

# Shaping the Future of Surgical Navigation

## A look at 2022 and beyond

Dear Investors,

I hope this newsletter finds you well. As we kick off 2023, we wanted to take a moment to reflect on the progress made by The Shape Sensing Company over the past year. Our team has been diligently working on various initiatives, including fundraising, research and development, business growth, and sales. Moreover, we've achieved success in broadening our customer base, and our marketing efforts have been generating positive responses as we started promoting our technology more aggressively.

### Fundraising update

We are pleased to report that our fundraising efforts have been successful thus far, having raised \$3.1 million from 10+ investors. While we had set a target of \$3.5 million for our series A round and were looking at closing the round at the end of January 2023, a strategic investor that promised \$400 thousand dropped out at the last minute citing a new year budget cycle. However, we have received some additional interest from existing investors and have decided to extend the round until March 15, 2023. If you or anyone in your network is interested in investing in The Shape Sensing Company, please do not hesitate to reach out to us.



### ***Our Vision***

***“To revolutionize  
surgical navigation  
and interventional  
medicine with sim-  
pler and safer medi-  
cal devices”***

## Research & Development

Our R&D team has been hard at work, focusing on improving the technology at several different levels. As per our technical roadmap we have been able to reduce the sensor diameter from 500um down to 300um, allowing for greater integration into small catheter channels and increased flexibility. Additionally, we have achieved a reduction in bending radius from 2.5cm to 1cm, making it possible to navigate more tortuous paths. We have also mitigated various unwanted optical and mechanical effects, which have led to improved accuracy of the technology. Our efforts have resulted in two provisional patents and a clearer path towards using the technology in new applications. These innovations bridge the gap between technology and application and provide customers with easy to adopt options on how to utilize our technology.

## 2023 R&D focus

- **Accuracy in tortuous paths**
- **Automate sensor calibration and manufacturing**
- **Simplify technology embedment and adoption**

June 2022 snapshot

PARAMETERS	2020	2022	2024 TARGET
Refresh rate	15Hz	≥ 60Hz	≥ 60Hz
Latency	500ms	30ms	30ms
Accuracy	≤ 4% of arc length	≤ 0.5% of arc length	≤ 0.5% of arc length
Bend radius	1.5"	≤ 1"	≤ 0.5"
Sensor diameter	600µm	≤ 500µm	≤ 300µm
Sensor calibration	Manual	Manual	Automated
Sensor manufacturing	Manual	Manual	Automated



February 2023 snapshot

PARAMETERS	2020	Today	2024 TARGET
Refresh rate	15Hz	≥ 60Hz	≥ 60Hz
Latency	500ms	30ms	30ms
Accuracy	≤ 4% of arc length	≤ 0.5% of arc length	≤ 0.5% of arc length
Bend radius	1.5"	≤ 1"	≤ 0.5"
Sensor diameter	600µm	≤ 500µm	≤ 300µm
Sensor calibration	Manual	Semi-automated	Automated
Sensor manufacturing	Manual	Semi-automated	Automated

## Business Development / Sales

Business Development and Sales activities have continued in 2022. Our efforts to expand beyond the US have led us to appoint a representative in Ireland, [Avem](#), to serve the European Medical Technology market and an Asian distributor, [Ogmentum](#). These have already resulted in generating new leads and sales. Independently, we have started working with new customers in the orthopedics and surgical navigation fields, and are engaging with these customers through paid projects. We are also proud to see that our existing customers, who started working with us in the electrophysiology, vascular, bronchoscopy, and gastrointestinal fields, continue to use and integrate our technology into their applications. While our sales have decreased from \$741k to \$500k year-to-year, this decline does not reflect the strong interest we are currently experiencing. Considering our current pipeline of opportunities, we anticipate our revenues to be close to \$1 million in 2023.

## Marketing

On the marketing front, we have been actively promoting our technology by publishing educational and informative [blog posts](#) on our website which showcase shape sensing's numerous fields of application. Our presence at the [MD&M tradeshow](#) last week also allowed us to interact with many people and showcase our advancements. The response was overwhelmingly positive and our technology was proclaimed several times the "coolest on the exhibition floor". Please click on the picture below to access a video recorded at the trade show with our CTO, Alex Tongue, demonstrating the technology.



## Hiring

Our team has recently hired a technician to help offload some of the work from our R&D engineers. This will help to streamline our development process and allow our engineers to focus on core research and development tasks. Additionally, we are actively looking for a Mechanical Research Engineer to join and execute our roadmap projects. With a clear path towards technical viability, we believe that this new hire will play an instrumental role in driving our continued success. Finally, we are also seeking a Business Development professional with a strong track record in the medical device industry. Several very promising candidates have been interviewed so far. Once hired, this individual will play a critical role in helping us drive business growth, expand our customer base, and get us involved in projects for integrating shape sensing technology into medical devices.