



TROLL—E™
troll-e.io

Innovating Golf Solutions for the Future

Rental of durable electric golf trolleys and premium golf tracking in one app

- Golfing Electrified
- Better Strokes
- Faster Rounds
- Same Activity
- Greener Golfing
- Less Gear
- Better Shoulders
- Unlimited Potential

New, Sustainable, and Profitable GolfTech

Revolutionary Technology: The world's first self-service electric rental golf cart with an integrated app.

Efficient Management Platform: A dashboard providing clubs with complete control over rentals, operations, and data.

Solves Key Issues: Affordable for players, eliminates costs and maintenance burdens for clubs.

Stable Revenue Streams: Generates income through rentals, subscriptions, and advertising.

Strong Market Potential: Aiming for 8,000 carts and 300,000 app users by 2029.

Proven Concept: Tested with Fana Golf Club and received significant interest from both Norwegian and international clubs.

Perfect Timing: Growing golf market with increasing demand for technological solutions.

Investment Opportunity: Seeking NOK 6–9 million for scaling in Norway and international expansion.



Clear Market Challenges

Players

Golfers face several challenges with traditional electric trolleys. These trolleys are expensive, with an average price of NOK 20,000, representing a significant investment. They require regular maintenance, including battery charging and replacement, and their heavy weight makes them inconvenient to transport in and out of cars, limiting usability. Additionally, not all golfers need an electric trolley for every game, making a rental solution far more flexible and cost-effective by reducing capital commitments.

Club

Golf clubs also encounter substantial hurdles. Investing in a fleet of electric trolleys is financially demanding, particularly for smaller clubs with limited budgets. Managing maintenance, charging, and rental logistics consumes valuable staff time and resources. Rental trolleys often wear out faster, resulting in higher replacement costs. Predicting the number of trolleys needed is a challenge, leading to either overinvestment or shortages. Furthermore, traditional trolleys are only available during club opening hours, restricting revenue opportunities and convenience for golfers. Finally, the availability of spare parts remains a major issue, prolonging repair times and escalating maintenance costs.



Fully Automated Trolley Rental

TROLL-E offers a trolley rental solution that effectively addresses many of the challenges golf clubs face today. By integrating our proprietary, modern electric golf trolleys into the club's offerings, we reduce the administrative burdens and maintenance costs typically associated with traditional trolleys. **We take full responsibility for the operation, maintenance, and management of the trolleys**, freeing up time and resources for the club's staff to focus on enhancing the overall member experience.

Our solution eliminates the club's need to invest in its own fleet of trolleys while providing a new, **stable revenue stream through our attractive profit-sharing model**.

For most clubs in Norway, such a reliable income source is highly appealing. TROLL-E trolleys are designed to be durable, energy-efficient, and easily accessible, ensuring less maintenance and greater availability for players, particularly during peak seasons. With our rental solution, golf clubs gain not only a modern and attractive product but also a partner committed to seamless operations and consistent rental income.

Through a dedicated dashboard, clubs have full oversight of the trolleys, including their locations and usage patterns.

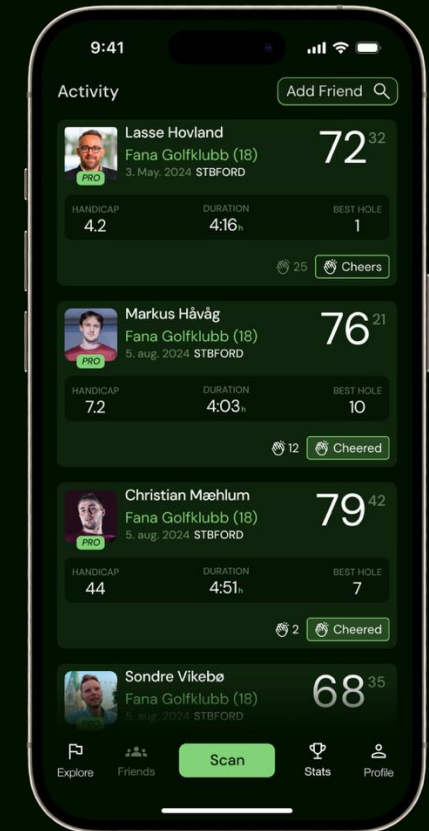


Rental and Golf Tracking in One App

TROLL-E's innovative app solution is the core of our self-service rental service, revolutionizing how golf clubs and players interact. Through the app, players can easily **reserve, pay for, and unlock trolleys directly from their mobile phones**, making the entire process seamless and user-friendly. This technology-driven solution minimizes the need for manual interaction, saving time for both club staff and players.

With 78% of golfers already using a golf app, our app is much more than a rental platform; it builds a **social network for golfers**, enabling players to follow each other, create tournaments, establish leagues, and participate in competitions. Integrated with Apple Health, the app also encourages physical activity. This combination of social and health-oriented features increases engagement and interest in the sport while **fostering a stronger sense of community among members**.

For golf clubs, the app provides access to **comprehensive data and insights**. We share valuable player activity data, helping clubs better understand their members and optimize operations. Additionally, the app **provides information on the location of lost golf balls, addressing a significant environmental issue** and enhancing the overall golfing experience. With TROLL-E's app, golf clubs can offer a modern, efficient, and eco-friendly service tailored to the needs of today's golfers.



Software Revolution in Golf Management

\$900 Billion Market with 60,000 Golf Courses

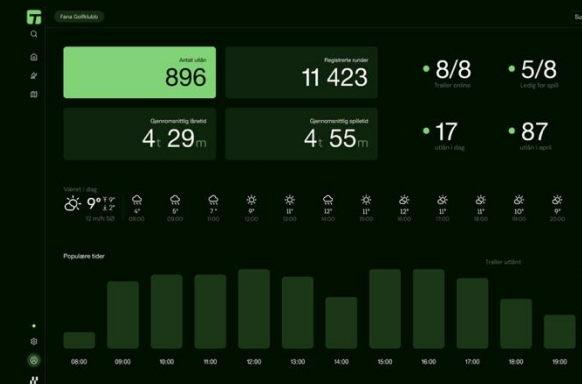
Golf course management software is outdated and inefficient. Clubs rely on fragmented legacy systems that lack automation, analytics and user-friendliness.

TROLL-E offer a **fully integrated digital ecosystem** for golf clubs, with an advanced SaaS solution that enhances operations, drives revenue and improves golfer engagement.

- Automated fleet & rental management
- Golf app with social & competitive features
- Data-driven insights
- Lost ball-tracking – a sustainable innovation

Our **subscription model is scalable**, with base fee for access to the full suite of management tools, premium app subscription with exclusive features for golfers, **and in-app advertising** and sponsorships for supportive revenue stream.

TROLL-E is positioned to become the **gold standard for golf course management** software, disruption an industry that has seen little innovation. With global scalability, we are not just revolutionizing the golf trolley rentals – we are **redefining how players and golf clubs operate**.



Use Case

Reserve a TROLL-E

Check availability and reserve a trolley easily in the app.

Unlock the TROLL-E

A fully charged and ready-to-use trolley is unlocked through the app when you're within range.

Enjoy Your Round

Golf on your terms. The trolley does the heavy lifting while you focus on your game.

Track Round

The app provides GPS, a digital scorecard, and other tools to enhance your golfing experience.

Return the TROLL-E

The trolley is returned to the charging station, and payment is automatically processed from your card.

Make Golf Social

Share your results, create leagues, and challenge friends directly in the app.



Product Landscape

Today's product landscape is dominated by privately owned trolley solutions and golf carts on select courses

Manual Trolley

The most common solution for the majority of players.

Problem

Physically demanding and places strain on the player, affecting performance. Must be transported to and from the course. Trolleys durable enough for rough terrain are often heavy.

Electric Trolley

Increasingly popular among more affluent players.

Problem

Expensive to purchase and heavy to transport in and out of cars. Performs poorly in rough terrain unless opting for a very costly model. Maintenance is tedious.

Golf Cart

Available at some clubs in Norway, more commonly used internationally.

Problem

Expensive for clubs to purchase and maintain, requiring significant storage space and upkeep. High rental costs for players and limited accessibility in rough terrain.



Market Potential

The Global Golf Market is Valued at Over \$900 Billion in 2023*

	Norway	Nordics	Europe	Worldwide
Players	150 000	900 000	7 000 000	60 000 000
Clubs	175	850	6 800	38 000

Troll-E's Ambition by 2029:

8,000 trolleys in the market, distributed across 800 clubs (2.1% market share).

300,000 app users (0.5% market share).

*Data sourced from Future Data Stats and Grand View Research.



Platform



The screenshot shows the TROLL-E mobile application interface. On the left, a QR code scanner is active, displaying 'Scan QR code' and 'Scan QR code at the handle of the trolley'. Below the scanner are buttons for 'Flashlight', 'Enter code', and 'Help'. On the right, a dashboard displays various metrics: 'Active users' (896), 'Registration number' (11 423), '8/8' (Trolley online), '5/8' (Landing for split), 'Communication quality' (4.29m), and 'Communication quality updated' (4.55m). Below these are weather forecasts for different locations and a bar chart showing 'Problems solved' over time.



A black and green TROLL-E self-balancing scooter is shown, featuring the brand name 'TROLL-E' on the frame.

HEISENBUG®

pavels innovation

Subscription

RevenueCat

Apple Pay

Rental

stripe vipps

mastercard

VISA

Back-end

HEISENBUG®

TROLL—E™

Heisenbug: Development partner for software and IoT

Pavels Innovation: Development partner for hardware

Vipps/ApplePay/MC/Visa: Payment solutions for rentals and subscriptions

RevenueCat: Platform for subscription payments

Stripe: Payment network (PSP)

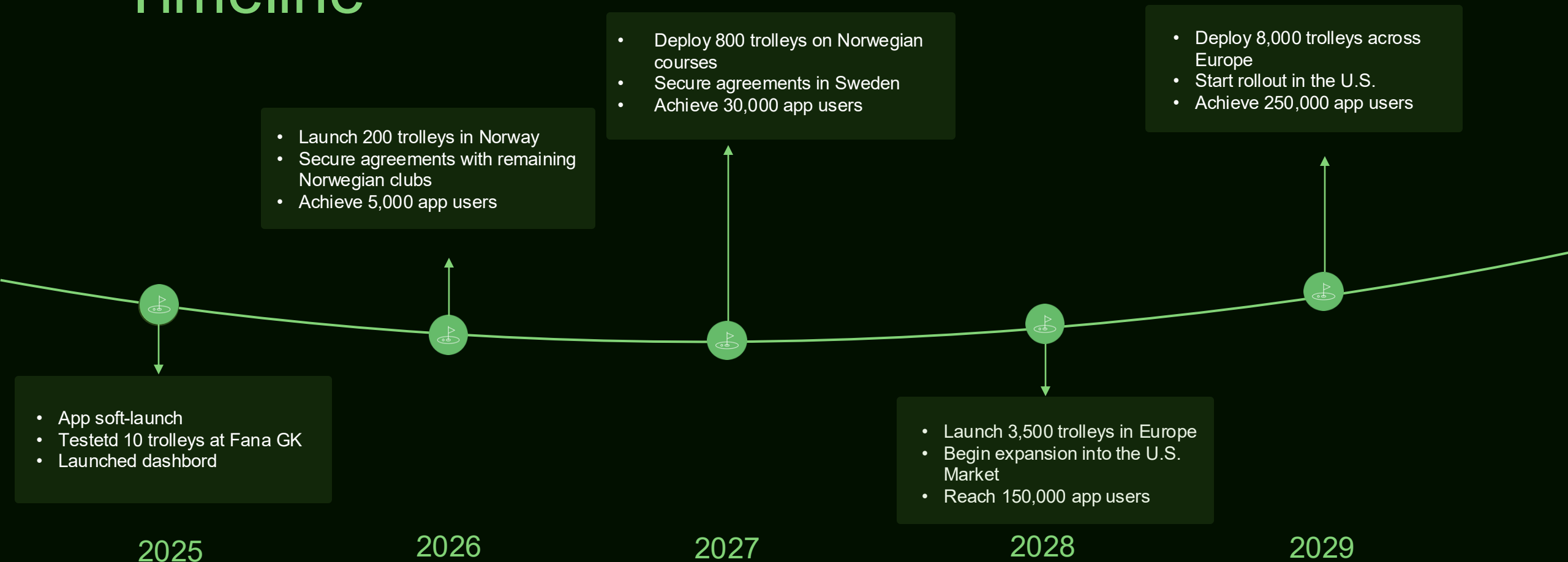


Traction

- 🟢 Raised NOK 3.5 million in funding
- 🟢 Developed and tested a trolley prototype, currently finalizing version 1.0
- 🟢 Completed MVP of the app, tested by over 700 users
- 🟢 Completed a successful pilot with Fana Golf Club
- 🟢 Received media coverage in Finansavisen, Shifter, and the Norsk Golf member magazine
- 🟢 Orders of 500+ trolleys, and pre-sale of supplemental equipment of NOK 900 000
- 🟢 Customers such as Meland GC, Sotra GC, Bjaavann GC, Haga GC, Bærum GC, Hemsedal GC with more.



Timeline



Timing

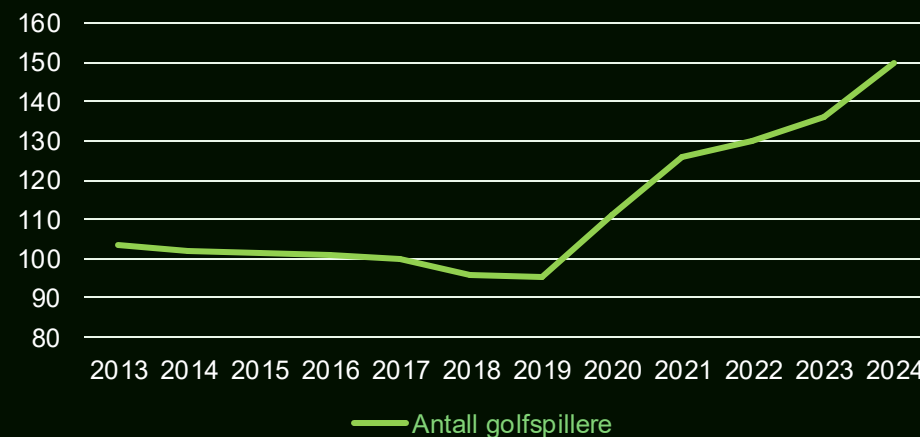
The golf market is growing, both in Norway and internationally. The number of players is increasing, particularly among younger generations who are tech-savvy and prefer convenient, digital solutions. Since 2019, the number of golfers in Norway has increased by 50%.

TROLL-E is perfectly positioned to succeed right now, with timing that couldn't be better. As the first solution in the world to offer a fully self-service electric golf trolley integrated with a groundbreaking app, we have a unique opportunity to set the standard in the market before other players enter.

In line with broader societal trends, the demand for technological solutions in the golf industry is accelerating. Combined with a shift toward sustainable solutions and golf clubs' desire to reduce their carbon footprint, our trolleys meet multiple needs for both players and clubs.

Golf clubs are also searching for new revenue streams. TROLL-E provides an attractive and stable income source through rentals, making our solution highly appealing to clubs. In principle, no Norwegian golf club can say no to our trolleys.

Development in Norway



In 2023, a total of 1,741,986 rounds were booked in GolfBox, representing a 0.7% increase from the previous year. Compared to 2019, before the pandemic, this marks an impressive 82% growth in booked rounds.

LTV & CAC

The number of golfers worldwide is growing, and the demand for environmentally friendly and easily accessible solutions is becoming increasingly important. We believe the LTV of our trolley will be strong and continue to grow.

The LTV of a trolley in Norway is based on 200 rental days per year, a lifespan of four years, and an average of 1.2 rentals per day, resulting in an **LTV of NOK 110,400**. Norwegian golf clubs typically have 15 trolleys, giving an **LTV per golf club of NOK 1.7 million**.

The LTV of a trolley in Europe is based on 360 rental days per year, a lifespan of three years, and an average of 1 rental per day, resulting in an **LTV of NOK 132,300**. European golf clubs typically have 15 trolleys, giving an **LTV per golf club of NOK 2 million**.

Our customers are golf clubs, and with our B2B sales strategy, we can achieve a CAC (Customer Acquisition Cost) of NOK 10,000 in Norway, which translates to a **CAC per trolley of NOK 667**.

For European golf clubs, the CAC is expected to be slightly higher due to increased travel expenses, estimated at NOK 30,000. This results in a **CAC per trolley of NOK 2,000**.



Sales Strategy

Growth is based on a B2B sales strategy, emphasizing strong presence in the golfing community and long-term partnerships with clubs.

Golf clubs are our customers, and by working directly with them, we gain access to all their players. Each "sale" to a golf club provides access to thousands of trolley rentals. With our current team, we have sufficient capacity to reach all golf clubs in Norway by the end of 2025.

When entering an agreement, the club is tied to a 24-month exclusivity contract. This has two advantages: (1) it provides income predictability for both the club and Troll-E, and (2) it prevents potential competitors from entering the market. Once the agreement is signed, we deploy trolleys at the respective golf clubs and organize demo days, where both golfers and club staff receive thorough training on how to use the trolleys and the app.

Troll-E will simultaneously conduct marketing efforts to reach both clubs and players. We will focus on specialized digital channels, allowing us to target golf clubs and players at a low cost effectively. Golf clubs will also be encouraged to promote the trolleys, as Troll-E's revenue-sharing model provides clubs with a direct incentive to maximize rentals. By combining our marketing initiatives with the clubs' own campaigns, we ensure broad coverage and rapid user engagement.

We prioritize building long-term partnerships with clubs by offering continuous support and updates for both the trolleys and the app. This ensures seamless operations for the clubs and guarantees golfers access to the best possible experience.



Business Model

Trolley Rental

We offer competitive rental pricing for trolleys with a kickback model for clubs, where the club handles trolley maintenance.

Price per rental: NOK 179 incl. VAT

Club kickback: 20%

App Subscription

The app functions as a key for the trolleys but also includes a complete golf assistant for players. We are developing a premium version at a significantly lower cost than competitors.

Price for premium subscription: NOK 69 per month

SaaS License

A complete administration platform for clubs, enabling them to manage rounds, track trolleys, and locate lost balls.

Price for version 1.0 (Nordics): NOK 3,000 per month

Price for version 2.0 (Europe): NOK 10,000 per month

Advertising

The app is an ideal platform for targeted advertising, and the free version will include banner ads. Based on market standards for app advertising, we estimate annual ad revenue per user at NOK 75.



Forecast

Revenue	2026	2027	2028	2029
Rental	6 864 000	27 456 000	151 104 000	389 280 000
Premium App Subscription	231 840	2 782 080	13 910 400	23 184 000
Advertising Revenue (app)	-	1 800 000	9 000 000	15 000 000
Dashboard SaaS Solution	-	1 440 000	6 120 000	48 000 000
Total Revenue	7 095 840	33 478 080	180 134 400	475 464 000

Expenses	2026	2027	2028	2029
Cost og Goods	3 116 000	11 064 000	55 976 000	129 520 000
Research and Development	3 000 000	5 000 000	7 000 000	10 000 000
Sales and Marketing	1 800 000	3 400 000	15 000 000	30 000 000
Operational and Asministrative Cost	2 000 000	4 000 000	15 000 000	30 000 000
Total Expenses	9 916 000	23 464 000	92 976 000	199 520 000



Team



Lasse Hovland

CEO / Founder

- 15+ years of sales experience
- 10+ years of leadership experience
- Strong expertise in both B2B and B2C



Omar Grotli Zacka

COO / Founder

- 15+ years of experience as an operations manager
- Extensive logistics experience
- Former leader of a team of 60+ employees



Torstein Sandaa-Johansen

CFO

- Master's in Economics
- 8+ years of experience in finance, technology, and leadership
- 5+ years of startup experience



Tibor Mæhlum

CTO

- Founder of Heisenbug
- 20+ years of experience in product development and technology
- Formerly with Chess & Atea

Support team



Arvid Hovland

Chairman

- 40+ years of experience in production, logistics, and sales
- Experienced board chairman
- Executive leader



Harald Mowinckel Troye

Advisor

- Experienced early-stage investor
- 20+ years of experience in finance
- Recognized executive leader and board chairman

Competitive Landscape



Booking solution for renting golf carts. Targets existing golf carts that clubs must purchase themselves. Installs IoT in the carts and provides the club with access to a booking system. Present in 60 clubs across Europe.



Leading golf app in the USA with over 7 million users. Focuses on GPS data and shot analysis.



The official app of the Golf Federation and Norway's most used golf app. Free, but offers no functionality beyond an illustrated course map with distances.



Golf app for scorecards, tournaments, and course maps. 1.5 million users.

Exit-strategi & captable

The market for pay-per-use and micromobility has experienced significant growth in recent years, with seamlessly integrated technological solutions providing users with flexibility predicted to dominate the market.

The company will prioritize opportunities for early-stage investors to exit during Series A and Series B funding rounds, either through share buybacks by the company or sales to other investors.

Owners	Roll	Share
Omar Grotli Zacka	Founder & COO	44,5 %
Lasse Hovland	Founder & CEO	44,5 %
Angels, Advisors and Board members		11 %

Investment Case

We are seeking NOK 5-8 million at a valuation of NOK 49 million to launch the full version of trolleys and the app in Norway, building sufficient proof-of-concept to expand into the Nordics and Europe. We have a soft commitment of NOK 1 million from new shareholders and will apply for soft funding of up to NOK 1 million from Innovation Norway, as well as Skattefunn to cover 19% of R&D costs.

We aim to conduct a new funding round within the next 12-18 months to finance expansion into the Nordics and Europe.

The investment will enable us to:

- Finalize version 1.0 of the trolley and app
- Launch up to 200 trolleys in Norway
- Develop a premium version of the app with a subscription model
- Create a SaaS solution for clubs



Value Potential



Company Type: Micromobility
Valuation: NOK 3.96 billion
Customers: 7 million
Locations: 12 countries in Europe



Company Type: Golf Trolley Manufacturer
Valuation: NOK 1.04 billion
Location: Australia



Company Type: Micromobility
Valuation: NOK 730 million
Customers: 258,000
Location: Nordics



Company Type: Golf App
Valuation: NOK 532 million
Customers: 7 million
Location: Global

Media

SHIFTER

<https://www.shifter.no/nyheter/grndere-satser-pa-hole-in-one-med-strava-for-golfere-og-el-golf-tralle/337671>

Finansavisen

<https://www.finansavisen.no/teknologi/2024/06/30/8146693/satser-pa-golftrend-ser-uante-muligheter>

norsk golf

<https://www.norskgolf.no/nyheter/satser-pa-el-traller-og-app-folk-spiller-bedre/289061>





TROLL—E™

troll-e.io

Lasse Hovland
CEO/Founder

lasse@troll-e.no

+47 966 45 145

- Golfing Electrified
- Better Strokes
- Faster Rounds
- Same Activity
- Greener Golfing
- Less Gear
- Better Shoulders
- Unlimited Potential