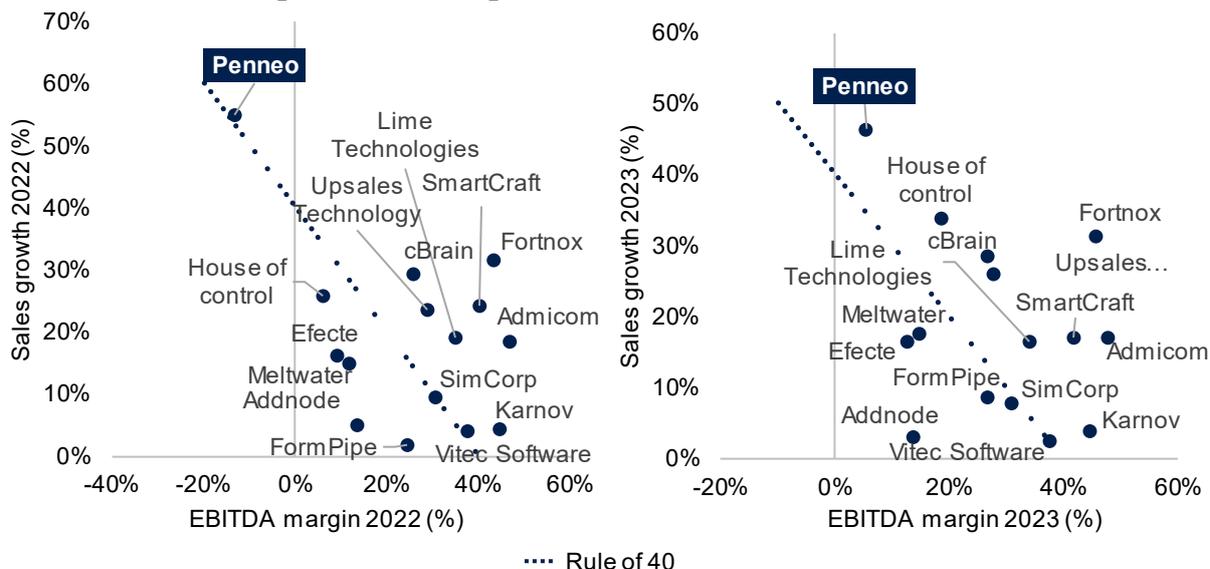
Company	DKK million EV	EV/Sales			Sales growth			EBITDA margin (%)		
		2021e	2022e	2023e	2021e	2022e	2023e	2021e	2022e	2023e
<b>Penneo</b>	<b>884</b>	<b>15.6x</b>	<b>10.1x</b>	<b>6.9x</b>	<b>59%</b>	<b>55%</b>	<b>46%</b>	<b>-30%</b>	<b>-13%</b>	<b>5%</b>
FormPipe	1,284	3.8x	3.7x	3.4x	18%	2%	9%	27%	24%	26%
Upsales Technology	1,245	18.3x	14.8x	11.7x	27%	24%	26%	23%	29%	28%
cBrain	8,354	52.9x	40.9x	31.8x	32%	29%	28%	24%	25%	27%
Efecte	616	4.8x	4.1x	3.6x	15%	16%	16%	5%	9%	12%
Admicom	3,245	17.5x	14.8x	12.7x	13%	18%	17%	47%	47%	48%
House of control	869	6.5x	5.2x	3.9x	53%	26%	34%	2%	6%	19%
Lime Technologies	3,991	13.3x	11.2x	9.6x	24%	19%	17%	34%	35%	34%
Addnode	10,391	3.6x	3.4x	3.3x	8%	5%	3%	13%	13%	13%
Vitec Software	12,788	11.0x	10.6x	10.3x	25%	4%	2%	38%	37%	37%
Karnov	4,820	7.6x	7.3x	7.0x	15%	4%	4%	43%	44%	45%
Fortnox	22,085	31.7x	24.1x	18.4x	41%	32%	31%	41%	43%	46%
SmartCraft	2,572	13.1x	10.5x	9.0x	24%	24%	17%	38%	40%	41%
Meltwater	8,481	3.3x	2.9x	2.5x	8%	15%	18%	10%	12%	15%
SimCorp	34,008	9.2x	8.4x	7.8x	9%	9%	8%	30%	30%	31%
<i>Average</i>	<i>8,196</i>	<i>14.0x</i>	<i>11.6x</i>	<i>9.6x</i>	<i>22%</i>	<i>16%</i>	<i>16%</i>	<i>27%</i>	<i>28%</i>	<i>30%</i>
<i>Median</i>	<i>4,406</i>	<i>10.1x</i>	<i>9.5x</i>	<i>8.4x</i>	<i>21%</i>	<i>17%</i>	<i>17%</i>	<i>29%</i>	<i>30%</i>	<i>29%</i>

*Source: ABG Sundal Collier for Penneo estimates, Factset for peer estimates*

The median Nordic SaaS peer is roughly 5x as large as Penneo in enterprise value, with Penneo standing at DKK 884m compared to DKK 4,406m. Comparing EV/sales across peers and years we find that Penneo has a relatively high 2021e EV/sales multiple, a relatively average 2022e EV/sales multiple and a relatively low 2023e EV/sales multiple. We rely primarily on '22e and '23e sales multiples for the comparison.

To explain some of the discrepancies in the EV/sales multiples we compare them to the 'rule of 40', a SaaS metric which has gained a lot of traction in recent times. The 'rule of 40' measures the performance of SaaS companies by incorporating the trade-off between profitability and growth. It implies that the combined sales growth and EBITDA margin should sum to or exceed 40%. In the graphs below, the 'rule of 40' is illustrated by the dotted line, indicating that a company should be placed to the right of the line to live up the rule.

### Rule of 40 – EBITDA margins and sales growth for '22e and '23e

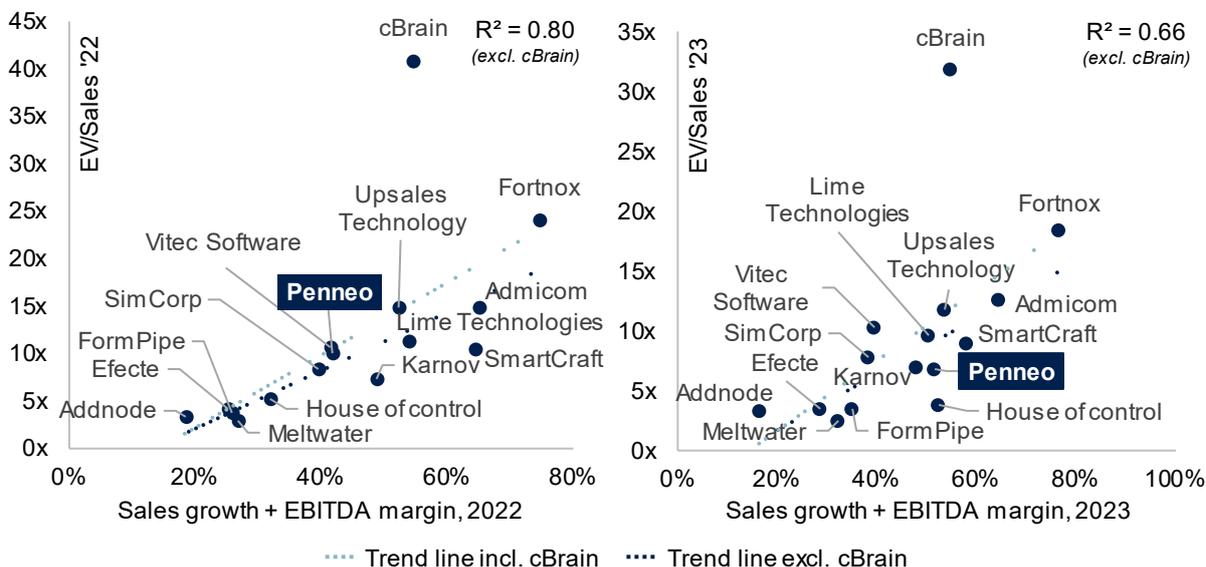


Source: ABG Sundal Collier for Penneo estimates, FactSet for peer estimates

The graphs illustrate that Penneo with 55% expected growth in 2022 and an (adjusted) EBITDA margin of -13% just barely lives up to the rule, with a combined performance of 42%. However, the two graphs also clearly show the differences between Penneo and the Nordic peers in terms of sales growth in relation to profitability. Because the Nordic peers are generally larger and more mature than Penneo, it may be difficult to base a valuation of Penneo on Nordic peers that are in a different growth stage than Penneo.

The higher expected growth of Penneo in '22 and '23 indicates that it may be fair to assume a higher valuation of Penneo relative to some of its Nordic peers. However, this depends to a large degree on how much weight the profitability aspect is given in the valuation. We argue that for Penneo it may not be appropriate to treat sales growth and profitability on a one-to-one basis as the 'rule of 40' implies, also when considering Penneo management's strong focus on growth versus profitability. Therefore, we argue that using the 'rule of 40' on Nordic peers leads to conservative estimates that may serve as a lower bound for our valuation of Penneo.

### Rule of 40 and EV/Sales '22e & '23e correlations



Source: ABG Sundal Collier for Penneo estimates, FactSet for peer estimates

We plot the EV/sales multiples against the 'rule of 40' (EBITDA margin + sales growth) to determine the correlation between the two factors. As illustrated in the two graphs above, cBrain is a far outlier, indicating that it is relatively more expensive than what its 'rule of 40' performance indicates.

To get a better correlation we take cBrain out of the regression, which results in the dark-blue dotted line compared to the light-blue dotted line when cBrain is included.

Based on the two 'rule of 40' regressions, which have an explanation power of 0.80 and 0.66 in '22e and '23e, respectively, we estimate Penneo's fair EV/sales multiple to be 8.8x and 9.1x for '22e and '23e, respectively.

When we calculate Penneo's fair value per share based on the regressions, we use the total diluted number of shares, which corresponds to 29,629,445. This number includes 4,540,101 warrants (as of 31/12/20), which potentially can dilute the outstanding shares by ~18%. Most of the warrants were granted on May 28, 2020, in connection with the IPO and have an exercise period from August 2021 (after H1 2021 report) to November 2023. The warrants are subject to a lock-up agreement like the one for existing shares at the IPO, limiting warrant holders to exercise in five smaller instalments.

The dilution of shares due to the warrants makes Penneo look more expensive than when looking at the previous two graphs. Based on the EV/sales multiples of 8.8x and 9.1x for '22e and '23e, we arrive at fair values of DKK 26 and DKK 39 per diluted share. We conservatively weigh '22e higher than '23e and arrive at a final lower-bound fair value per share of DKK 30.

Summing up, we estimate a fair value range of DKK 30-60 based on an upper bound based on Penneo's main peer, DocuSign, and a lower bound based on less comparable Nordic SaaS peers.

# Risks

## Fierce competition

Penneo's products and solutions address a market that is evolving and highly competitive. Many competitors have more financial strength and broader global distribution while their technical and marketing resources may put them in a better position to respond more swiftly and effectively to new opportunities and technologies. While Penneo aims to mitigate such risks by catering specifically to the auditing vertical, there is a risk that larger players will begin to offer or further develop their solutions targeted at this vertical, potentially forcing Penneo into a price war.

## Continued digitisation and adoption of eIDs

Penneo relies on adoption of eIDs and continued digitisation particularly in its international markets. It may have adverse impacts on Penneo's ability to execute on its strategy if these markets do not digitise at a pace matching Penneo's growth ambitions. We find a great variation in the digitisation and eID strategies of European countries while it also greatly varies how well digital solutions are adopted by the population. Lower levels of digitisation and national adoption rates outside Scandinavia may make expansion outside Scandinavia more difficult.

## Data and cyber security

Penneo's solutions are hosted on behalf of its customers and the operations involve storage and transmission of sensitive customer data. Penneo's systems may be compromised or subject to cyberattacks and data breaches. If so, Penneo's solutions may be perceived as insecure and customers may stop using its services. Consequently, breaches and security incidents may damage Penneo's reputation, generate negative publicity, impair sales and lead to loss of customers.

## Regulatory risks

Penneo is subject to a variety of EU regulations regarding data integrity, protection and compliance. The market is relatively new and evolving and it is difficult to predict how it will develop and how regulators may respond. Changes to regulations may restrict Penneo's ability to provide its services, adversely impacting its earnings and financial position. In the event of regulatory changes, Penneo may need to invest in additional product development to remain compliant.

## IPO lock-up expiries post H1 report

In connection with the IPO in June 2020, all existing shareholders entered into lock-up agreements that restricted sales of shares until after the publication of the H1 2021 financial report, which was published on 27 August. The lock-up shares will be released in five instalments of equal size. The nine largest shareholders with lock-up agreements collectively held around 71% of the share capital prior to the publication of the H1 2021 report. Large share sales or the perception that such share sales could occur may depress the Penneo share price.

## Internationalisation creating operational challenges

Entering new markets entails risks such as lower target market knowledge, lower degree of brand recognition, and handling of pre-sales activities in new countries. Increased activity in new markets and cultures increases complexity and the risk of misallocations. Upon entering a new market, Penneo needs to adapt and localise products, e.g. via eIDs, and provide support in different languages. Once a new

market has been entered, the company will be exposed to changes in laws and business practices that may favour local vendors.

## **Business and market uncertainties**

The combination of Penneo's relatively short history, not least internationally, and the relatively new and evolving market makes the company's prospects difficult to evaluate. Technological and regulatory changes as well as the emergence of innovative competitive solutions may affect the growth rates and attractiveness of the market, while it may impact Penneo's ability to upsell and to retain customers.

## Appendix A – Executive Management

Name	Position	Experience	
Christian Stendevand		CEO	Christian Stendevand joined Penneo in August 2021 with solid experience within the digital identity and security space and in scaling SaaS businesses globally. Christian is an experienced leader with a previous COO position at Omada. Christian has been with Omada for the past 17 years, where he successfully co-headed the international scaling and growth journey of Omada. Prior to Omada he held a position as Managing Consultant in PwC Consulting and IBM.
Casper Christiansen		CFO	Casper Christiansen has since 2018 been the key driver behind the development of structured financial processes in Penneo for improved financial insights regarding e.g. ongoing forecasting, SaaS metrics, profitability etc. Before joining Penneo, Casper Christiansen was CFO in SpotOn Marketing, where he played a key role in the disposal of the company to the private equity fund, Adelis.
Mikkel Clausen		HoP&C Head of people & culture	Mikkel Clausen is one of the co-founders of Penneo and strives for creating and defining the culture and values of Penneo. Mikkel comes with several entrepreneurship experience through co-founding Presentia and Eavior which target online marketing and click tracking respectively.
André Shack		CCO	André Schack is one of the co-founders of Penneo. In addition, he has been able to provide Penneo with valuable insights from the auditing industry. André and his strong salesmanship has played an important role in the high growth rates related to the attraction of new customers. In addition, André Schack plays a leading role in the European expansion as a vital part of Penneo's task force.
Jan Flora		CTO	Jan Flora is one of the co-founders of the company. Jan Flora has since the foundation of the Company been the spearhead of product development, innovation, and development of new markets. Jan has had experience with other tech companies before co-founding Penneo in 2014.
Erik Selmann		CISO Chief Information Security Officer	Erik Selmann joined Penneo in November 2019 and brings with him heavy experience from the auditing from the auditing industry, with seven years in KPMG and almost 6 years in Deloitte.

Source: descriptions are adapted from penneo.com where possible

## Appendix B – Board of Directors

Name	Position	Experience
Christian Sagild	Chairman	<p>Christian Sagild is currently the Chairman of Nordic Solar Energy and Nordic Solar Global A/S, a member of the Audit Committee of Royal Unibrew A/S, and the Chairman of the Audit Committee of Ambu A/S. He was the CEO of Topdanmark A/S between 2009-2017.</p> <p>His areas of expertise are capital markets, managing public companies, stakeholder and reputation management, and complex framework management.</p>
Morten Eik	Board Member	<p>Morten Elk is a serial entrepreneur, board member and business angel. He started his career in 1997 after leaving a postdoctoral position in Physics to co-found what became a leading Danish digital agency that was exited to Swedish Adcore in 1999. In 2003, Morten Elk co-founded SimpleSite, a global player in the DIY website building services, where he remains the CEO today. Alongside, Morten Elk has invested in several start-ups and is the initiator and driver behind the event series Nordic Growth Hackers where participants in the tech community in Copenhagen gather to share growth experiences and tactics.</p>
Rikke Stampe Skov	Board Member	<p>Rikke Stampe Skov is the CEO of Impero A/S, a position, which she has held since June 2018. Rikke drives the company's vision of creating trust and transparency on a global scale. Prior to joining Impero, Rikke Stampe Skov spent several years as a partner in PwC co-chairing the Risk Assurance Services service line, and later as a partner with Odgers Berndtson, where Rikke Stampe Skov focused on executive search and leadership development. Before this, Rikke co-founded the IT security consulting company, Protego, which was successfully exited to PwC in 2006. Rikke Stampe Skov's long career also includes leadership positions with Maersk, ISS, and Siemens. She also serves as a board advisor with several organizations.</p>

Source: descriptions are adapted from penneo.com

## Appendix C – Shareholders

### Penneo's ownership structure and no. of shares

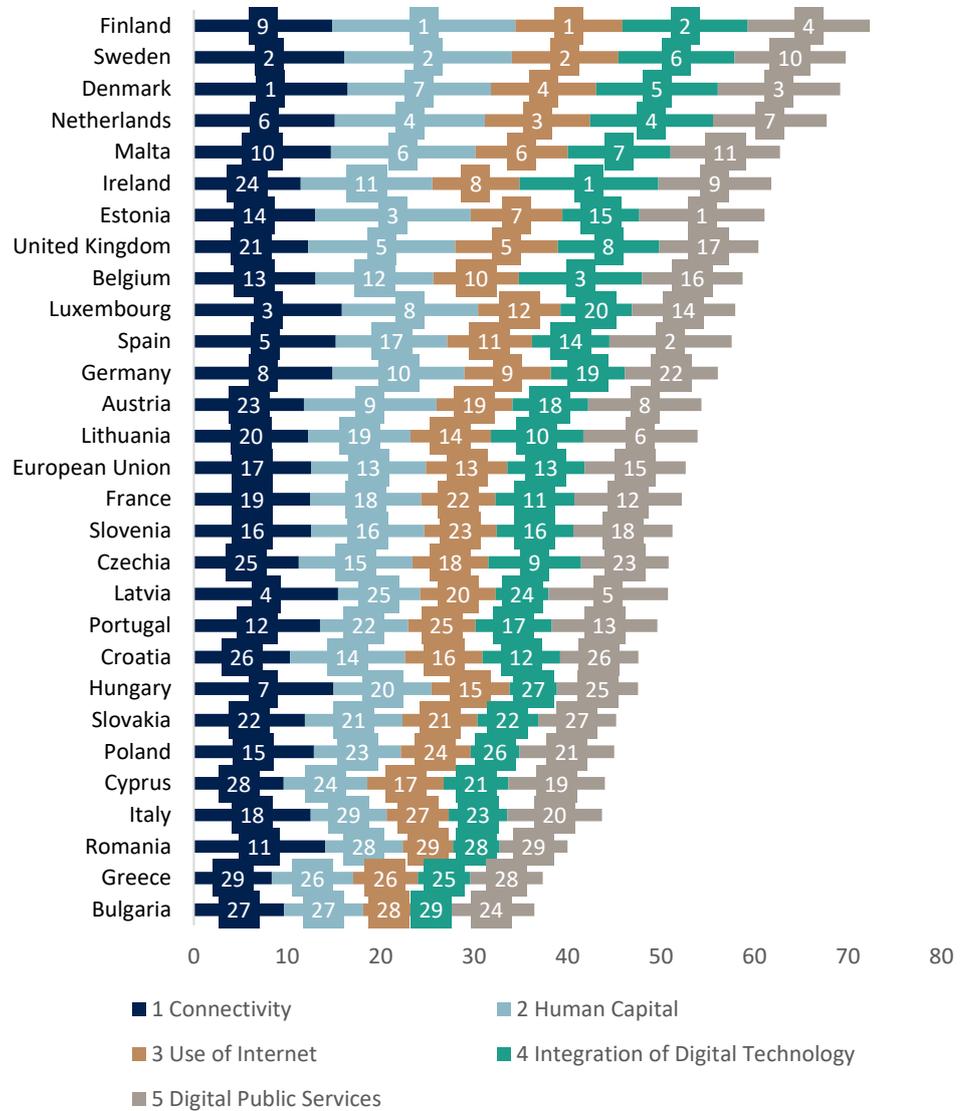
Name	No. of shares	Value (DKKm)*	% of shares
Michael Moesgaard Andersen	3,164,744	110.8	12.6%
Nicolaj Højer Nielsen	2,890,829	101.2	11.5%
Jan Flora	2,327,427	81.5	9.3%
Mikkel Clausen	2,028,813	71.0	8.1%
André Clement	1,851,382	64.8	7.4%
Anders Eskholm	1,754,351	61.4	7.0%
Jakob Neua Nørgaard	1,754,351	61.4	7.0%
Niels Henrik Rasmussen	1,360,495	47.6	5.4%
Janek Borgmann	1,220,164	42.7	4.9%
Penneo A/S	609,921	21.3	2.4%
BI Asset Mgmt	312,588	10.9	1.2%
Fundamental	293,826	10.3	1.2%
Morten Elk	18,083	0.6	0.1%
Rest	5,543,754	194.0	22.1%
<b>Total no. of shares</b>	<b>25,130,728</b>	<b>879.6</b>	<b>100.0%</b>
Warrants (as of 31/12/20)	4,540,101		18.1%
<b>Total shares (incl. Dilution)</b>	<b>29,670,829</b>		<b>118.1%</b>

\* Updated August 31, 2021

Source: Holdings.se

# Appendix D – DESI composite score

DESI composite score, 2020



Note: labels present the rank of the sub-category scores. The composite score is weighted 25% connectivity, 25% human capital, 15% use of internet, 20% integration of digital technology, and 15% digital public services.

Source: DESI, ABG Sundal Collier

## Appendix E – AML directives

### Anti-Money Laundering directives in EU

Directive	Description
<b>AMLD 1</b> 1991-1994	<ul style="list-style-type: none"> <li>Requirement for member states to criminalise money laundering.</li> <li>Requirement of CDD and KYC procedures.</li> <li>Requirement of transaction management.</li> </ul>
<b>AMLD 2</b> 2001-2003	<ul style="list-style-type: none"> <li>Widening the scope of obligators to "non-banking financial institutions" (NBFIs) and "designated non-financial business and professions" (DNFBPs), e.g. lawyers</li> </ul>
<b>AMLD 3</b> 2005-2017	<ul style="list-style-type: none"> <li>Tackling of financing of terrorism. Due diligence of obligated entities to ensure not providing services to terrorists.</li> <li>Introduction of penalties for AML breaches.</li> <li>Introduction of risk-based approach to CDD, creating a spectrum of CDD, from SDD to EDD.</li> <li>Expanding AML obligations across more sectors (incl. accountants)</li> </ul>
<b>AMLD 4</b> 2015-2017	<ul style="list-style-type: none"> <li>Widening of the scope of AML obligations.</li> <li>Focus on transparency on business structures. Thus, required UBO determined as anyone owning more than 25% of a legal entity should appear in national registries.</li> <li>Further focus on EDD and PEPs (now also domestic politically linked individuals).</li> </ul>
<b>AMLD 5</b> 2018-2020	<ul style="list-style-type: none"> <li>Reduction in prepaid card limits.</li> <li>Further scope expansion (incl. crypto exchanges)</li> <li>Further detail to the "transparency agenda": requiring national UBO registers to go public by March 2020 and creating national functional PEP lists (which roles qualify as PEP).</li> </ul>
<b>AMLD 6</b> 2018-2020	<ul style="list-style-type: none"> <li>Codification of 22 predicate offences (incl. cyber and environmental crimes).</li> </ul>

*Note: the year ranges indicate the year of final proposal and year of national transposition deadline.*

## Appendix F – Market estimates

### Overview of market forecast estimates

Report provider	Year		Market size (USDbn)			CAGR
	Base	Forecast	Base	2021	Forecast	
<b>Digital Identity (DI) Market</b>						
Research & Markets	2021	2026	23.3	23.3	49.5	16.2%
Research & Markets	2021	2026	21.1	21.1	48.1	17.8%
Market Research	2020	2025	18.0	21.0	39.4	17.0%
Adroit Market Research	2019	2025	13.6	18.3	33.0	16.0%
<b>Average</b>				<b>20.9</b>		<b>16.7%</b>
<b>Digital Signature (DS) Market</b>						
P&S Intelligence	2020	2030	1.9	2.4	25.2	29.2%
P&S Intelligence (e-signatures)	2020	2030	1.2	1.5	12.7	26.6%
Markets & Markets	2020	2026	2.8	3.7	14.1	31.0%
Mordor Intelligence	2020	2026	n.a.	n.a.	n.a.	21.5%
Fortune Business Insights	2019	2027	1.1	1.8	8.0	28.9%
TechSci Research	2019	2025	n.a.	n.a.	n.a.	26.0%
<b>Average</b>				<b>2.4</b>		<b>27.2%</b>
<b>Digital Transaction Management (DTM) Market</b>						
Market Research Engine	2020	2028	n.a.	n.a.	17.3	29.90%
Verified Market Research	2020	2028	6.4	7.6	26.7	19.6%
Research and Market	2020	2026	6.1	7.6	23.5	24.5%
Grand View Research	2018	2025	6.4	10.9	15.7	19.7%
<b>Average</b>				<b>7.6</b>		<b>23.4%</b>
<b>Business Process Automization (BPA) market</b>						
Research & Markets	2020	2026	9.9	11.1	19.7	12.2%
Mordor Intelligence	2020	2026	7.8	8.8	16.1	13.0%
Research & Markets	2018	2023	6.8	9.8	12.6	13.3%
Verified Market Research	2018	2026	6.6	9.3	16.6	12.2%
<b>Average</b>				<b>9.7</b>		<b>12.7%</b>

Note: market estimates for digital identity are included to highlight that it is much broader than the DS market.

Source: Research & Markets, Market Research, Mordor Intelligence, Adroit Market Research, P&S Intelligence, Fortune Business Insights, TechSci Research, Verified Market Research, and Grand View Research, ABG Sundal Collier

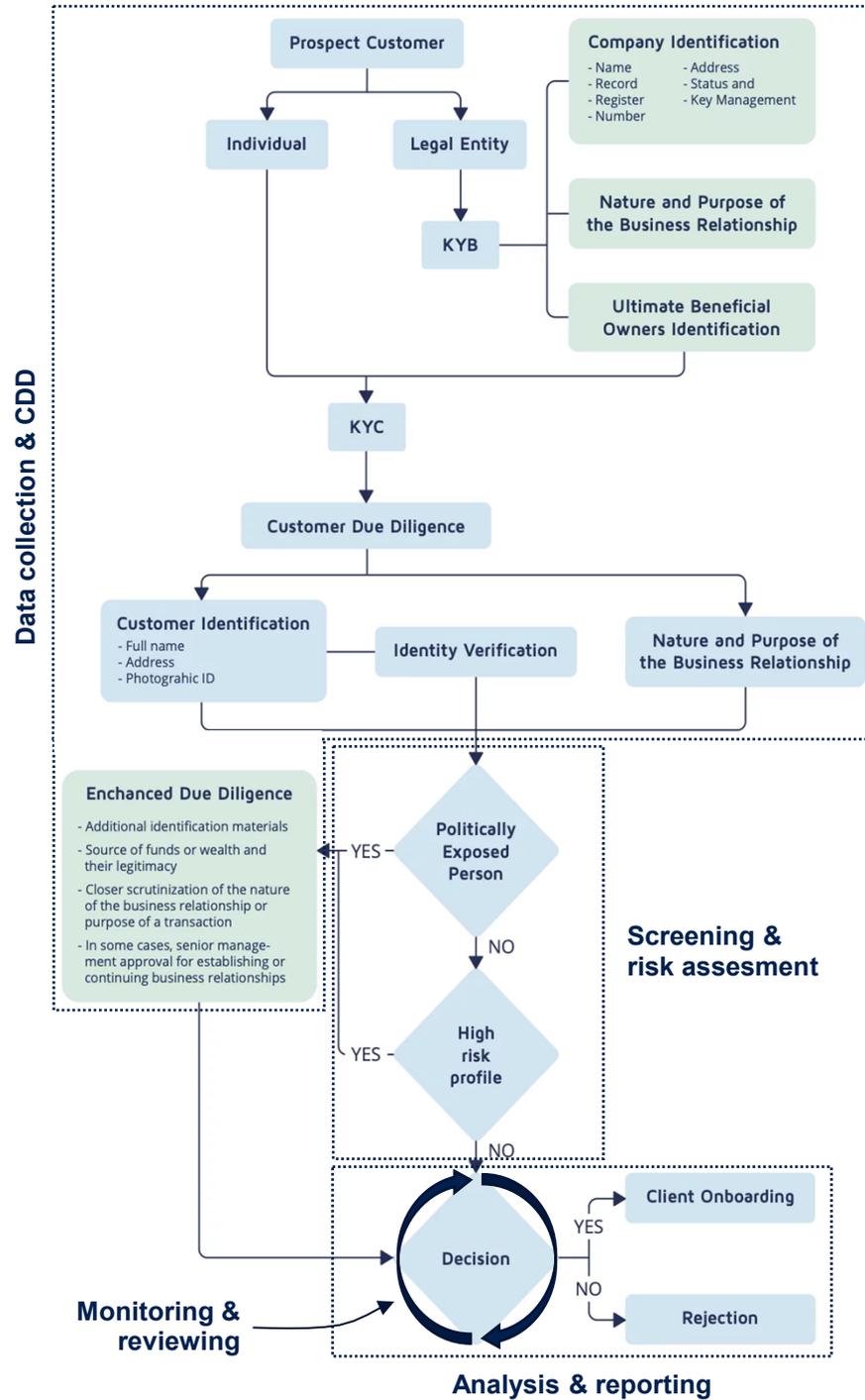
## Appendix G – Addressable market estimate assumptions

### Addressable market estimates and underlying assumptions

	Active enterprises			ARS mkt.* (DKKm)	Active enterprises, >10 employees, in...					Total mkt. (DKKm)	
	Partner-ship, etc.	LLCs	Sum		Finance	Real estate	Legal & account.	Mgmt. Consult.	HR (est.)		Sum
<b>EU</b>	14,275,515	1,933,844	11,030,316	<b>610</b>	19,862	21,600	33,000	20,869	135,506	230,837	<b>12,375</b>
<b>EU &amp; UK</b>	14,647,715	2,058,754	13,238,156	<b>732</b>	24,607	28,100	41,000	27,359	155,269	276,335	<b>14,814</b>
<b>Austria</b>	46,867	103,926	150,793	<b>8</b>	798	648	1,291	808	3,840	7,385	<b>396</b>
<b>Belgium</b>	61,985	398,478	460,463	<b>25</b>	605	382	691	589	2,518	4,785	<b>257</b>
<b>Bulgaria</b>	10,155	281,831	291,986	<b>16</b>	367	492	228	172	2,606	3,865	<b>207</b>
<b>Croatia</b>	669	107,153	107,822	<b>6</b>	152	159	204	114	1,326	1,955	<b>105</b>
<b>Cyprus</b>	877	32,640	33,517	<b>2</b>	215	39	252	142	359	1,007	<b>54</b>
<b>Czech rep.</b>	5,473	268,640	274,113	<b>15</b>	393	729	592	272	3,680	5,666	<b>304</b>
<b>Denmark</b>	13,369	129,060	142,429	<b>8</b>	437	759	415	467	2,396	4,474	<b>240</b>
<b>Estonia</b>	652	82,570	83,222	<b>5</b>	107	146	99	58	666	1,076	<b>58</b>
<b>Finland</b>	28,740	169,642	198,382	<b>11</b>	413	370	335	365	1,972	3,455	<b>185</b>
<b>France</b>	35,708	2,224,029	2,259,737	<b>125</b>	2,810	2,659	5,346	3,695	14,613	29,123	<b>1,561</b>
<b>Germany</b>	365,256	570,711	935,967	<b>52</b>	3,536	4,958	12,016	4,225	30,704	55,439	<b>2,972</b>
<b>Greece</b>	117,268	74,625	191,893	<b>11</b>	397	306	268	495	3,535	5,001	<b>268</b>
<b>Hungary</b>	86,562	239,231	325,793	<b>18</b>	331	818	539	551	3,090	5,329	<b>286</b>
<b>Iceland</b>	1,860	19,531	21,391	<b>1</b>	34	21	30	13	188	286	<b>15</b>
<b>Ireland</b>	9,941	123,691	133,632	<b>7</b>	761	292	591	433	1,950	4,027	<b>216</b>
<b>Italy</b>	636,484	895,173	1,531,657	<b>85</b>	1,854	645	2,036	1,674	16,983	23,192	<b>1,243</b>
<b>Latvia</b>	2,409	82,924	85,333	<b>5</b>	121	326	77	63	868	1,455	<b>78</b>
<b>Lithuania</b>	1,006	71,890	72,896	<b>4</b>	60	264	127	178	1,320	1,949	<b>104</b>
<b>Luxembourg</b>	1,101	28,603	29,704	<b>2</b>	396	44	246	109	404	1,199	<b>64</b>
<b>Malta</b>	2,008	12,945	14,953	<b>1</b>	116	:	:	87	220	423	<b>23</b>
<b>Netherlands</b>	165,397	287,706	453,103	<b>25</b>	1,161	874	1,714	1,388	5,846	10,983	<b>589</b>
<b>N. Macedoni</b>	1,367	47,899	49,266	<b>3</b>	72	41	82	25	524	744	<b>40</b>
<b>Norway</b>	10,650	190,079	200,729	<b>11</b>	410	412	582	235	2,531	4,170	<b>224</b>
<b>Poland</b>	58,309	181,644	239,953	<b>13</b>	1,772	2,484	1,587	905	9,458	16,206	<b>869</b>
<b>Portugal</b>	5,864	349,252	355,116	<b>20</b>	403	502	536	574	4,145	6,160	<b>330</b>
<b>Romania</b>	3,006	504,007	507,013	<b>28</b>	664	713	202	615	5,187	7,381	<b>396</b>
<b>Serbia</b>	148,925	1,485	150,410	<b>8</b>	158	106	245	261	1,660	2,430	<b>130</b>
<b>Slovakia</b>	1,992	188,748	190,740	<b>11</b>	149	477	204	392	1,535	2,757	<b>148</b>
<b>Slovenia</b>	1,983	57,225	59,208	<b>3</b>	95	74	86	96	753	1,104	<b>59</b>
<b>Spain</b>	214,356	1,192,694	1,407,050	<b>78</b>	1,110	1,364	3,133	1,454	11,773	18,834	<b>1,010</b>
<b>Sweden</b>	56,406	438,427	494,833	<b>27</b>	653	1,031	588	966	3,737	6,975	<b>374</b>
<b>Switzerland</b>	13,769	219,246	233,015	<b>13</b>	2,024	1,034	1,248	1,179	4,501	9,986	<b>535</b>
<b>Turkey</b>	56,846	617,580	674,426	<b>37</b>	1,063	1,183	1,288	1,115	17,780	22,429	<b>1,202</b>
<b>UK</b>	124,910	2,082,930	2,207,840	<b>122</b>	4,745	6,520	7,845	6,490	19,776	45,376	<b>2,433</b>

Note: calculation for ARS market is based on active partnerships, co-operatives, associations etc., companies and LLC companies multiplied by an average of DKK 55 for a signature in 2019 (167,300 signatures, among auditing customers, which accounted for 37% of the revenue in 2019, corresponding to DKK 9.25m). Calculation for the total market is estimated from no. of active enterprises with more than 10 employees in the four chosen industries, as well as an estimation on the number of HR departments. In DK, approx. 10% of all companies with more than 10 employees (not shown in table) have a HR department – this has been applied to all countries, adjusted for already-counted companies in the four industries. The market value is then the number of firms multiplied by Penneo's ARPA in H1 2021, DKK 21,444, divided by the estimated penetration rate of 40% \* Annual report signature market  
Source: Eurostat, ABG Sundal Collier

# Appendix H – KYC/KYB process chart



Source: adapted from penneo.com

# Appendix I – eIDAS and SES, AES, QES signatures

Article 25 of the eIDAS regulation states that electronic signatures should not be denied legal effect solely on the ground of their electronic nature. This applies to all three forms of eSignatures: SES, AES, and QES. However, there are differences in the security of the three signatures and consequently also their legal validity.

Simple/Basic Electronic Signature (BES/SES)	Advanced Electronic Signature (AES)	Qualified Electronics Signature (QES)
<b>Description</b>		
All electronic signatories. For example, manually drawn signature on screen, or a click on an "I accept" button.	The signature must meet specific requirements to ensure higher level of ID verification backed by a Trust Service Provider (TSP).	Legally equivalent to a written signature backed by a Qualified Trust Service Provider (QTSP)
<b>Integrity</b>		
Certain that content cannot be changed after signature	Certain that content cannot be changed after signature	Certain that content cannot be changed after signature
<b>Identity Verification</b>		
Checking identity is not mandatory	Identity is checked but not guaranteed	100% capable of identifying the signer
<b>Authenticity</b>		
Not mandatory that the signature is linked to the signer	Certain that the signature is uniquely linked to signer	Certain that the signature is uniquely linked to signer
<b>Authentication</b>		
Not certain the signature is created under the sole control of the signer	Certain that the signature is created under the sole control of the signer. Multifactor authentication is optional	Certain that the signature is created under the sole control of the signer. Multifactor authentication is required
<b>Hardware</b>		
No specific hardware required	Secure Signature Creation Device (SSCD)	Qualified Signature Creation Device (QSCD)
<b>Legal validity</b>		
Burden of proof lies with the initiating party of the signature.	Burden of proof lies with the initiating party of the signature.	Burden of proof lies with the party disputing the signature

Source: adapted from connective.eu (collaboration with DLA Piper)

A SES can be any signature (even just checking a box off) that is performed electronically. In contrast to SES, AES and QES are digital signatures (as opposed to electronic) as they are created digitally rather than 'manually'. Both AES and QES have specific requirements to secure the identification of the signer. An AES involves fulfilling four requirements:

- Uniquely linked to the signatory
- Capable of identifying the signatory
- Created using secure signature creation device (SSCD) that the signatory can, with a high level of confidence, use under their sole control.
- Linked to the data signed so that any subsequent change in the data is detectable

A QES reaches the highest level of security for an electronic signature, making it legally equivalent to a written signature. Likewise, if taken to court, it is the party disputing the signature that bears the burden of proof. The QES must fulfil even stricter requirements than that of an AES. Furthermore, to be a QES it must be backed by a Qualified Trust Service Provider (QTSP).

Income Statement (DKK m)	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021e	Q4 2021e
Sales	7	9	8	12	11	16	15	15
COGS	-3	-4	-4	-5	-6	-6	-7	-7
Gross profit	4	6	4	7	4	10	8	8
Other operating items	-6	-9	-7	-9	-9	-11	-13	-13
<b>EBITDA</b>	<b>-2</b>	<b>-4</b>	<b>-3</b>	<b>-3</b>	<b>-5</b>	<b>-1</b>	<b>-6</b>	<b>-6</b>
Depreciation and amortisation	-0	-0	-0	-0	-0	-0	-0	-0
<b>EBITA</b>	<b>-2</b>	<b>-4</b>	<b>-3</b>	<b>-3</b>	<b>-5</b>	<b>-1</b>	<b>-6</b>	<b>-6</b>
EO items	0	0	0	0	0	0	0	0
Impairment and PPA amortisation	-2	-1	-0	-2	-2	-2	-1	-1
<b>EBIT</b>	<b>-4</b>	<b>-4</b>	<b>-3</b>	<b>-5</b>	<b>-7</b>	<b>-3</b>	<b>-7</b>	<b>-7</b>
Net financial items	-0	-0	-0	-0	-0	-0	-0	-0
<b>Pretax profit</b>	<b>-4</b>	<b>-5</b>	<b>-3</b>	<b>-5</b>	<b>-7</b>	<b>-3</b>	<b>-7</b>	<b>-7</b>
Tax	1	-0	1	3	1	1	-0	-0
<b>Net profit</b>	<b>-3</b>	<b>-5</b>	<b>-3</b>	<b>-2</b>	<b>-6</b>	<b>-2</b>	<b>-7</b>	<b>-7</b>
Minority interest	0	0	0	0	0	0	0	0
Net profit discontinued	0	0	0	0	0	0	0	0
<b>Net profit to shareholders</b>	<b>-3</b>	<b>-5</b>	<b>-3</b>	<b>-2</b>	<b>-6</b>	<b>-2</b>	<b>-7</b>	<b>-7</b>
EPS	-0.10	-0.16	-0.09	-0.08	-0.25	-0.08	-0.30	-0.30
EPS Adj	-0.04	-0.13	-0.08	-0.00	-0.17	-0.01	-0.24	-0.24
Total extraordinary items after tax	0	0	0	0	0	0	0	0
Tax rate (%)	28.4	1.4	22.0	51.8	14.3	35.8	3.4	3.4
Gross margin (%)	56.1	61.0	47.2	57.8	41.0	62.7	52.2	52.2
EBITDA margin (%)	-30.2	-38.2	-38.4	-21.3	-45.8	-6.5	-37.8	-37.8
EBITA margin (%)	-31.2	-38.6	-38.5	-22.1	-46.6	-7.0	-38.2	-38.2
EBIT margin (%)	-53.9	-47.8	-41.4	-42.2	-64.0	-19.0	-46.8	-46.8
Pretax margin (%)	-59.1	-51.7	-43.7	-43.6	-67.5	-20.5	-48.2	-48.2
Net margin (%)	-42.3	-52.5	-34.1	-21.0	-57.9	-13.2	-49.8	-49.8
<b>Growth rates Y/Y</b>	<b>Q1 2020</b>	<b>Q2 2020</b>	<b>Q3 2020</b>	<b>Q4 2020</b>	<b>Q1 2021</b>	<b>Q2 2021</b>	<b>Q3 2021e</b>	<b>Q4 2021e</b>
Sales growth (%)	+chg	+chg	+chg	+chg	61.0	72.5	92.9	25.6
EBITDA growth (%)	-chg	-chg	-chg	-chg	-chg	+chg	-chg	-chg
EBIT growth (%)	-chg	-chg	-chg	-chg	-chg	+chg	-chg	-chg
Net profit growth (%)	-chg	-chg	-chg	-chg	-chg	+chg	-chg	-chg
EPS growth (%)	-chg	-chg	-chg	-chg	-chg	+chg	-chg	-chg
<b>Adj earnings numbers</b>	<b>Q1 2020</b>	<b>Q2 2020</b>	<b>Q3 2020</b>	<b>Q4 2020</b>	<b>Q1 2021</b>	<b>Q2 2021</b>	<b>Q3 2021e</b>	<b>Q4 2021e</b>
EBITDA Adj	-2	-4	-3	-3	-5	-1	-6	-6
EBITDA Adj margin (%)	-30.2	-38.2	-38.4	-21.3	-45.8	-6.5	-37.8	-37.8
EBITA Adj	-2	-4	-3	-3	-5	-1	-6	-6
EBITA Adj margin (%)	-31.2	-38.6	-38.5	-22.1	-46.6	-7.0	-38.2	-38.2
EBIT Adj	-4	-4	-3	-5	-7	-3	-7	-7
EBIT Adj margin (%)	-53.9	-47.8	-41.4	-42.2	-64.0	-19.0	-46.8	-46.8
Pretax profit Adj	-2	-4	-3	-3	-5	-1	-6	-6
Net profit Adj	-1	-4	-2	-0	-4	-0	-6	-6
Net profit to shareholders Adj	-1	-4	-2	-0	-4	-0	-6	-6
Net Adj margin (%)	-19.6	-43.2	-31.2	-0.9	-40.4	-1.2	-41.2	-41.2

Source: ABG Sundal Collier, Company data

Income Statement (DKKkm)	2014	2015	2016	2017	2018	2019	2020	2021e	2022e	2023e
Sales	0	0	0	0	0	28	36	57	88	128
COGS	0	0	0	0	0	-10	-16	-27	-40	-56
Gross profit	0	0	0	0	0	18	20	30	47	72
Other operating items	0	0	0	0	0	-18	-33	-50	-62	-69
<b>EBITDA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-0</b>	<b>-13</b>	<b>-20</b>	<b>-15</b>	<b>3</b>
Depreciation and amortisation	0	0	0	0	0	-0	-0	-0	-0	-0
Of which leasing depreciation	0	0	0	0	0	0	0	0	0	0
<b>EBITA</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-0</b>	<b>-13</b>	<b>-20</b>	<b>-15</b>	<b>3</b>
EO items	0	0	0	0	0	0	0	0	0	0
Impairment and PPA amortisation	0	0	0	0	0	-2	-3	-4	-5	-6
<b>EBIT</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-2</b>	<b>-16</b>	<b>-24</b>	<b>-20</b>	<b>-3</b>
Net financial items	0	0	0	0	0	-1	-1	-1	-1	-1
<b>Pretax profit</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-3</b>	<b>-17</b>	<b>-25</b>	<b>-21</b>	<b>-4</b>
Tax	0	0	0	0	0	0	4	2	3	4
<b>Net profit</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-3</b>	<b>-13</b>	<b>-23</b>	<b>-19</b>	<b>-0</b>
Minority interest	0	0	0	0	0	0	0	0	0	0
Net profit discontinued	0	0	0	0	0	0	0	0	0	0
<b>Net profit to shareholders</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-3</b>	<b>-13</b>	<b>-23</b>	<b>-19</b>	<b>-0</b>
EPS	0	0	0	0	0	-0.09	-0.43	-0.78	-0.63	-0.01
EPS Adj	0	0	0	0	0	-0.03	-0.33	-0.64	-0.45	0.20
Total extraordinary items after tax	0	0	0	0	0	0	0	0	0	0
Leasing payments	0	0	0	0	0	0	0	0	0	0
Tax rate (%)	ns	ns	ns	ns	ns	0.8	26.0	6.9	12.6	94.0
Gross margin (%)	nm	nm	nm	nm	nm	63.9	56.0	53.0	54.0	56.0
EBITDA margin (%)	nm	nm	nm	nm	nm	-0.8	-37.0	-34.6	-16.9	2.4
EBITA margin (%)	nm	nm	nm	nm	nm	-0.9	-37.3	-34.8	-17.0	2.3
EBIT margin (%)	nm	nm	nm	nm	nm	-7.8	-45.7	-42.3	-23.1	-2.4
Pretax margin (%)	nm	nm	nm	nm	nm	-9.7	-48.7	-44.1	-24.2	-3.2
Net margin (%)	nm	nm	nm	nm	nm	-9.6	-36.0	-41.1	-21.2	-0.2
<b>Growth rates Y/Y</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021e</b>	<b>2022e</b>	<b>2023e</b>
Sales growth (%)	na	na	na	na	na	na	28.8	59.1	55.1	46.5
EBITDA growth (%)	na	na	na	na	na	high	-5,949.2	-48.8	24.3	120.9
EBIT growth (%)	na	na	na	na	na	high	-652.7	-47.3	15.5	84.5
Net profit growth (%)	na	na	na	na	na	high	-382.3	-81.4	20.1	98.6
EPS growth (%)	na	na	na	na	na	high	-382.3	-81.4	20.1	98.6
<b>Profitability</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021e</b>	<b>2022e</b>	<b>2023e</b>
ROE (%)	nm	nm	nm	nm	nm	-59.3	-38.5	-50.5	-74.1	-1.6
ROE Adj (%)	nm	nm	nm	nm	nm	-16.6	-29.5	-41.3	-53.0	37.4
ROCE (%)	nm	nm	nm	nm	nm	-17.1	-31.4	-35.9	-44.2	-8.6
ROCE Adj(%)	nm	nm	nm	nm	nm	-1.6	-25.6	-29.5	-32.7	8.2
ROIC (%)	na	na	na	na	na	-20.0	-34.0	-41.6	-29.4	-0.3
ROIC Adj (%)	na	na	na	na	na	-20.0	-34.0	-41.6	-29.4	-0.3
<b>Adj earnings numbers</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021e</b>	<b>2022e</b>	<b>2023e</b>
EBITDA Adj	0	0	0	0	0	-0	-13	-20	-15	3
EBITDA Adj margin (%)	nm	nm	nm	nm	nm	-0.8	-37.0	-34.6	-16.9	2.4
EBITDA lease Adj	0	0	0	0	0	-0	-13	-20	-15	3
EBITDA lease Adj margin (%)	nm	nm	nm	nm	nm	-0.8	-37.0	-34.6	-16.9	2.4
EBITA Adj	0	0	0	0	0	-0	-13	-20	-15	3
EBITA Adj margin (%)	nm	nm	nm	nm	nm	-0.9	-37.3	-34.8	-17.0	2.3
EBIT Adj	0	0	0	0	0	-2	-16	-24	-20	-3
EBIT Adj margin (%)	nm	nm	nm	nm	nm	-7.8	-45.7	-42.3	-23.1	-2.4
Pretax profit Adj	0	0	0	0	0	-1	-14	-21	-16	2
Net profit Adj	0	0	0	0	0	-1	-10	-19	-13	6
Net profit to shareholders Adj	0	0	0	0	0	-1	-10	-19	-13	6
Net Adj margin (%)	nm	nm	nm	nm	nm	-2.7	-27.6	-33.6	-15.2	4.6

Source: ABG Sundal Collier, Company data

Cash Flow Statement (DKKkm)	2014	2015	2016	2017	2018	2019	2020	2021e	2022e	2023e
EBITDA	0	0	0	0	0	-0	-13	-20	-15	3
Net financial items	0	0	0	0	0	-1	-1	-1	-1	-1
Paid tax	0	0	0	0	0	1	2	3	4	0
Non-cash items	0	0	0	0	0	-0	2	3	2	7
Cash flow before change in WC	0	0	0	0	0	-0	-10	-15	-10	10
Change in WC	0	0	0	0	0	-1	1	-3	-1	-2
<b>Operating cash flow</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-1</b>	<b>-9</b>	<b>-19</b>	<b>-11</b>	<b>8</b>
CAPEX tangible fixed assets	0	0	0	0	0	-1	-1	-0	-0	-0
CAPEX intangible fixed assets	0	0	0	0	0	-3	-9	-12	-12	-12
Acquisitions and disposals	0	0	0	0	0	0	-4	0	0	0
<b>Free cash flow</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-6</b>	<b>-22</b>	<b>-30</b>	<b>-23</b>	<b>-4</b>
Dividend paid	0	0	0	0	0	0	0	0	0	0
Share issues and buybacks	0	0	0	0	0	6	48	0	0	0
Lease liability amortisation	0	0	0	0	0	-0	-2	-1	0	0
Other non cash items	0	0	0	0	0	-8	-6	0	-1	-1
Balance Sheet (DKKkm)	2014	2015	2016	2017	2018	2019	2020	2021e	2022e	2023e
Goodwill	0	0	0	0	0	0	8	8	8	8
Other intangible assets	0	0	0	0	0	14	27	32	35	38
Tangible fixed assets	0	0	0	0	0	0	1	1	1	1
Right-of-use asset	0	0	0	0	0	11	15	15	15	15
Total other fixed assets	0	0	0	0	0	1	1	1	1	1
Fixed assets	0	0	0	0	0	27	53	57	61	64
Inventories	0	0	0	0	0	0	0	0	0	0
Receivables	0	0	0	0	0	4	11	13	19	28
Other current assets	0	0	0	0	0	0	1	1	2	3
Cash and liquid assets	0	0	0	0	0	8	32	1	-23	-28
<b>Total assets</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>96</b>	<b>72</b>	<b>60</b>	<b>67</b>
Shareholders equity	0	0	0	0	0	9	58	34	16	16
Minority	0	0	0	0	0	0	0	0	0	0
<b>Total equity</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>58</b>	<b>34</b>	<b>16</b>	<b>16</b>
Long-term debt	0	0	0	0	0	5	5	5	5	5
Pension debt	0	0	0	0	0	0	0	0	0	0
Convertible debt	0	0	0	0	0	0	0	0	0	0
Leasing liability	0	0	0	0	0	11	16	16	16	16
Total other long-term liabilities	0	0	0	0	0	5	3	3	3	3
Short-term debt	0	0	0	0	0	0	0	0	0	0
Accounts payable	0	0	0	0	0	5	11	10	16	23
Other current liabilities	0	0	0	0	0	5	4	4	4	4
<b>Total liabilities and equity</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>96</b>	<b>72</b>	<b>60</b>	<b>67</b>
Net IB debt	0	0	0	0	0	8	-11	20	44	48
Net IB debt excl. pension debt	0	0	0	0	0	8	-11	20	44	48
Net IB debt excl. leasing	0	0	0	0	0	-3	-27	5	28	33
Capital invested	0	0	0	0	0	21	49	58	63	67
Working capital	0	0	0	0	0	-5	-3	0	1	3
EV breakdown	2014	2015	2016	2017	2018	2019	2020	2021e	2022e	2023e
Market cap. diluted (m)	na	na	na	na	na	na	1,342	1,037	1,037	1,037
Net IB debt Adj	0	0	0	0	0	8	-11	20	44	48
Market value of minority	0	0	0	0	0	0	0	0	0	0
Reversal of shares and participations	0	0	0	0	0	0	0	0	0	0
Reversal of conv. debt assumed equity	0	0	0	0	0	0	0	0	0	0
<b>EV</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>1,331</b>	<b>1,057</b>	<b>1,081</b>	<b>1,085</b>
Capital efficiency	2014	2015	2016	2017	2018	2019	2020	2021e	2022e	2023e
Total assets turnover (%)	nm	nm	nm	nm	nm	140.0	52.5	67.2	132.9	203.5
Working capital/sales (%)	nm	nm	nm	nm	nm	-9.3	-11.7	-2.6	0.9	1.8
Financial risk and debt service	2014	2015	2016	2017	2018	2019	2020	2021e	2022e	2023e
Net debt/equity	nm	nm	nm	nm	nm	0.84	-0.19	0.59	2.77	3.12
Net debt/market cap	na	na	na	na	na	na	-0.01	0.02	0.05	0.06
Equity ratio (%)	nm	nm	nm	nm	nm	22.7	60.0	47.4	26.5	23.3
Net IB debt adj./equity	nm	nm	nm	nm	nm	0.84	-0.19	0.59	2.77	3.12
Current ratio	nm	nm	nm	nm	nm	1.11	2.55	0.90	-0.07	0.09
EBITDA/net interest	na	na	na	na	na	-0.42	-12.56	-18.94	-14.35	2.99
Net IB debt/EBITDA	nm	nm	nm	nm	nm	-34.84	0.85	-1.03	-2.95	15.68
Net IB debt/EBITDA lease Adj	nm	nm	nm	nm	nm	14.49	2.04	-0.23	-1.90	10.64
Interest cover	nm	nm	nm	nm	nm	-0.36	-11.55	-19.06	-14.46	2.88

Source: ABG Sundal Collier, Company data

Valuation and Ratios (DKKm)	2014	2015	2016	2017	2018	2019	2020	2021e	2022e	2023e
Shares outstanding adj.	0	0	0	0	25	25	25	25	25	25
Fully diluted shares Adj	0	0	0	0	30	30	30	30	30	30
EPS	0	0	0	0	0	-0.09	-0.43	-0.78	-0.63	-0.01
Dividend per share Adj	0	0	0	0	0	0	0	0	0	0
EPS Adj	0	0	0	0	0	-0.03	-0.33	-0.64	-0.45	0.20
BVPS	0	0	0	0	0	0.36	2.29	1.37	0.63	0.62
BVPS Adj	0	0	0	0	0	0.07	1.28	0.17	-0.72	-0.84
Net IB debt / share	na	na	na	na	0	0.3	-0.4	0.8	1.7	1.9
Share price	na	na	na	na	na	na	45.30	35.00	35.00	35.00
Market cap. (m)	na	na	na	na	na	na	1,138	880	880	880
<b>Valuation</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021e</b>	<b>2022e</b>	<b>2023e</b>
P/E	na	na	na	na	na	na	-104.8	-44.6	-55.8	-4,115.7
EV/sales	na	na	na	na	na	na	37.46	18.70	12.33	8.45
EV/EBITDA	na	na	na	na	na	na	-101.3	-54.1	-73.0	351.4
EV/EBITA	na	na	na	na	na	na	-100.4	-53.8	-72.4	365.6
EV/EBIT	na	na	na	na	na	na	-81.9	-44.2	-53.5	-346.3
Dividend yield (%)	na	na	na	na	na	na	0	0	0	0
FCF yield (%)	na	na	na	na	na	na	-1.7	-2.9	-2.2	-0.4
Lease adj. FCF yield (%)	na	na	na	na	na	na	-1.8	-3.0	-2.2	-0.4
P/BVPS	na	na	na	na	na	na	19.77	25.61	55.76	56.66
P/BVPS Adj	na	na	na	na	na	na	35.31	205.93	-48.84	-41.57
P/E Adj	na	na	na	na	na	na	-136.8	-54.7	-78.1	177.2
EV/EBITDA Adj	na	na	na	na	na	na	-101.3	-54.1	-73.0	351.4
EV/EBITA Adj	na	na	na	na	na	na	-100.4	-53.8	-72.4	365.6
EV/EBIT Adj	na	na	na	na	na	na	-81.9	-44.2	-53.5	-346.3
EV/cap. employed	na	na	na	na	na	na	17.0	19.2	29.7	30.0
<b>Investment ratios</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021e</b>	<b>2022e</b>	<b>2023e</b>
Capex/sales	nm	nm	nm	nm	nm	17.0	27.3	21.0	13.6	9.3
Capex/depreciation	nm	nm	nm	nm	nm	16,380.0	8,087.1	9,918.0	9,918.0	9,918.0
Capex tangibles/tangible fixed assets	nm	nm	nm	nm	nm	524.8	103.2	16.3	16.3	16.3
Capex intangibles/definite intangibles	nm	nm	nm	nm	nm	47.8	52.7	54.3	46.3	41.6
Depreciation on intangibles/definite intai	nm	nm	nm	nm	nm	0	0	0	0	0
Depreciation on tangibles/tangibles	nm	nm	nm	nm	nm	11.8	16.3	16.3	16.3	16.3

Source: ABG Sundal Collier, Company data

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