

### **Elop in brief**





**Solutions** to inspect and monitor critical infrastructure



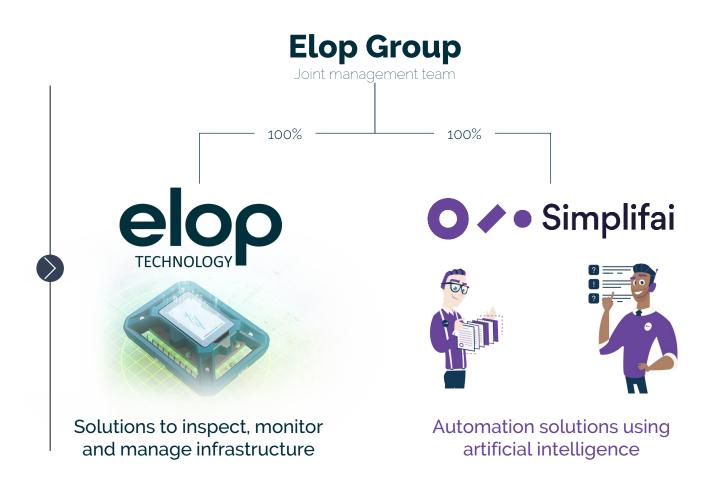
Developed and patented a **rolling ultrasonic scanner** that is far **superior** to what is available today



Acquired **Simplifai**, a software company specializing in unstructured data processing and process automation



Data-driven and AI-based solutions for **inspection** and **predictive maintenance** of critical infrastructure



## The concrete challenge



8% of the world's CO<sub>2</sub> comes from the concrete production process



**Ageing infrastructure** with significant backlog of maintenance



Lack of efficient hardware to collect data



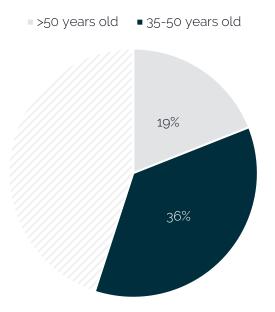
**Lack of efficient software** to manage maintenances and monitor health of large infrastructure



### Maintenance is a growing concern globally

Maintenance of critical concrete infrastructure is a growing concern, with aging structures and prolonged neglect driving up maintenance costs

### Age structure of highway bridges in Germany



Significant backlog of bridge maintenance



Current backlog at USD 125-170bn – expected to increase as current budget allows for only ~570 bridge repairs p.a. out of 47,000 in urgent need



Statens Vegvesen's annual budget for bridge repairs is USD 30m despite backlog of USD ~2bn



Similar significant backlogs seen in Spain, Germany, France and numerous other developed countries Maintenance spend has historically kept backlog stable, but is expected to increase with current pace



## Consequences of being unable to monitor infrastructure cost-effectively

For society, infrastructure owners and users



Short infrastructure lifetime



**Costs** of building new infrastructure



Accidents that could have been prevented



High CO<sub>2</sub> emissions from production and construction



### Point scanners for the concrete market have their limitations

### The ultrasound scanners on the market have some limitations today...

- Point scanners a still image needs to be taken every 10cm
- Not practical to scan large areas efficiently
- Unable to assess the depth of cracks and air pockets
- Varying sophistication of software for visualizations on app / web

### ...which leads to low utilization and data generation

- Scanners not being used to cover larger areas
- Data quantity and quality low
- Data unconsolidated
- Data mainly utilized in reports generated by inspection specialists
- Mainly used as ad-hoc tools for certain situations



## Elop has patented a first-of-its-kind rolling concrete scanner

#### Real-time 3D visualization

Globally patented ultrasound scanning solution (dry coupling) that quickly, efficiently and accurately gathers assessment data on critical infrastructure and transmits the real-time 3D visualization of the subsurface construction

#### Unparalleled efficiency

Elop's unique technology enables a considerably more efficient and practical way of inspecting larger volumes of concrete structures than what is possible with other existing technologies and devices on the market

#### Scalable cloud-based application

Data is transmitted to a scalable, cloud-based application where all stakeholders have access to relevant information, including 3D-videos, models, images and historical data





## First order received from Miami-based inspection company



### Field tests across Europe and asset classes

#### Completed field tests



Demo project with major asset owner in **energy sector** 





Demo project with **inspection partner** on the Abisko bridge in Sweden for large asset owner





Demo project in Norway with major infrastructure entrepreneur





Demo project for Elop Insight in Germany



#### Upcoming field tests



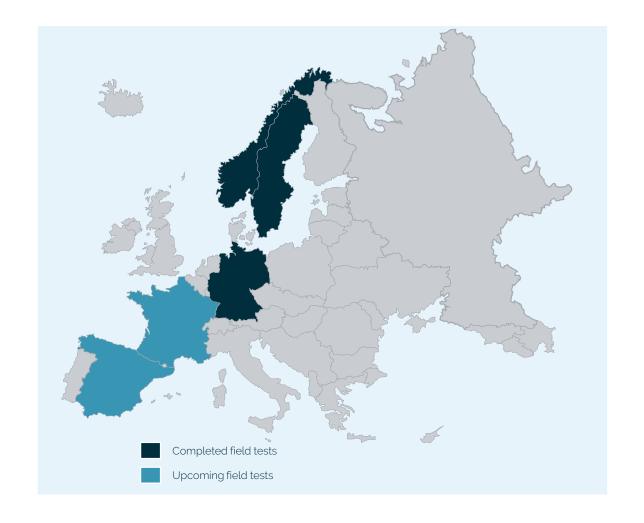
Demo projects for Elop Insight in **Norway** and **Sweden** agreed for bridges, a tunnel, an oil installation and more



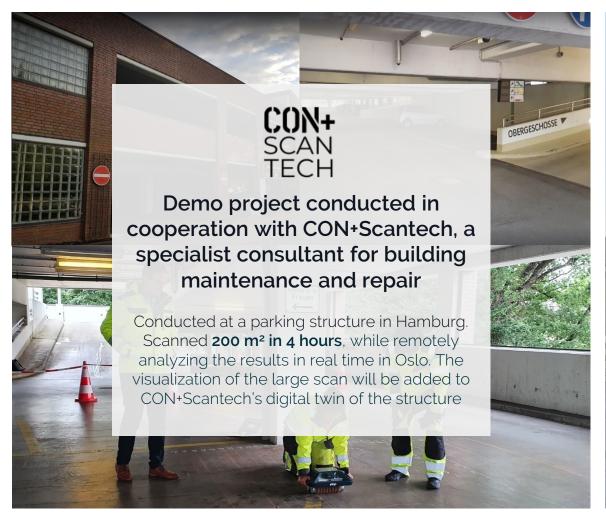


Demo project for Elop Insight in France





## Successful pilots and demo projects validate our technology





## DEKRA Visatec cooperation confirms the global potential of Elop's technology



#### **DEKRA**

- Leading global provider of mapping and inspection services for infrastructure
- World's largest unlisted organization in the TIC industry
- 44,000 employees
- Global operations

- Global breakthrough for Elop Technology's patented technology, including large sales potential
  - Collaboration and testing already on-going utilizing DEKRA facilities in Germany
- Finalization of contract terms on-going expanding initial scope
- DEKRA Visatec GmbH and Elop Technology to combine vacuum crawler and Elop Insight to create an "InsightCrawler"
- Key for Elop Technology: Access to global market in Testing, Inspection and Certification (TIC)

## Partnerships provide key opportunities within the survey and inspection market

In addition to agreement with DEKRA Visatec, we have key partnerships with...



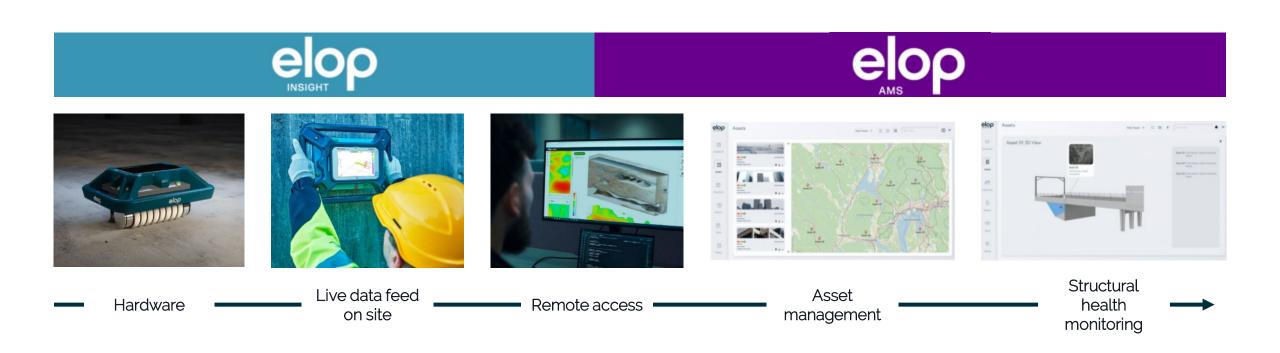


### Elop recruits infrastructure industry seniors



Our customers see the need for Elop's technology, and our team consists of former high-ranking employees at customers who have validated our solutions and technology

## Overall strategy: Become a fully integrated technology provider



# From reactive to proactive maintenance

By coupling data from many sources with our scalable cloud-based system, we aim to give asset owners full digital overview of their structures allowing them to move from a reactive maintenance strategy to a proactive.

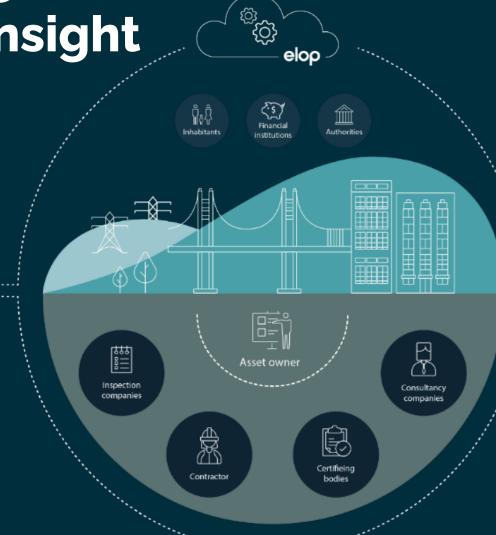


Transforming data into unique insight

Asset scanner

**Scanner & Dashboard** 

Collect, connect, visualise

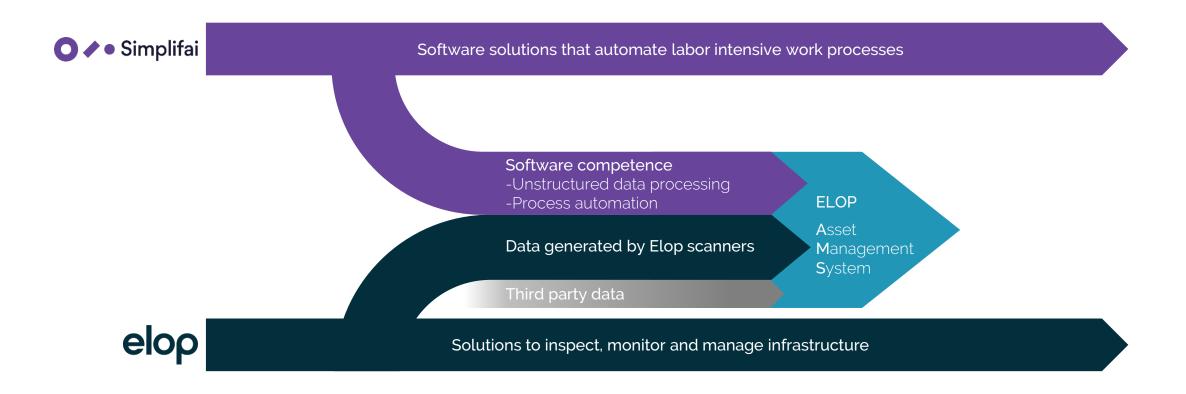




Asset Management & Monitoring System (AMS)
Structure, analyse, act



## Simplifai's competence in data processing and process automation is key in building Elop AMS





### Look into the future with a digital collaboration tool

Elop Asset Management System enables all stakeholders to look into the future maintaining and safeguarding bridges, dams, railroad infrastructure and other large infrastructures.



Cloud based



Data collection and visualization

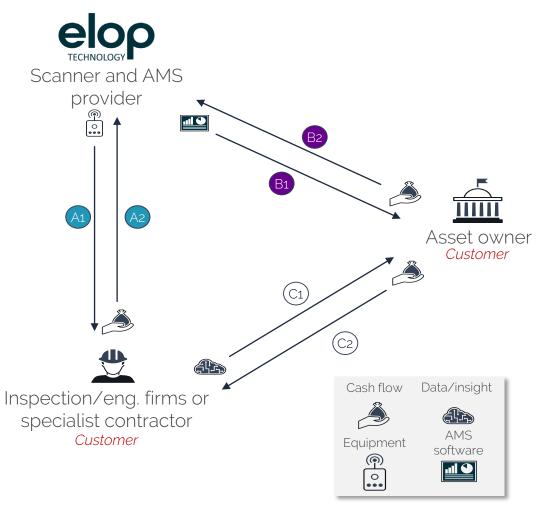


Smart automation and integration



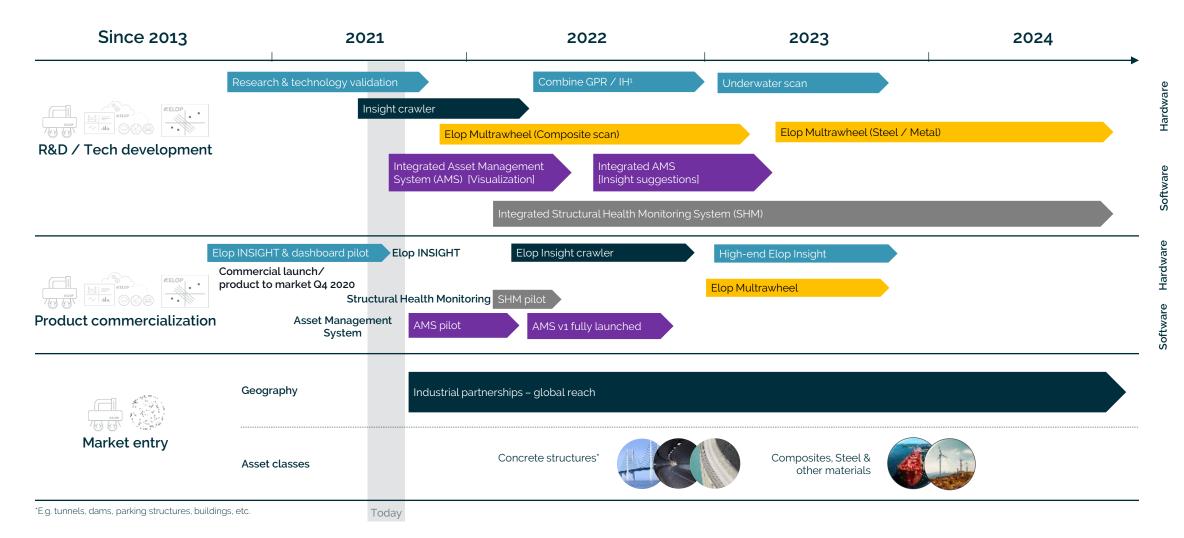
Predictive analysis

## Elop Technology to go-to market in a 3-way collab. with inspection companies and asset owners



- Elop to provide inspection players with Elop Insight to be used in inspections
- Inspection players pay Elop for scanner and license fee for AMS Dashboard
- Elop grants asset owners access to Elop AMS where data generated from Elop Insight and third parties can be viewed. AMS features bundled into packages and rolled out over time.
- Asset owners to pay Elop **annual licensing fee** for access to **Elop AMS** features and a **data-based fee**
- Inspection firms to enhance their recommendations and insight to asset owners based on data from Elop Insight
- Asset owners to pay inspection firms for inspecting their assets and providing recommendations, like today's setup

### Continuous R&D / Tech development and commercial launches in 2022



## Multrawheel to target composite and metal structure inspections

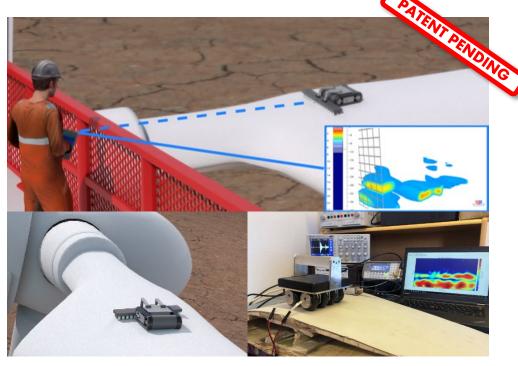
"The proposed product/service is innovative; ELOP proposes the «world's first self-driven robotic scanner for  $WT^1$  industry».

The R&D and technical team is strong, multidisciplinary and covers all aspects including sales and marketing aspects. The project will support the demand for green energy and zero carbon emission.

Moreover, the wind turbine market and the predictive maintenance market are in full expansion. The mobile inspection robot product is patented; indeed ELOP is a deep-tech SME that has used H2020 SME funding to develop manual rolling concrete scanner. It will be adapted in the project for the WT industry.

It is a product that completes the current approaches (e.g. by drone); it can be imposed if it proves to be reliable, simple and low cost product/service. This product can be also adapted to other applications (marine and aerospace inspection)."

Quote from a European Innovation Council evaluator Feedback to Elop Technology's application for EIC funding, September 2021



1: Wind Turbine

### Elop moving in the right direction

Introducing new technology to create a new high growth market







#### **Awareness**

- √ Euronext listing
- ✓ Commercial launch
- √ Solutions marketing
- √ First technology demonstrations
- ✓ Initiating commercial partnerships
- × Building sales pipeline
- x Proactive international marketing
- x Industry events

#### Credibility

- ✓ Demonstrating tech
- Bringing Al competence inhouse
- √ Field demonstrations
- ✓ Developing industry partnerships
- √ Terratec agreement
- ✓ Industry partnership with DEKRA Visatec GmbH
- ✓ Insourced scanner production & software development
- × Major reference clients
- Demonstrating different applications areas

#### **Success stories**

- ✓ New industries
- New geographical markets
- √ First sales
- × Successful field projects
- Demonstrating stakeholder value
- X Global industry partnership with DEKRA for the Insight crawler
- x New technology applications

#### Recognition

- x Exponential sales growth
- x International expansion
- x Global distribution

## Gradual shift towards contracted recurring software revenue

Elop revenue expected to pick up with software and scanner roll-out

Revenue, MNOK **2025 TARGETS** 1 000+ >1 000M NOK Revenue >40% Simplifai EBIT margin Elop Technology >75%

2025

2024

2021

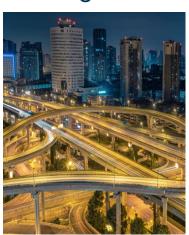
2022

2023

2020

## Elop Technology's core business contributes to a sustainable future

#### Securing critical infrastructure











Several global bridge and building collapses exemplifies the need for improved inspection, surveys and maintenance of critical infrastructure.

Elop Technology and its solutions provide information and insight into the condition of an asset. Using this data for optimised maintenance and control, ensures safe and secure operations throughout the lifecycle of the asset.

#### Reducing the environmental impact







8% of the world's CO2 emissions stems from the concrete production process. Extending life of existing concrete structures through optimised maintenance and inspection, will have a significant benefit to the environment.

Elop Technology's patented technology for structural health insight, combined with systems in development for managing and monitoring asset data, will give assets owners full insight into the condition of their constructions and the necessary tools to analyse and maintain their structures, in order to extend asset life and reduce the environmental impact.

#### Innovating the construction industry







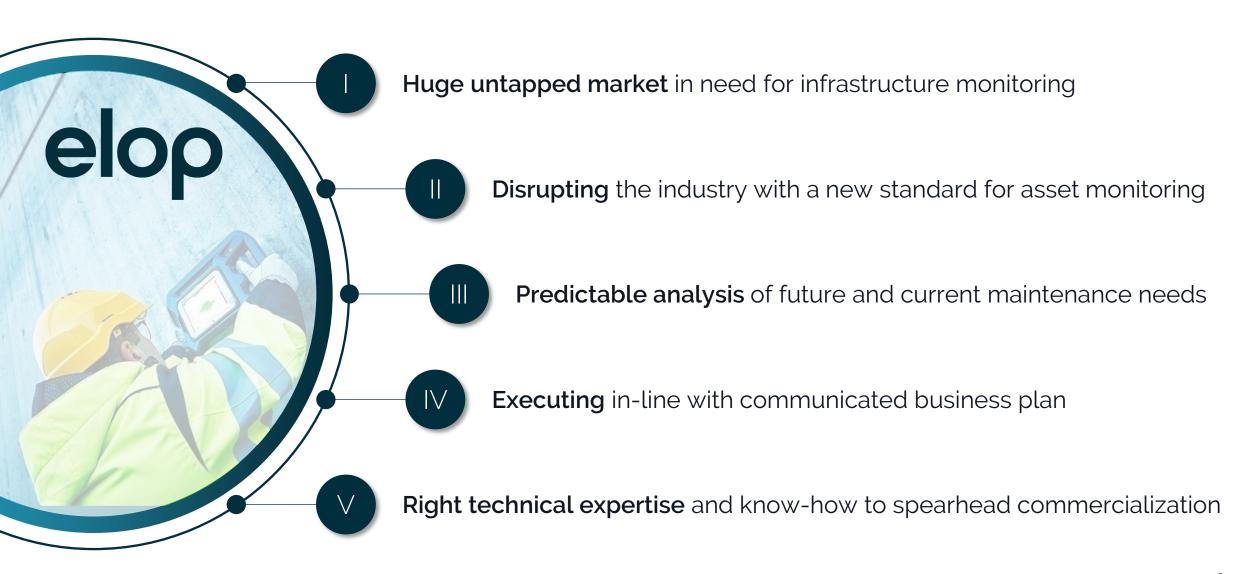


The construction industry is conservative and has a relative low degree of digitization. There are major shortcomings in the traditional approach to inspection and maintenance.

Elop Technology is digitizing crucial data and provides new and innovative solutions with major benefits to the industry.

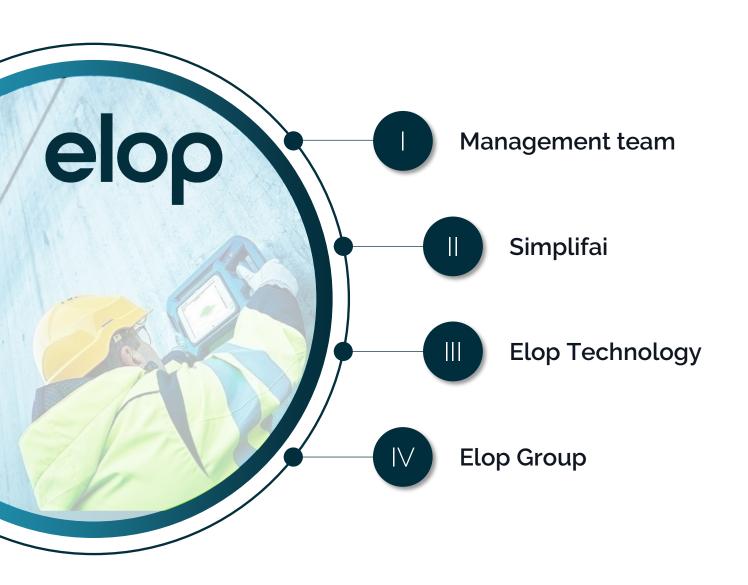
We will continuously grow our competency and innovate together with our partners. We want to introduce new technology and solutions to the benefit of the society in general and our clients, in particular.

### **Company highlights**



### **Appendix**

### elop





## Management team with good track-record and technical & commercial expertise



**Øivind Horpestad**CEO and Chair of The Board



- One of the original founders and former CEO of NRC Group, listed on Oslo Stock Exchange
- Responsible for developing and executing the strategy that transformed Endur ASA into a leading player within maritime infrastructure, former COB ENDUR ASA, listed on Oslo Stock Exchange
- Has broad industrial experience through former positions in Team Bane, VRS Rail AS and Coast Capital



Kim Boman
Chief Financial Officer



- More than 20 years of experience from finance roles
- Former CFO of AqualisBraemar, Head of IR at Rec Solar and has corporate finance experience from DNB Markets and Swedbank



**Bård Myrstad**Chief Operating Officer



- One of the founders and CEO of Simplifai
- Strong background from the IT sector, having worked at Accenture, Embriq and Viz Risk Management



Imran Tamboli Chief Technology Officer



- More than 15 years of experience from technical leadership roles in various technology companies
- Prior experience includes Head of Delivery at EVRY Financial Services and CTO at Simplifai



## Management team with good track-record and technical & commercial expertise



Erik Leung
Chief Product Officer



- Has more than 10 years of experience from product leadership roles at various technology companies
- Prior experience includes Head of AI at EVRY Financial Services and Co-Founder and COO at Simplifai



**Daniel Kohn**Chief Commercial Director



- Has wide industry knowledge, including a combined knowledge of HW and SW sales and process
- Prior experience includes sales and sales management positions at Canon Business Solutions and Sales Directors at Global Connect



Niklas Persson Head of Global Sales



- More than 20 years industry experience from various business development and global sales management positions.
- Prior experience includes six years from DEKRA in Sweden and Germany as well as experience from Force Technology and Siemens



Marcus Jocham Head of Business Development



- Nearly 15 years' experience within strategic sales management and business development
- Prior experience includes 13 years within the DEKRA and Visatec systems



Elop Group has offices in 5 countries and a total of 140 employees







### Simplifai: Elop's AI business unit



Norwegian Al Company HQ in Oslo, 115 FTE's



Verified: Microsoft Partner



Services: Digital Employees



**Core**: Standardized Solutions, ≈ 90% Automation Grade, Quick implementation and ROI



**Tech**: AI, Natural Language Technology, Natural Language Processing (free-text)



**Products:** Emailbot, Documentbot, and Chatbot



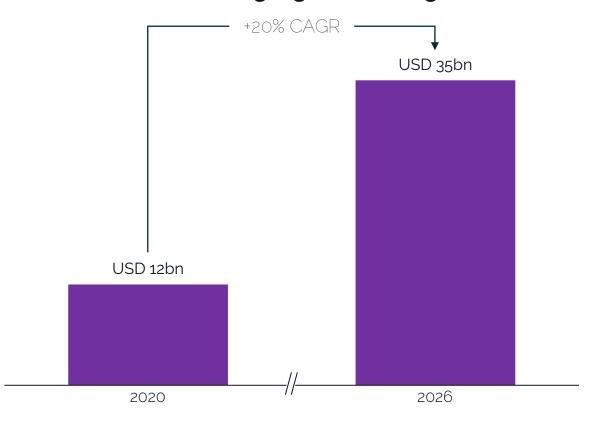
SaaS Business Model: Building recurring and scalable revenue model





## Simplifai: provides Elop with a large addressable secondary market...

#### Global Natural Language Processing market<sup>1</sup>



- Natural language processing is necessary in several business processes which utilize e.g., the following tools: Portals, Email, Customer service software, Docs, CRM
- Has historically been difficult to automate
- Requires heavy human interaction with corresponding high cost
- Vulnerable for mistakes, large variations in quality and service level
- Increased demand for 24/7 service globally, further drives cost
- Large potential for efficiency gains





## Digital Employees ensures end-to-end automation



Interact

Interpret content and intent

Decide

Act



Chatbot



Documentbot



**Decision Engine** 



API & RPA

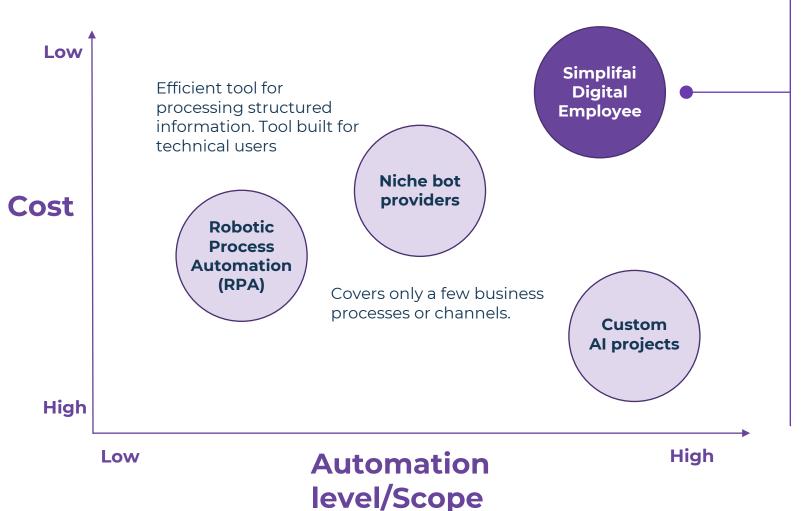


**Emailbot** 





## Simplifai's unique position facilitates early adoption of AI technology



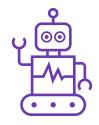
6-month payback, 150% ROI first year

- Low-cost implementation
- High automation grade
- Easy to use implementation tools for business users
- Handles unstructured data
- Wide scope across industries and business processes (use case agnostic)
- ✓ Handles complex documents





### Customers (and Simplifai) benefit from best-inclass implementation approach

















### Key steppingstones for Simplifai

### Capturing a high growth market







#### **Awareness**

- ✓ Initiating commercial partnerships
- √ Solutions marketing
- ✓ Auditions and tendering
- Building products as part of commercial cooperation
- ✓ Building sales pipeline

#### Credibility

- Establishing close partnership with Microsoft
- ✓ industry tech approval, BFSI, retail and public sector
- Recruiting world class technical organisation
- ✓ Solutions available on recognised marketplaces
- Develop commercial partnerships
- ✓ International breakthroughs (i.e. India, Singapore)

#### 0/•

#### **Success stories**

- ✓ Claims Link and OSM Maritime success stories
- ✓ Technology acceptance opens up new sales channels
- ✓ Continuously shorten onboarding cycles
- ✓ New industries: online retail, telecom
- Breakthrough in municipality market
- ✓ Partner channel beginning to deliver results
- x New geographical markets
- X Significantly shorten sales cycles

#### Recognition

- x Exponential sales growth
- Widespread international expansion
- x Global distribution
- Recognized as leading vendor within natural language-based business process automation
- × International BFSI clients





## Several contract wins verify Simplifai's technology leadership and growth potential

Selected clients	Description of service	Why important?		
Capricorn® logistics homefirst	Emailbot + Documentbot	<ul> <li>New international clients won in tough competition</li> </ul>		
elka. Forsikring  Knif Trygghet	Emailbot + Documentbot	<ul><li>GDPR/Schrems ii- compliance validated</li><li>Strong customer reference</li></ul>		
Kartverket  Sarpsborg ALESUND KOMMUNE	Solution for e-mail archiving & Documentbot	<ul> <li>Expanding in public sector</li> <li>First solutions in production</li> <li>Position to dominate large archiving projects</li> </ul>		

Eika Forsikring will use Al-powered Digital Employees in their claims handling

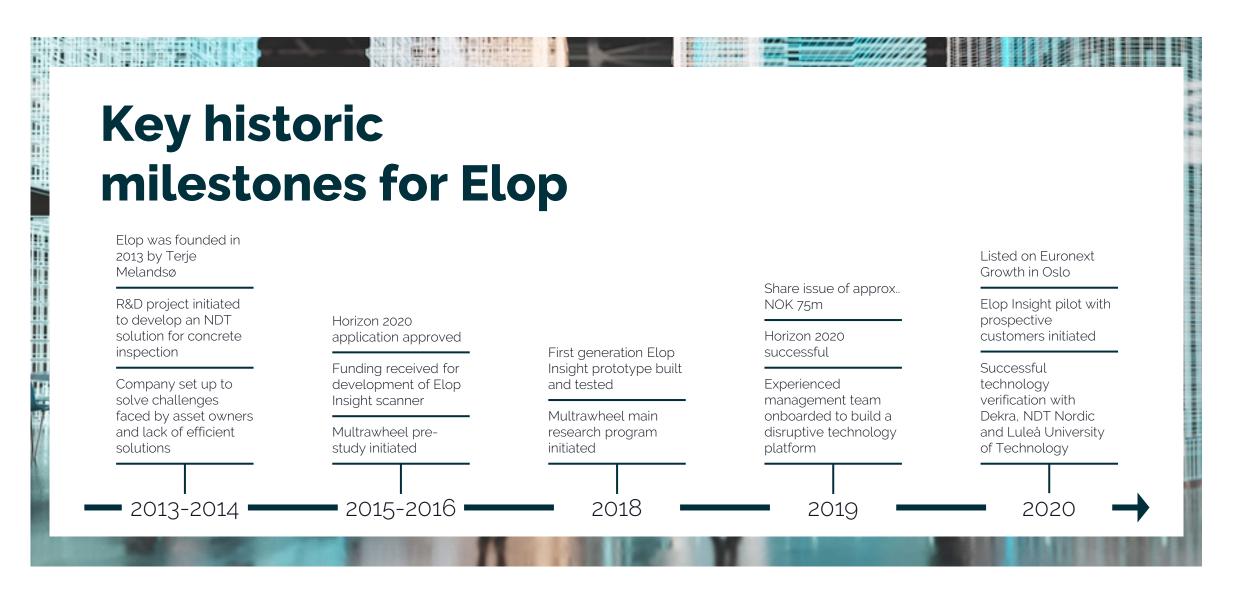


Good references, successful POC, and handling of GDPR were crucial for our choice of Al-supplier.

Kristin Bjerkli, Head of Claims in Eika Forsikring





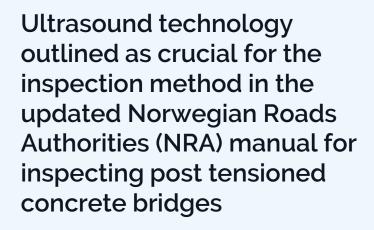






### New recommended practice supports Elop's business case





Ultrasound technology implemented in Chinese National Standard and Chinese Technical code for in-site testing of building waterproof engineering, such as dams<sup>1,2</sup>

## Significant increase in attention from all stakeholders

Increase in enquiries regarding the inspection of post tensioned concrete bridges





<sup>2:</sup> GB/T 50784-2013 Technical standard for in-site inspection of concrete structure. (2)

Other codes and regulations





### Protected by patents worldwide (1/2)

Title	About	Status	Country
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Application allowed	Brazil
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	China
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	Germany
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	EPO
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	Spain
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	France
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	United Kingdom
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	Italy
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	Japan
Ultralydanordning	Elop Insight	Registered	Norway
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	Poland
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	Sweden





### Protected by patents worldwide (2/2)

Title	About	Status	Country
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	Turkey
Device, Method and System for Ultrasonic Signal Transducer	Elop Insight	Registered	USA
Device, system and method for emission and reception of ultrasonic signals to and from a test material	MultraWheel	Application filed	Brazil
Device, system and method for emission and reception of ultrasonic signals to and from a test material	MultraWheel	Application filed	Canada
Device, system and method for emission and reception of ultrasonic signals to and from a test material	MultraWheel	Under examination	China
Device, system and method for emission and reception of ultrasonic signals to and from a test material	MultraWheel	Application filed	EPO
Device, system and method for emission and reception of ultrasonic signals to and from a test material	MultraWheel	Under examination	Japan
Device, system and method for emission and reception of ultrasonic signals to and from a test material	MultraWheel	Under examination	USA

#### **Trademarks**

Title	About	Status	Country
Elop	Elop	Registered	Norway
Elop Insight	Elop Insight	Registered	Norway
Elop Foresight	Elop Foresight	Registered	Norway



#### **Our goals**



Establish Elop technology as an industry standard



Build the next generation structural health monitoring system



Establish **Simplifai** as a leading global software vendor within **intelligent business process automation** 





### Becoming a NOK billion revenue company

