



Directional Pixel Technology by Realfiction:  
**The next-generation glasses-free 3D experience**

Realfiction Holding AB

INFORMATION MEMORANDUM

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# 01

## Executive Summary

KEY INVESTMENT HIGHLIGHTS

COMPANY TIMELINE AND FUTURE

OWNERSHIP STRUCTURE AND TRANSACTION OBJECT

# World's first shared 3D experience with personalized views in full resolution

## - Glasses-free 3D offering Multi-user and Multi-view through patented Directional Pixel Technology

Claim the future of glasses-free 3D with Directional Pixel Technology (DPT) while the market is still emerging

- Own the first high-end true glasses-free 3D display solution and set the benchmark for the industry
- When DPT is the industry standard, the first-mover window is closed

Unlock a new 3D display frontier with multi-user, glasses-free DPT

- Multi-user 3D for up to five people, with full resolution, no glasses and look-around effect
- Multi-view 2D/3D enabling completely different screen content for each viewer, including e-privacy for authorized viewing only
- Full resolution and wide viewing angles without lenticular 3D flaws
- Real-time eye tracking for a shared yet personalized 3D experience
- Strategic and technical partnerships with strong industry players that bring proven know-how, support R&D activities, and boost commercialization
- Strong patent portfolio that secures your technology advantage and protects your investment

Turn emerging multi-user 3D into your signature advantage

- Compatible for LCD, OLED and LED/Micro-LED for future-proof display integration
- DPT is already validated through proof-of-concept demonstrations and growing industry exposure and interest

Multi-user 3D: sharing a three-dimensional experience with look-around effect



Multi-view 3D: individual image based on position



DPT is a powerful 3D enabler that transforms ordinary screens into seamless shared spatial visualization platforms, unlocking new possibilities across countless applications...

### Home entertainment & Gaming

Turn standard displays into shared 3D experiences, letting audiences view immersive, glasses-free content from several positions



### Medical imaging

Enhancing 3D diagnostic visualization and examination, enabling multiple users to simultaneously analyse shared data from their own perspective



### Automotive

Turning the centre stack into a personalised yet shared interface, allowing driver and passenger to view different content while enhancing safety



### Telepresence

### Digital Advertising

### AI Avatar Service Desk

### + Other use cases

# Realfiction was founded in 2008 with the introduction of its holographic displays, and in 2019 the Company began developing DPT

## 2008-2017

### ESTABLISHMENT OF REALFICTION

Realfiction was founded in 2008 in Copenhagen, Denmark by Peter Simonsen and Clas Dyrholm, who both are still active in the company today.

Realfiction initially started developing mixed reality displays used for the retail segment, marketing several successful displays within its Dreamoc product family.

## 2017

### LISTING ON NASDAQ FIRST NORTH AND LAUNCH OF DEEPFRAME

In 2017, Realfiction was listed on Nasdaq First North Growth Market in Sweden. With increased funding from the IPO and increased resources, Realfiction launched DeepFrame, the world's largest mixed reality display.

## 2019

### START OF DIRECTIONAL PIXEL TECHNOLOGY

In 2019, Realfiction presented an early-stage version of Directional Pixel Technology, enabling multi-user glasses-free 3D experiences.

Moreover, Realfiction filed DPT patent applications to protect both hardware and software parts of the technology.

## 2020-2022

### BETA VERSION OF LCD DPT

In 2020, a beta version of an LCD DPT display was created.

Furthermore, Realfiction filed for an additional five patents between 2020 and 2022 for the technology.

## 2022

### STRATEGIC PARTNERSHIP WITH AMTRAN

In 2022, Realfiction formed a strategic partnership with a large LCD manufacturer, AmTRAN, working with them on further developing DPT LCD displays. Moreover, AmTRAN acquired a minority stake in the Company.

## 2023

### EARLY DPT OLED AND MICRO-LED DEMONSTRATORS

In 2023, Realfiction completed the first DPT LCD display, as well as OLED and Micro-LED demonstrator versions, thus being compatible with all of the three major display technologies.

Moreover, Realfiction secured an exclusive license agreement for Ferroelectric Liquid Crystals (FLC)

## 2023-2024

### PATENTS GRANTED AND FIRST COMMERCIAL DPT AGREEMENT

Two DPT patents are granted in 2023 and three in 2024.

In September 2024, Realfiction signed a DPT agreement for a custom-designed proof-of-concept display worth SEK 7.4 million with an undisclosed customer.

## 2025

### LICENSE AND COLLABORATION AGREEMENT

In January 2025, a significant license and collaboration agreement was signed with Shantou Goworld Display, with the aim of manufacturing DPT display products, initially towards the automotive sector.

## 2025

### WORLD'S FIRST MICRO-LED-BASED 3D DISPLAY AND STRATEGIC SHIFT ON SCALING DPT

In April 2025, Realfiction achieved a major milestone with PlayNitride: building the world's first Micro-LED-based 3D display, powered by DPT. The 9-inch display made its debut at Touch Taiwan 2025, gaining interest from a variety of leading display manufacturers.

In May 2025, Realfiction made a strategic shift to focus exclusively on DPT, transitioning its legacy products to a license model.

## 2025

### PATENT GRANTED AND WORLD'S FIRST 3D DISPLAY WITH THREE FULL-SCREEN EXPERIENCES UNVEILED

In July 2025, another patent was granted. The Company now holds six patents across four patent families.

In October 2025, Realfiction built the world's first 3D display capable of showing three different full-screen experiences simultaneously, proving DPT's true multi-user capability and marking a key step toward commercialization.

## 2025-2026

### CES ATTENDANCE AND COLLAB. WITH ONE OF TAIWAN'S LARGEST DISPLAY MANUFACTURERS

In December 2025, Realfiction initiated an early-stage technology collaboration with one of Taiwan's largest display manufacturers, focusing on the evaluation of DPT for potential future applications.

In January 2026, the Company attended CES in Las Vegas, US, and successfully presented its glasses-free multi-user 3D display.

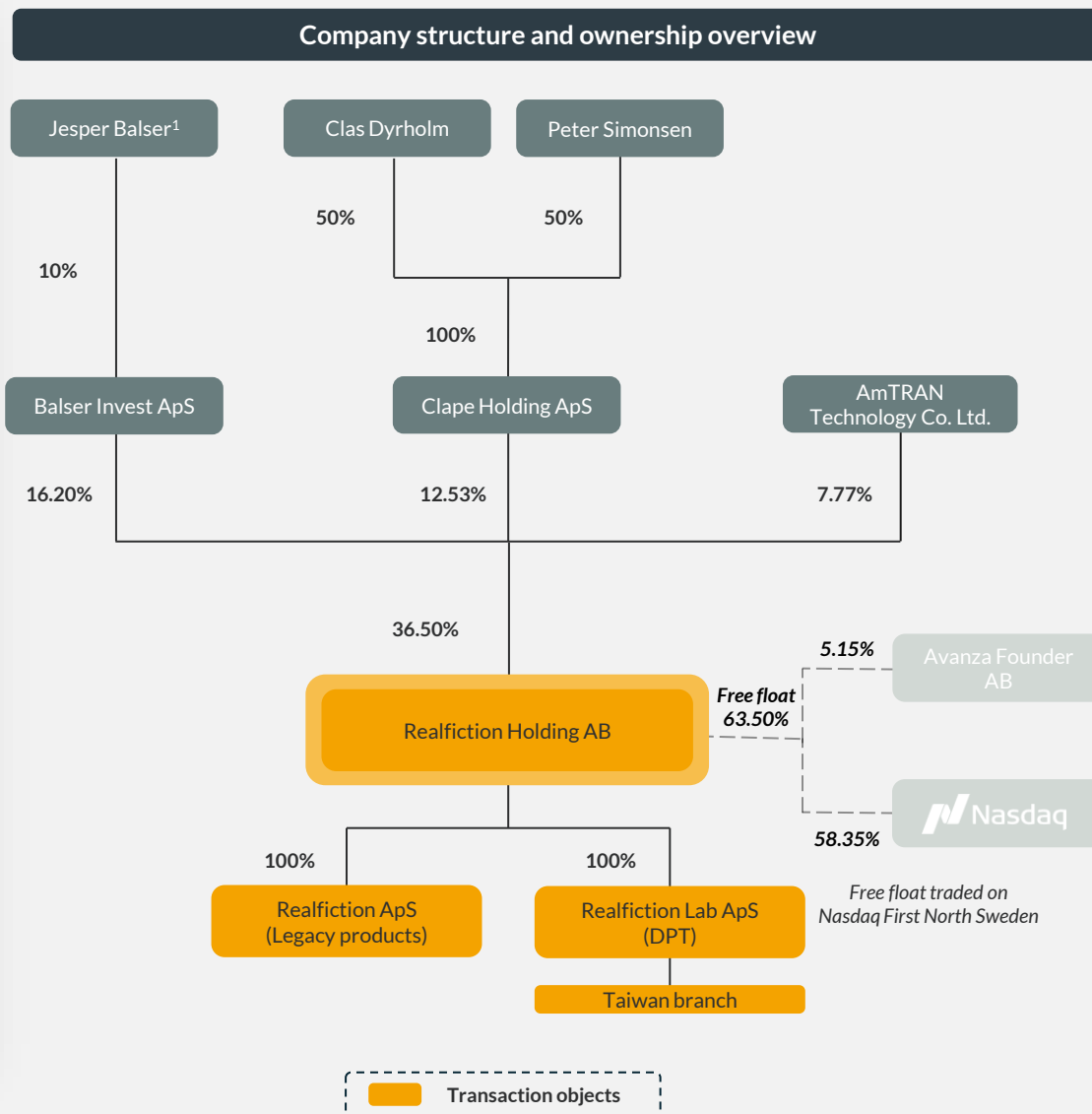
## ONGOING

### FURTHER COMMERCIALIZATION OF DPT

Realfiction is actively advancing the commercialization of DPT through continued development, currently focusing on scaling fast liquid crystals to enable large-format display production. The ambition is to establish DPT as the industry standard for glasses-free 3D experiences.

# Ownership structure and transaction perimeter

- Realfiction Holding AB is the parent company in the listed group and is headquartered in Copenhagen, Denmark.
- The Company has two wholly owned subsidiaries located in Denmark; Realfiction ApS and Realfiction Lab ApS, which has a branch in Taiwan. All operations are mainly conducted in the subsidiaries and Realfiction Holding AB does not own any shares in other companies.
- Realfiction Holding AB was listed on Nasdaq First North Sweden in 2017, which initially served the Company well, but has since proved suboptimal for the commercialization of DPT.
- The 3D display market is growing rapidly, driven by a rising demand in consumer electronics, gaming, and automotive sectors. With Realfiction's Directional Pixel Technology, the Company has a unique opportunity to disrupt the 3D display market, offering display manufacturers a clear first-mover advantage in a category competitors cannot yet offer.
- Therefore, Realfiction is seeking a partner to support the Company's growth and accelerate the commercialization of DPT. Alternatively, the owners are open to selling the rights to Directional Pixel Technology separately.
- The founders have prepared a plan to ensure a smooth transition in the event of an acquisition of the Company, should a buyer not wish to acquire the rights separately.
- At the time of the execution of the proposed transaction, 12.53% will be controlled by Clas Dyrholm (founder and CEO) and Peter Simonsen (founder and Head of R&D). Clas and Peter remain committed to participating in the Company's future growth alongside a new partner.



1) Jesper Balsler is a private investor and not involved in the daily operations of the Company, and the remaining shares are owned by his immediate family.

# 02

## Business Overview

INTRODUCTION TO DIRECTIONAL PIXEL TECHNOLOGY

DIRECTIONAL PIXEL TECHNOLOGY FEATURES

DIRECTIONAL PIXEL TECHNOLOGY EXPLAINED

USE-CASES

PATENTS

DPT INTEGRATION

VALUE PROPOSITION

# Realfiction has redefined multi-view and multi-user glasses-free 3D displays with its patented Directional Pixel Technology

- Existing 3D displays – primarily lenticular – require special glasses, limit multi-user experiences, or sacrifice resolution to allow multiple viewers to interact with the display simultaneously. Physical lens architecture makes quality trade-offs unavoidable, and depth-of-field blurring further limits 3D image depth.
- Realfiction’s patented Directional Pixel Technology eliminates these constraints with a fully electronic, lens-free solution that delivers glasses-free 3D with zero resolution or quality loss regardless of 2D/3D mode.
- DPT is solving the key limitation in glasses-free 3D displays: enabling multiple simultaneous users without sacrificing resolution or quality, while preserving a full look-around effect for everyone. DPT’s unique features include 3D multi-user, 3D multi-view, as well as 2D multi-view and standard 2D modes, with the technology supporting seamless switching between modes without compromising quality.
- The technology is highly suitable for a broad range of industries, including gaming, automotive, home entertainment, medical imaging, telepresence, and digital signage, where demand for high-quality, immersive visual experiences is accelerating. The technology integrates seamlessly with next-generation LCD, OLED, and LED/Micro-LED platforms, ensuring future-proof compatibility across the display ecosystem.

Realfiction has conducted extensive R&D on DPT and is working to implement it in larger displays, beginning with 27-inch models. The technology has been validated across all major display types, with challenges like light efficiency and bandwidth resolved. The remaining focus is on scaling fast liquid crystals used in the SLM for larger displays.

## Directional Pixel Technology



### Problem:

#### Conventional 3D displays

- Single-user limitation
- Low image resolution in multi-user displays
- Use of costly lenses
- Narrow viewing angle
- No mode switching

### Solution:

#### REALFICTION™

- True multi-user freedom
- No resolution loss
- Cost-effective, electronic, lens-free solution
- Individual look-around for multiple users
- Seamless switching between 2D/3D modes

# Directional Pixel Technology offers several unique features, with users being able to seamlessly switch between 3D and 2D modes, all without compromising display quality

## Multi-user and multi-view 3D

- The glasses-free 3D mode offers two distinct features: a multi-user 3D mode and a multi-view 3D mode.
- Multi-user 3D lets all viewers see the same 3D image regardless of viewer position, ideal for shared movie experiences. In this mode, there is virtually no limitation for the number of viewers.
- Multi-view 3D lets each person in a room – currently up to five people – see their own unique perspective of a scene while being able to move freely and look around the scene. This makes it particularly ideal for educational or exhibition settings. The 3D multi-view mode also enables viewers to see completely different 3D images.

### Multi-user 3D: same image with look around effect



### Multi-view 3D: individual image based on position



## Multi-view 2D

- Multi-view 2D allows multiple users to view different content in 2D simultaneously, depending on their viewing angle, in which case eye-tracking is not needed.
- Multi-view 2D is particularly useful in vehicle cockpit information systems, where the driver can focus on operating the car and following navigation on the center screen, while, at the same time, the passenger can view their own content without disturbing the driver.
- DPT currently supports up to 10 different full-screen views with no loss in resolution.

### Example of multi-view 2D used in a vehicle



## E-privacy

- Directional Pixel Technology also enables a new level of person-specific privacy, where sensitive information displayed on a screen can only be seen by persons granted security access beforehand.
- The mode is compatible with face recognition and eye tracking, restricting content visibility for unauthorized users by instead showing a black screen or random content, such as a dummy Excel sheet.
- This feature can be used in, for example, healthcare and law enforcement settings but also enables work on sensitive information when sitting in a crowded place.

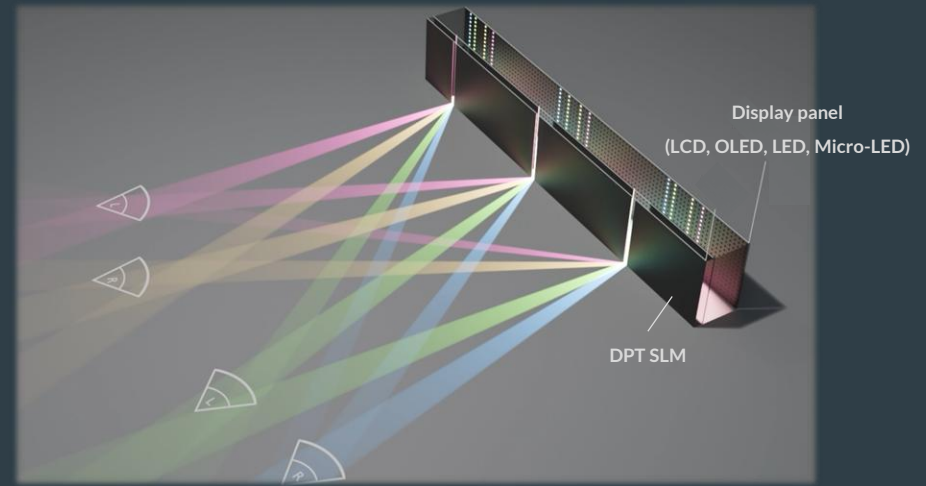


# Realfiction introduces a whole new category of 3D display based on novel patent pending parallax technology

- Unlike traditional technologies, which utilize physical lenses, such as lenticular technology, Realfiction employs a fully electronic approach using a patented dynamic Spatial Light Modulator technology.
- A spatial light modulator (SLM) and a display with a dynamically controlled scan sequence together control the direction of light, enabling precise delivery of multiple simultaneous viewing angles without the need for special glasses. Through algorithmically controlled, synchronized time-multiplexed interleaving, each view is being scanned simultaneously, creating the perception of multiple simultaneous 3D perspectives.
- Combined with proprietary software, DPT directs pixel light through the SLM only in directions toward each viewer's eyes, enabling calculation of the correct image for each eye in real-time.
- Integrated eye-positioning technology tracks viewer locations continuously, ensuring that accurate 3D images are delivered even as viewers move freely around in front of the screen. For the 3D multi-view function, this will create a holographic "look around" effect – a glasses-free 3D experience that adapts dynamically to multiple viewers simultaneously.
- Additionally, the Company uses super-fast liquid crystals as a key component in the SLM. This substantially overcomes the speed limitations of conventional LCD displays and increases performance in other display technologies, enabling more images at different positions to be shown for a smooth viewing experience. Realfiction is currently developing its own proprietary approach based on nematic liquid crystals.

## Directional Pixel Technology

– patented SLM technology combined with proprietary software algorithm and eye tracking



Delivers a unique glasses-free 3D experience



Example showcases the 3D multi-view function, allowing up to five users to see an individual view of the display

# Directional Pixel Technology can be implemented within next-gen display applications across gaming, automotive, medical, and digital signage, ensuring long-term scalability

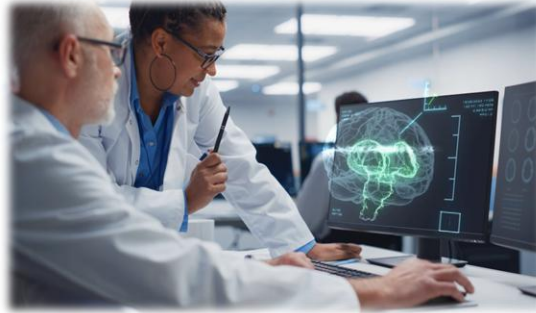
## Gaming

DPT removes the need for split-screens and special glasses by giving each player their own full-screen view on a shared display, in either 2D or 3D modes.



## Medico

Improving 3D visualization for diagnostics and training, enabling multiple users to analyze the same data simultaneously without losing their individual perspectives.



## Advertising

DPT enables advertisers to serve 2D or 3D messages to multiple audiences on a single display with tailored content for higher relevance and impact.



## Telepresence

DPT enables a more natural, immersive telepresence experience, with direct individual eye contact, letting multiple people see individual 3D views.



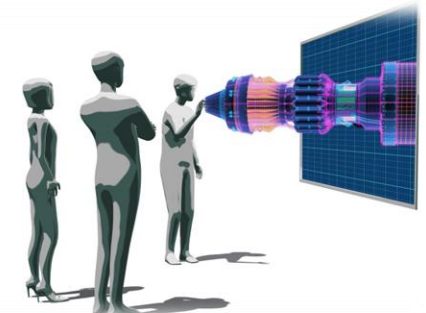
## Automotive

DPT enables advanced in-car multi-view displays, which can be used on the center stack, allowing the driver and passenger to view different content simultaneously when relevant.



## Presentation

DPT makes presentations engaging and immersive, letting multiple users view individual 3D views, being able to look around freely.



# Directional Pixel Technology can transform in-car displays into personalized and more enjoyable experiences while increasing safety

## Use-case: Automotive

- Current in-car entertainment solutions do not yet meet the growing demand for high-quality, individualized passenger experiences. Directional Pixel Technology in automotive lets different people in the car see different full-resolution content on the same screen, with the possibility of 3D, making journeys more enjoyable while helping reduce driver distraction.

## DPT multi-view for automotive

- DPT multi-view lets the driver see only driving-relevant information – such as navigation, speed, car status, etc. – while the passenger on the same physical display can watch movies or browse media. The passenger can prepare or adjust routes on their side of the display and then hand off the final route to the driver's view, enabling smoother on-the-go trip planning without distracting the driver and reducing the need for dedicated smart tablets for on-the-go entertainment.
- In the rear seat, DPT multi-view can be used to show full-resolution 2D or 3D content to multiple passengers, so each person can watch their own movie or play their own game on the same panel. This proves an attractive solution for families with children of different ages and preferences without installing multiple separate screens or the need to invest in costly smart tablets.

### Dual-view explained



Driver perspective: map and navigation



Passenger perspective: movie

### 3D integration



# DPT can transform digital-out-of-home displays into more immersive, personalized, and effective advertising that reaches more people from a single screen

## Use-case: Advertising

- Today's digital signage and advertising must stand out on an entirely new level to capture attention. DPT can transform digital out-of-home media into a more interactive, realistic, and eye-catching experience, with the possibility to make it more personalized. With DPT the screen can display different targeted content to different viewers on the same screen, across multiple 2D and 3D views, enabling advertisers to reach more target groups at once with a single display.

## Digital signage

- DPT can make digital signage more eye-catching, immersive and relevant by enabling dynamic 2D and 3D content, directional targeting, and multiple views from a single screen, taking advertising to a whole new level.

## Directionally differentiated advertising

- In crowded locations such as airports, train stations, or department stores, a single display using DPT can show multiple 2D or 3D views at once, targeting different audiences depending on where they stand or which direction they move. One side can display departure information while arriving passengers see directions to taxis, and in retail, different angles of the same screen can highlight different product categories simultaneously, maximizing both display usage and relevance.
- Additionally, advertisers can also combine the use of AI cameras with DPT to deliver personalized ads – based on the camera's perception of age and gender of the viewer – to different viewers at the same time.

### Exhibitions and boutiques

In exhibitions and high-end boutiques, DPT can turn a standard screen into a holographic-style 3D experience. Viewers can walk around and see a futuristic sports car or a fashion model from different angles, with realistic depth, volume, and look-around effects as they move.



### Out-of-home advertising

With DPT, roadside and transit displays can stay relevant while achieving a higher impact. The same screen can show simple, static, large-font ads to drivers, and richer video campaigns to people at the bus stop, depending on viewing direction. It can also tailor messaging by distance, using bold, simple, eye-catching content for viewers far away, and more detailed information for those standing closer.



Ad directed for pedestrians



Ad directed for drivers

### Differentiated and programmatic advertising

DPT can turn a standard screen into a smart, dynamically targeted display where content changes with context and audience. With DPT, the same screen can show different ads at the same time to people moving in different directions, or use real-time, anonymous camera input to adapt content to broad demographic segments: a family walking past might simultaneously see a car ad aimed at the parents, a gaming ad aimed at the kids, and a fashion ad aimed at a teenager, all in full resolution on a single display.



Ad directed at an 8-year-old girl



Ad directed at a 30–35-year-old man

# Realfiction has established a defensible global 3D display IP platform that differentiates its solutions and creates high entry barriers

## Broad geographic & structural IP coverage

- Realfiction has secured DPT coverage across the US, China, Japan, South Korea, India, and Europe – combining proprietary DPT patents with exclusively licensed patents.
- The IP portfolio spans hardware architecture, optical systems, manufacturing processes and software, consisting of:
  - 6 granted patents across 4 patent families.
  - 7 additional patent families pending.
- Realfiction has secured a global exclusive license from HKUST<sup>1</sup> for FLC, covering (1) dual-view and multi-view displays, (2) 3D display applications and (3) displays above 9 inches, whether based on a single panel or combined with multiple modules.
- Additionally, a patent-pending SLM solution is under development that uses a proprietary nematic liquid crystal architecture to enable large-format display manufacturing with high-speed performance, providing full control over the component.



## Deep technical coverage enabling glasses-free 3D

- The core DPT patent families enable the technology to deliver its unique multi-view 3D/2D and multi-user 3D modes, glasses-free, without any resolution loss.
- Core DPT patent families include:
  - Directional pixel architecture and multi-view image delivery.
  - SLM integration and control.
  - Display backplane design and system architecture.
  - Methods for multi-user 3D rendering and content distribution.
- Software and content protection include algorithms for view generation and distribution.
- The core patents extend into the early-to-mid 2040s, ensuring a high degree of protection for a long time to come.



## Defensible position supporting scalable monetization

- The IP platform serves as the critical foundation of Realfiction's licensing-based business model – enabling recurring, asset-light revenue streams.
- It delivers a clear differentiation from lenticular-based and light-field competitors that carry significant resolution trade-offs.
- Additionally, it creates significant barriers to entry across optical architecture and display integration – protecting both licensing revenues and product-based commercialization.



**6**  
GRANTED  
PATENTS



**4**  
PATENT  
FAMILIES



**7**  
FAMILIES  
PENDING

# Realfiction's Directional Pixel Technology integration works with all major display technologies providing seamless integration for next-generation displays

## Seamless integration into all major display technologies

- DPT is a next-generation upgrade layer – not a replacement. It integrates into the display technologies manufacturers already use today, including LCD, OLED, and LED/Micro-LED, making adoption straightforward cross the entire industry for next-generation displays.
- This means that DPT is suitable as a next-generation upgrade for a broad range of display products and formats, from tablet-sized screens to large television displays and beyond.

### LCD

- LCD is a mature and cost-efficient technology.
- While LCD displays are cost efficient, they have limitations in combination with DPT: 2D multi-view is restricted to two views, 3D multi-view shows the same 3D image to all viewers, and 3D look-around supports only single-user.

### OLED

- OLED delivers perfect blacks, high contrast, wide viewing angles and fast response time.
- It is ideally suited for the most demanding use cases, such as 3D gaming for multiple persons at the same time and high-end cinema experiences.

### LED

- LED displays have the highest brightness and fastest response time of all display technologies and are therefore the ideal platform for all DPT features.
- DPT and LED displays are especially suited for segments including retail, control rooms, and digital signage.

### Micro-LED

- Micro-LED advances the LED technology by using arrays of microscopic LED pixels that deliver a higher pixel density and thereby a higher resolution.
- Micro-LED displays are suitable for high-end gaming or TVs, or for professional use-cases including control rooms and within medico.

# Directional Pixel Technology offers a clear first-mover advantage – and the IP to protect it

## Directional Pixel Technology offers a unique first-mover advantage

- DPT can be employed in both consumer and professional markets and offers a compelling first-mover advantage in next-generation glasses-free 3D experiences in a category that no other competitor can offer at this stage.
- Display manufacturers that implement the technology will be able to offer their customers a true breakthrough within visual experiences, which is particularly attractive in a world with an increasing demand for high-end and immersive solutions.

### Technology leadership

- DPT offers the only validated true multi-user glasses-free 3D solution on the market.
- Full resolution delivery and seamless mode switching.
- Wide dynamic viewing angles – no image quality trade-offs.
- Individual look-around for multiple users.

### IP & commercial platform

- Realfiction's extensive patent portfolio enables exclusive market opportunities.
- Holds a broad and defensible portfolio of patents.
- Provides exclusive rights for commercialization across multiple end markets.
- Supports a highly scalable and asset-light path to market.

### Market timing

- The window is open. With key hurdles solved and one focused challenge remaining, this is the optimal time for an acquirer to enter.
- Demand validated across consumer and professional markets.
- One remaining hurdle: fast liquid crystal scaling.
- Entering now means shaping the commercial future of DPT.

**With DPT you can own the first high-end true glasses-free 3D display solution and set the benchmark for the industry**

# 03

## R&D and Commercialization

PARTNERSHIPS

R&D STATUS AND COMMERCIALIZATION

# Realfiction collaborates with leading research and industry partners in advanced display technology, driving the refinement and advancement of DPT

- Realfiction anchors its R&D activities in Denmark and operates a branch in Taiwan, creating a close link to Asian sourcing and the regional display industry.
- To support its R&D activities, the Company has established a global network consisting of several technical collaborations with leading research institutions and industry partners including the Hong Kong University of Science and Technology, Fraunhofer Institute for Organic Electronics, Electron Beam and Plasma Technology FEP in Germany, and Interuniversity Microelectronics Centre (imec) in Belgium. These collaborations primarily consist of strategic sparring and the exchange of technological know-how.
- Moreover, Realfiction has established several important strategic and technical partnerships, including collaborations with Goworld Display, AmTRAN, PlayNitride, as well as one of the two largest display manufacturers in the Taiwan.
- For example, in partnership with PlayNitride, the two companies jointly created the world's first demonstration of a 3D Micro-LED display, marking a significant milestone in the commercialization of DPT.

## Technical collaboration partners



Interuniversity Microelectronics Centre (imec) is a leading Belgian R&D hub for nano-electronics and digital technologies. Imec works closely with the industry on advanced semiconductor and display technologies, from materials to system integration.



Fraunhofer Institute for Electron Beam and Plasma Technology FEP is part of the German Fraunhofer Society. It specializes in organic electronics, vacuum coating, and electron beam/plasma processes, including next-generation products and processes.



HKUST is a leading research university in Hong Kong with strong expertise in engineering and technology. Its researchers contribute advanced know-how in a wide range of areas, including advanced technology and materials science.

## Strategic collaboration partners



Shantou Goworld Display Co. Ltd. is a manufacturer of LCD panels and modules. The company develops and produces display components for a wide range of applications, including displays for the automotive, industrial, consumer sectors. In 2025, a licensing and collaboration agreement was agreed with Goworld.

**One of the two largest display manufacturers in Taiwan**

Realfiction also collaborates with one of the two largest display manufacturers in Taiwan, which has a strong focus on Micro-LED technology. They offer several 3D display products for medical and other professional markets. The collaboration focuses on technically evaluating and aligning DPT for future display applications.



AmTRAN Technology Co. Ltd. is a Taiwan-based display technology company specializing in TV and monitor manufacturing. In addition to being an investor in Realfiction, AmTRAN shares technical know-how and has helped the Company promote and develop DPT demonstrators, serving as an important development partner for the Company



PlayNitride Inc. is a technology company based in Taiwan, known for its expertise in Micro-LED and advanced LED display solutions. The company focuses on developing high-brightness, high-efficiency display technologies for future generation screens.

# Key challenges related to light-efficiency and bandwidth have been resolved

## – key remaining challenge is enabling fast liquid crystals in large displays

### Key challenges



#### Solved: Light-efficiency

- Realfiction's DPT is highly light-efficient, delivering strong brightness without requiring high power.
- It is more efficient than conventional LCDs while still matching their performance in demanding modes. The Company has also patented an optimization algorithm that reduces light loss.



#### Solved: Bandwidth

- Realfiction has programmed its DPT system architecture based on an FPGA simulating an ASIC design, which provides a very fast bandwidth.
- It can seamlessly be moved over to an ASIC for mass production, which provides an even faster bandwidth.



#### Ongoing : Enabling fast liquid crystals in large displays

- The remaining key challenge in DPT is enabling the use of fast liquid crystals used in SLMs for larger displays. The currently used technology, FLC, is constrained by its rigidity, which makes scaling to larger display formats difficult, as existing display fabrication lines are not optimized to handle it.
- The issue is manageable, and Realfiction is addressing it through partner collaborations while simultaneously developing proprietary technology based on another established liquid crystal platform.

# DPT proof of concept validated

## – crystal scaling will unlock immediate industry demand



### Proof of concept validated

- Realfiction has successfully showcased its Directional Pixel Technology at various exhibitions and through industry collaborations, generating strong, concrete interest.
- In October 2025, the Company unveiled the world's first 3D display capable of showing three different full-screen experiences simultaneously – without the need of glasses.
- This milestone validated the multi-viewer concept and marked a major step toward the commercialization of DPT.
- Several leading industry players have expressed strong interest, particularly for displays starting at 27 inches.

### Scaling crystal technology

- The main challenge to commercialization is scaling fast liquid crystals used in the SLM for larger displays – being addressed with technology partners for FLC.
- In parallel, the Company has developed an alternative, patent-pending SLM solution using nematic liquid crystals, adapted to achieve the needed high-speed performance.
- This simpler approach fits directly into existing mass production infrastructure and removes key scaling barriers for DPT, creating a clear path to mass production of large-format displays and significantly reducing dependency on FLC.
- Realfiction is currently working with partners to validate and integrate the upgraded SLM approach into future DPT display designs, with the goal of accelerating the path toward DPT mass production.

### Industry traction and production

- Industry demand is already in place: multiple industry players who have seen the technology have expressed strong interest in starting production as soon as DPT is available for larger displays.
- The constraint is crystal readiness, not market appetite. Once crystal scaling is fully resolved, Realfiction will be positioned to launch larger DPT-based displays, initially targeting 27 inches - moving from validated proof of concept to scalable product.
- For an acquirer, this represents a unique opportunity to capitalize on solved key technological challenges and immediate industry interest, enabling them to drive the commercial rollout and shape the future of DPT-based displays.

# 04

## Market Context

MARKET OVERVIEW

MARKET DEVELOPMENT

DEVELOPMENT BY GEOGRAPHY

3D SINGLE-USER VS. MULTI-USER

# Realfiction is the only company able to offer a technology capable of multi-user 3D experiences without quality or resolution loss

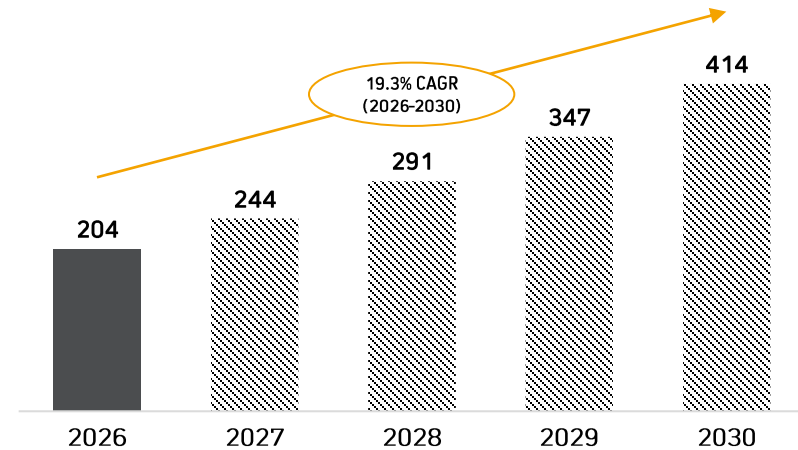
- The display technology industry is highly competitive, with major players constantly innovating to meet the growing demand for advanced visual experiences. The global 3D display market is expanding rapidly across sectors such as entertainment, gaming, automotive, and digital signage.
- Companies like LEIA, Sony (Spatial Reality Display), Looking Glass Factory, Japan Display Inc., and Sharp primarily utilize conventional lenticular or 2D multi-view technologies. Lenticular 3D introduces blurring at off-axis angles and imposes a restricted field of view - often at significant cost, effectively restricting experiences to single users. Meanwhile, 2D multi-view solutions are prone to image ghosting, color distortion, and resolution loss.
- For example, Sony's Spatial Reality Display is able to deliver high-quality 3D visuals but is limited to one person and comes at a high price point. Japan Display Inc. has developed a 2D multi-view function targeted at the automotive industry; however, this solution halves the display resolution.
- Realfiction is addressing these challenges with DPT, focusing on multi-user use cases and aiming to deliver high-quality 3D experiences without the quality trade-offs or rigid viewing constraints associated with conventional technologies.
- As a result, DPT is positioned to be the clear technological standard for next-generation 3D display applications.

Key competitors						
Feature/aspect	REALFICTION™	Leia Inc.	SPATIAL REALITY DISPLAY SONY	LOOKING GLASS FACTORY	JDI Japan Display Inc.	SHARP
Multi-user 3D support (* with resolution loss)	Yes	No	No	Yes*	No	No
High depth perception	Yes	Yes	Yes	No	No	No
High-quality 3D for single-user	Yes	Yes	Yes	No	N/A	N/A
2D multi-view capabilities (* with resolution loss)	Yes	No	No	No	Yes*	Yes*
3D/2D multi-view/privacy switching	Yes	No	No	No	No	No
Automotive application feasibility	Yes	Yes	No	No	Yes	Yes
Micro-LED compatibility	Yes	No	No	No	No	No
Ideal for smaller displays (e.g., smartphones and smartwatches)	No	Yes	Yes	Yes	N/A	N/A
Low refresh rate functionality	No	Yes	Yes	Yes	Yes	Yes

# The global 3D display market is expected to grow at a CAGR of 19.3% from 2026 to 2030, reaching a market size of USD 414 billion

- The 3D display industry is experiencing rapid growth, driven by rising demand across consumer electronics, gaming, and automotive sectors, as well as technological advancements such as glasses-free image viewing.
- The global 3D display market is projected to grow from a market size of USD 204 billion in 2026 to USD 414 billion by 2030, representing an impressive CAGR of 19.3%.<sup>1</sup>
- Key drivers underpinning this expansion include:
  - **Technological advancements:** Continuous improvements in display manufacturing are raising image quality and broadening usability.
  - **Emerging market growth:** Expanding middle classes in China, India, and Southeast Asia are accelerating demand for advanced display technologies.
  - **Declining device costs:** Falling production costs are making 3D displays increasingly accessible to a wider consumer base.
  - **Broader industry adoption:** Applications are extending well beyond consumer electronics into healthcare, education, engineering, and professional visualization.
  - **Rising entertainment and gaming demand:** Growth in immersive gaming, VR/AR, and next-generation home entertainment is fueling demand for high-quality, glasses-free 3D experiences.
- Realfiction is positioned to target a very large and growing share of the global 3D display industry, spanning automotive, gaming, consumer electronics, digital signage, medical imaging, and professional visualization. Beyond this, Realfiction is also well-positioned to capture a significant share of the emerging multi-view display segment which is not reflected in the 3D industry market size.

Global 3D display industry market size (USD billion)<sup>1</sup>



## Key market drivers



Technological advancements



Economic growth in emerging markets



Declining prices of electronics



Adoption across various industries



Increasing demand in entertainment and gaming

# Realfiction’s primary geographic focus encompasses regions with high demand for advanced display technologies, particularly North America and Asia-Pacific

## North America

- North America accounted for more than 27% of the global 3D display market in 2024, supported by robust ecosystem of technology companies advancing display innovation. Growth is being propelled by expanding use cases across gaming, entertainment, and defense.
- The U.S. market is expected to grow at a CAGR of 17.6% from 2025 to 2030.

## Europe

- Europe also represents a notable share of the global 3D display market, with Germany and France at the forefront of advanced display adoption. A mature electronics infrastructure and high consumer purchasing power create favorable conditions for technology investment across the region.
- The European market is projected to grow at a CAGR of 15% between 2024 and 2030.

## Target markets

- Realfiction focuses primarily on North America and Asia-Pacific, where demand for advanced display technologies is strongest, while continuing to prioritize Europe as an important secondary market.
- These markets are characterized by thriving consumer electronics sectors and a solid industrial base across key sectors such as gaming, automotive, and medical imaging.
- By concentrating its efforts in these regions, Realfiction is well-positioned to capture the growing demand for innovative 3D display solutions across multiple industries.

## Asia-Pacific

- Asia-Pacific is set to be one of the fastest-growing regions in the 3D display market, being the largest market in 2024, and with a projected CAGR of approx. 23% from 2024 to 2030.
- Driving this growth are advances in display technology and broad digital service adoption across the region. China and India are particularly prominent, with China’s market expected to grow at over 24% CAGR and India’s at approx. 26%, categorized by rising incomes, a growing middle class, and strong demand from the gaming sector.

# DPT taps into an under-served multi-user, glasses-free 3D segment of the immersive market, co-existing alongside head-mounted device solutions

- Today's immersive market is dominated by single-user solutions, where only one person at a time can see and sense a 3D effect.
- In practice, there are two fundamentally different usage types: single-user and multi-user. Almost all existing products serve the single-user side, either through VR headsets and smart display glasses that deliver a 3D experience to one user in high resolution, or through glasses-free single-viewer 3D displays, where one viewer can perceive a 3D effect but typically with a loss of effective resolution.
- What is largely missing today are multi-user 3D solutions, where several people can simultaneously experience high-quality 3D content from the same display without wearing any devices.

## Single-user

- Single-user immersive solutions, such as smart display glasses and headsets like Apple Vision Pro, devices from Even Realities, as well as single-viewer 3D display solutions from LEIA, are all designed to deliver high-quality 3D experiences to one user at a time.
- They combine advanced displays with head and eye tracking and are well suited for telepresence, remote collaboration, and other focused, individual use cases.
- However, these devices do not gather multiple people around a shared visual focal point in the same physical space, and therefore do not create truly shared, multi-user experiences, which in turn limits the range of situations and environments in which this technology can be effectively used.

## Multi-user

- Multi-user immersive solutions, like Realfiction's DPT, are designed to deliver high-quality, glasses-free 3D experiences to several viewers simultaneously in front of the same display. By projecting different images in parallel, DPT enables multiple people to see high-resolution 3D content from their own viewing positions without wearing any devices.
- DPT's multi-user, glasses-free 3D approach addresses a broad range of use cases, including digital signage, automotive, medico, presentations etc.
- This creates a natural shared viewing experience that brings people together around the same screen, while significantly reducing the number of individual devices required.

*Single-user and multi-user solutions can easily co-exist, as they serve different needs: head-worn, single-user devices are optimal for focused, individualized experiences, while technologies like DPT are better suited for shared, social and public settings where multiple people either need to see and interact with the same 3D content at once, or even view different, personalized content on the same physical screen simultaneously.*

# 05

## Organization

ORGANIZATIONAL OVERVIEW

SENIOR MANAGEMENT

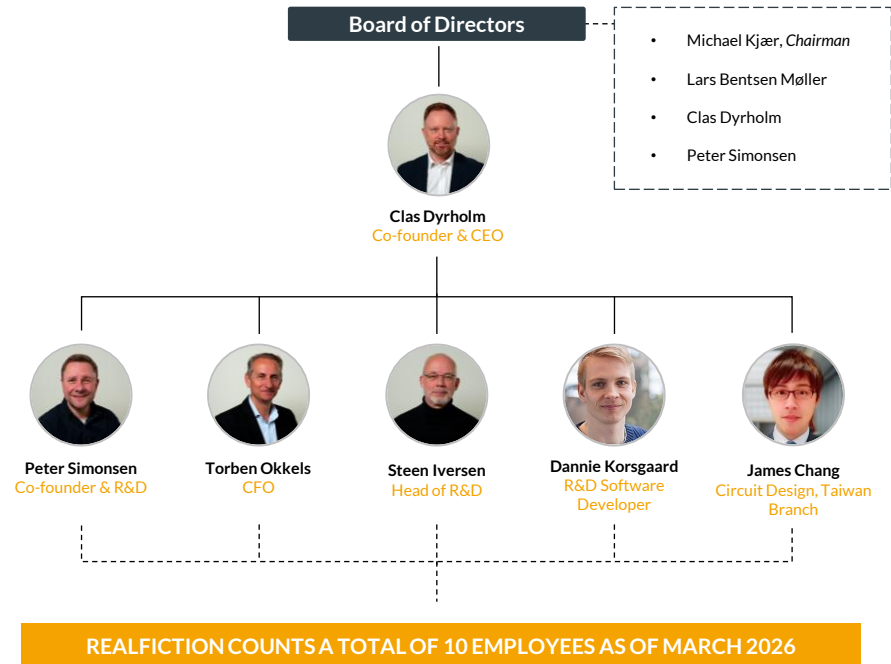
KEY EMPLOYEES

BOARD OF DIRECTORS

# Realfiction employs a highly experienced, long-tenured team with strong industry expertise and backgrounds from leading companies such as Innolux, IMAX and B&O

- Realfiction operates a flat and agile organization of 10 highly-experienced specialists, including 8 full-time and 2 part-time/hourly-based employees.
- Realfiction’s team brings many years of experience from relevant industries, including film and TV, mixed reality display development, interactive display solutions, and 2D and 3D display technologies. They draw on decades of expertise gained at leading companies such as IMAX, Innolux, and Bang & Olufsen.
- The team has a high tenure, with an average of more than 9 years – with the shortest current tenure being 3.5 years – reflecting strong employee retention and a cohesive team with long-standing working relationships.
- The average employee age is 54, which supports a profile of a highly experienced team with a broad and well-developed professional skill set.
- Realfiction is gradually reorganizing its structure as the Company shifts its strategic focus fully to the DPT business. As part of this transition, employees previously working on legacy products are being reassigned to DPT roles, leveraging their relevant expertise to support the DPT strategy.

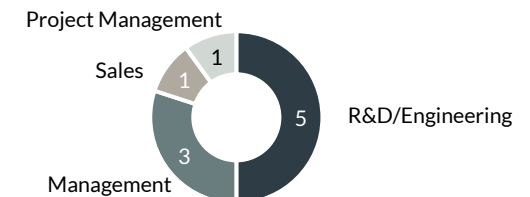
## Organizational overview



## Realfiction’s employees bring extensive experience from previous jobs



## Allocation of roles



# Realfiction's senior management team consists of highly skilled individuals with backgrounds in film, television, digital media, audit, and management consulting



**Clas Dyrholm**  
Co-founder & CEO

### About

- Clas Dyrholm is the co-founder of Realfiction and the acting CEO.
- As CEO, Clas drives Realfiction's vision of delivering cutting-edge, glasses-free 3D experiences to global markets.

### Education and background

- With a background in film, television, and digital media, Clas has extensive experience in visual storytelling and content creation.
- Clas holds an upper secondary education from Marselisborg Gymnasium.

### Shareholdings in Realfiction Holding AB

- Clas Dyrholm owns 50% of Clape Holding ApS, which in turn owns 3,005,000 shares in Realfiction Holding AB, corresponding to 12.53%.



**Peter Simonsen**  
Co-founder and R&D

### About

- Peter Simonsen is the other co-founder of Realfiction and leads the R&D initiatives.
- Peter's expertise in imaging, production, and content creation plays a crucial role in advancing the Company's Directional Pixel Technology.

### Education and background

- Peter has a background in film, television, radio, and electronic media production, and more than 20 years of R&D experience within visual media and mixed reality.

### Shareholdings in Realfiction Holding AB

- Peter Simonsen owns 50% of Clape Holding ApS, which in turn owns 3,005,000 shares in Realfiction Holding AB, corresponding to 12.53%.



**Torben Okkels**  
CFO

Featured experience: **Deloitte.**

### About

- Torben Okkels is the CFO of Realfiction.
- As CFO, Torben is responsible for all finance-related tasks and for ensuring a robust, transparent financial foundation for Realfiction's growth.

### Education and background

- Torben has more than 25 years of experience as CFO and from audit, accounting and management consulting with large and medium-sized public companies globally.
- Torben is a State Authorized Public Accountant and holds a MSc. in Audit & Accounting.

### Shareholdings in Realfiction Holding AB

- Torben owns 8,897 shares in Realfiction Holding AB, corresponding to ~0.04%. Torben also holds 171,331 warrants in the Company.

# Realfiction has a team of key employees being responsible for critical areas such as circuit design, software development, and display technology



**Steen Iversen**  
Head of R&D

Featured experience: **IMAX**

### About

- Steen Iversen is the Director of Advanced Display Technology and has been with Realfiction since 2019.
- He is the main inventor behind DPT and serves as the leading technical expert on the technology.

### Education and background

- Steen previously headed the IMAX Theatre’s development team as General Manager & Director of Technology. He was directly responsible for bringing the latest generation of 3D cinema laser projects successfully to market.

### Shareholdings in Realfiction Holding AB

- Steen holds no shares or warrants in Realfiction Holding AB. However, Steen has a royalty-agreement with the Company relating to sales of DPT<sup>1</sup>.



**Dannie Korsgaard**  
R&D Software Developer

### About

- Dannie Korsgaard is an R&D Software Developer at Realfiction and a key software architect with deep expertise in DPT algorithms and electronics.
- He has played a central role in the recent development since joining the company in 2022.

### Education and background

- Dannie has a background in game development, mobile applications, data science and R&D software engineering, with over a decade of experience in interactive media, machine learning and mixed reality technologies.
- He holds a PhD in Medialogy as well as an MSc and BSc in Medialogy from Aalborg University

### Shareholdings in Realfiction Holding AB

- Dannie holds no shares or warrants in Realfiction Holding AB.



**James Chang**  
Circuit Design, Taiwan Branch

Featured experience: **INNOLUX**

### About

- James Chang is the Director of Circuit Design at Realfiction Lab Taiwan and has been with Realfiction since 2021.
- He brings extensive experience from the display industry.

### Education and background

- James has a background in display engineering and R&D, with nearly a decade of experience from Innolux before joining Realfiction Lab Taiwan as an R&D Engineer.
- He holds a Master’s degree in Electro-optical Engineering from National Sun Yat-sen University.

### Shareholdings in Realfiction Holding AB

- James holds no shares or warrants in Realfiction Holding AB.

# The board of directors consists of the two co-founders, Clas and Peter, as well as two independent members, Lars and Michael, with Michael serving as the Chairman



**Michael Kjær**  
Chairman of the Board

### About

- Michael Kjær has served as Chairman of the Board at Realfiction since 2017.
- Michael also serves as a lay judge at the Maritime and Commercial Court in Copenhagen, Denmark.

### Education and background

- Michael has extensive experience from board and management positions, strategy development, retail, sales and marketing, as well as from fund and investment companies.
- He holds a certificate from IMD's board education program in Lausanne, Switzerland.

### Shareholdings in Realfiction Holding AB

Michael owns 135,286 shares in Realfiction Holding AB, corresponding to ~0.56%. Moreover, Michael holds 16,500 warrants in the Company.



**Lars Bentsen Møller**  
Member of the Board

### About

- Lars Bentsen Møller has served as a member of the board since 2021.
- Lars has served as IR Director and is currently Head of Finance/BI/Compliance at Tryg A/S and has also held several board positions.

### Education and background

- Lars has held several board and chairman positions in different investment companies.
- Lars holds a Graduate Diploma in Business Administration (Financial and Management Accounting) from CBS.

### Shareholdings in Realfiction Holding AB

Lars owns 29,192 shares in the Company, corresponding to ~0.1%. Moreover, Lars holds 16,500 warrants in the Company.

### Other board members



**Clas Dyrholm**  
Co-founder & CEO



**Peter Simonsen**  
Co-founder & R&D

