



Sparkbyte

A Junior Achievement Company

ANNUAL REPORT

*Making STEM accessible to innovators of
the next generation*

2025-2026

JUNIOR ACHIEVEMENT OF NORTH

CENTRAL OHIO

JACKSON HIGH SCHOOL,

MASSILLON, OHIO

Executive Summary

Sparkbyte's Mission

At Sparkbyte, we strive to make STEM education fun, accessible, and affordable through hands-on, memorable learning experiences. This hands-on journey does more than teach technical literacy; it introduces the foundations of STEM for our future engineers and innovators of tomorrow.

The Sparkbyte STEM Mini Arcade

Sparkbyte's journey began with an ambitious home safety device, a smart carbon monoxide detector that never made it to market. Instead of stopping there, we used the engineering and problem-solving skills we gained to pivot toward a new mission: inspiring students through hands-on STEM education.

Today, our Mini Arcade STEM Kit lets students build a working mini arcade using real components and simple coding, building skills in engineering, programming, and problem-solving. While many STEM kits cost around \$125, Sparkbyte offers comparable, real-world learning at nearly 70% lower cost, making STEM more accessible for families and underfunded classrooms.



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Sparkbyte Company Performance

Sparkbyte has achieved strong early success. We've showcased our product at multiple trade shows and STEM events, including ACCESS (Akron Council of Engineering and Scientific Societies) STEM Day, engaging young students and expanding their interest in coding, engineering, and circuitry. To date, we've generated over \$4,100 in revenue, secured capital, and fully designed and ordered our products. Through these events and competitions, we've also strengthened our communication and presentation skills while gaining financial traction and real-world validation.

UNITS SOLD

109

COST OF GOODS SOLD

\$13.11

PROFIT MARGIN

67%

TOTAL REVENUE

\$4.1k+

The Team



Zach Campbell
CEO



Kai Nukuto
COO



Noah Minard
CFO



Radha Kontamwar
CMO



Cole Hardesty
Director of Sales

Junior Achievement of North Central Ohio



Robert Garner
Classroom Mentor



Shawn Donaldson
Teacher



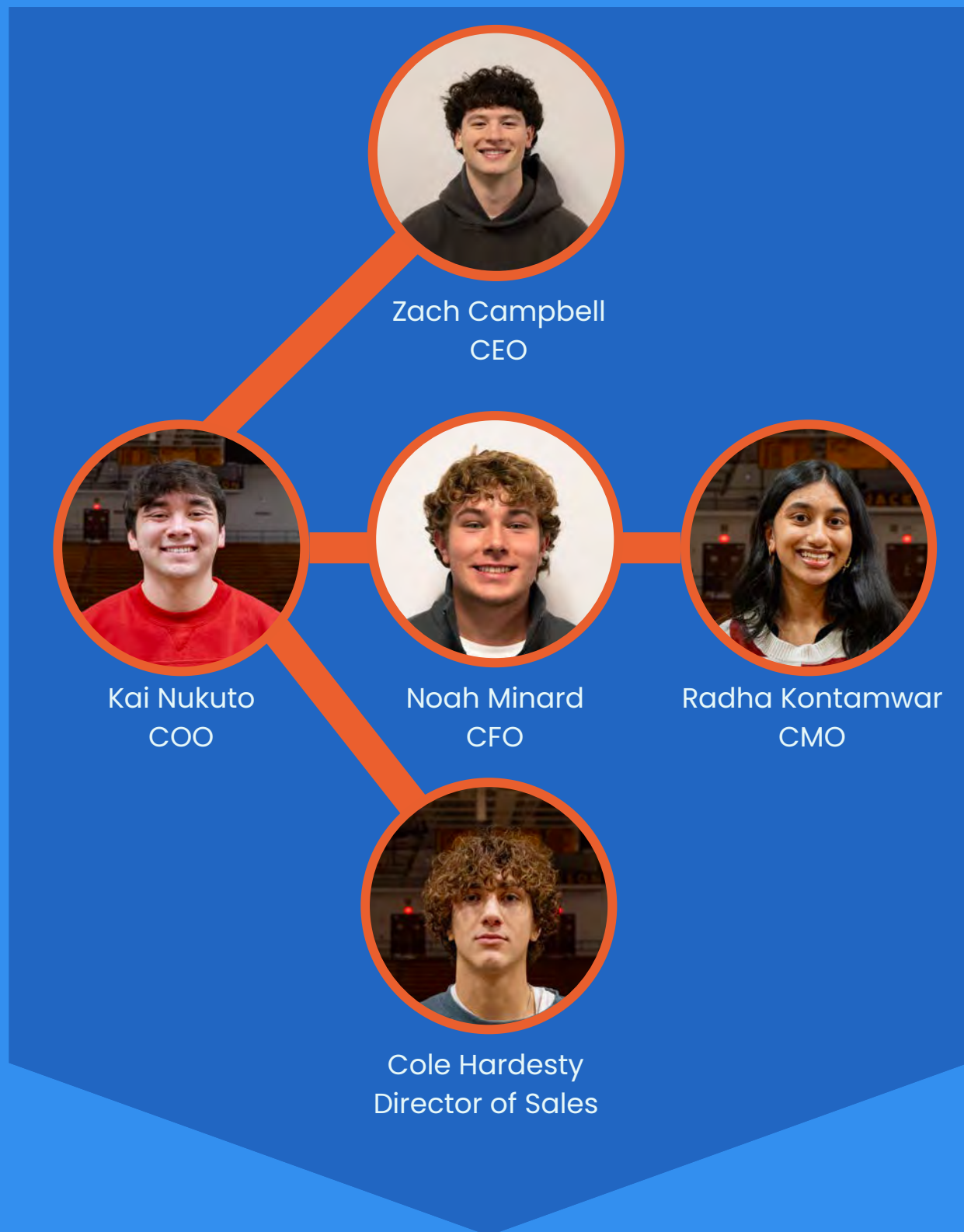
Katie Tolin
Classroom Mentor

Leadership And Organization

Team Motivation

The Sparkbyte team is passionate about bringing STEM to everyone. We attend events to give students hands-on opportunities to explore STEM through circuits and engineering activities, making these topics more interactive and engaging. Many of us didn't have much access to STEM when we were younger, so we understand how valuable it is to be introduced to these subjects early on. Because of that, we're committed to helping students gain more exposure, build confidence, and discover an interest in STEM in a fun and accessible way.

Team Structure



Team Optimization

For Sparkbyte, team optimization means working together to complete tasks, delegate duties, and run a successful company. Our clear collaboration and division of work allow us to produce and sell efficiently. CEO Zach sets the overall vision and long-term strategy, keeping Sparkbyte focused on expanding STEM access. COO Kai executes these strategies and manages logistics, turning Zach's vision into smooth daily operations. CFO Noah oversees budgeting, pricing, and finances to ensure every decision fits our budget. CMO Radha designs marketing campaigns and messaging that reach teachers, schools, and STEM programs. Director of Sales Cole builds relationships with schools and districts, turning marketing interest into customers and driving revenue growth.

Delegation of Duties



Kai Nukuto
COO

Oversees daily operations and ensures business processes run efficiently to execute the CEO's vision and strategic goals.



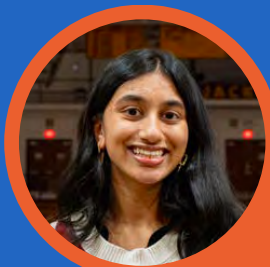
Zach Campbell
CEO

Oversees the company's vision, strategy, and direction, ensuring sustainable growth and long-term success.



Noah Minard
CFO

Manages the company's financial health by overseeing budgeting, forecasting, financial planning, and risk management to ensure profitability and sustainability.



Radha Kontamwar
CMO

Develops and executes marketing strategies to build brand awareness, increase customer engagement, and drive revenue growth.



Cole Hardesty
Director of Sales

Leads sales by developing strategies, setting targets, and building strong customer relationships to drive revenue growth.



Innovation Process – Discovery



The Problem

We didn't start in STEM education, we started with a failed CO detector that was too complex and costly to build. That failure revealed a bigger problem: if real technology is this hard to access, how are younger students supposed to learn it? Most STEM kits are either too expensive or too basic, limiting true hands-on experience. So we changed direction. The Mini Arcade Kit turns that failure into a solution, an affordable, engaging way for students to experience real engineering and coding.

Market Research

Prior to launching our product, we organized focus groups and surveys to refine our product, and find out our target market. This step was crucial to the success of our company for it allowed us to adjust pricing, and see what values participants valued in an educational product like ours and how we could fit in these core values.

Product Design and Testing

Our design process was driven by continuous refinement and learning from failure. After our initial CO detector proved too complex and costly, we shifted to developing the Mini Arcade Kit. Early prototypes revealed challenges, confusing wiring, unreliable components, and unclear instructions. Through repeated testing with real users, we simplified the design while preserving core engineering concepts. Each version was improved based on feedback, resulting in a final product that balances affordability, functionality, and ease of use.



Innovation Process

Market Analysis

Our Competition

Several companies offer STEM kits and educational electronics that aim to introduce students to engineering and programming concepts. Brands such as littleBits, Snap Circuits, and KiwiCo provide hands-on learning experiences through buildable projects and subscription kits. While these products promote STEM engagement, many are priced upwards of \$125, designed for narrow age ranges, or lack the interactive arcade-style experience that differentiates our Mini Arcade Kit from others. Our product competes by offering a more affordable, beginner-friendly solution that combines education with an engaging, game-based build experience.



Unfair Advantage



Our true edge is that we design, build, and improve the Mini Arcade Kit entirely ourselves. This means we control every part of the process, keeping costs low and quality high. Because our team understands both the engineering and educational sides, we turn real tech concepts into simple, hands-on experiences that are fun and accessible for beginners. At the same time, our production is built to scale, components can be easily outsourced for 3D printing or injection molding, and assembly is straightforward, allowing us to quickly ramp up by packaging and shipping at volume. This lets our customers purchase a one-of-a-kind product: a STEM kit that is both engaging through high-quality circuitry, coding, and engineering education, while also being affordable at \$39.99 and accessible compared to high-end kits that offer no true STEM skills to be learned.

Unique Value Proposition

Our Mini Arcade Kit bridges the gap between theory and practice by transforming abstract STEM concepts into a tangible, build-it-yourself arcade game. This hands-on journey makes learning accessible and exciting, empowering students to move from passive understanding to active creation. They don't just learn about technology, they build it; developing real skills, lasting confidence, and a sense of creative ownership as they bring their own custom game to life, ultimately seeing themselves as capable inventors. Unlike most toys that are complete once built, this allows students to keep coding, creating new games and experiences while continuously expanding their knowledge.

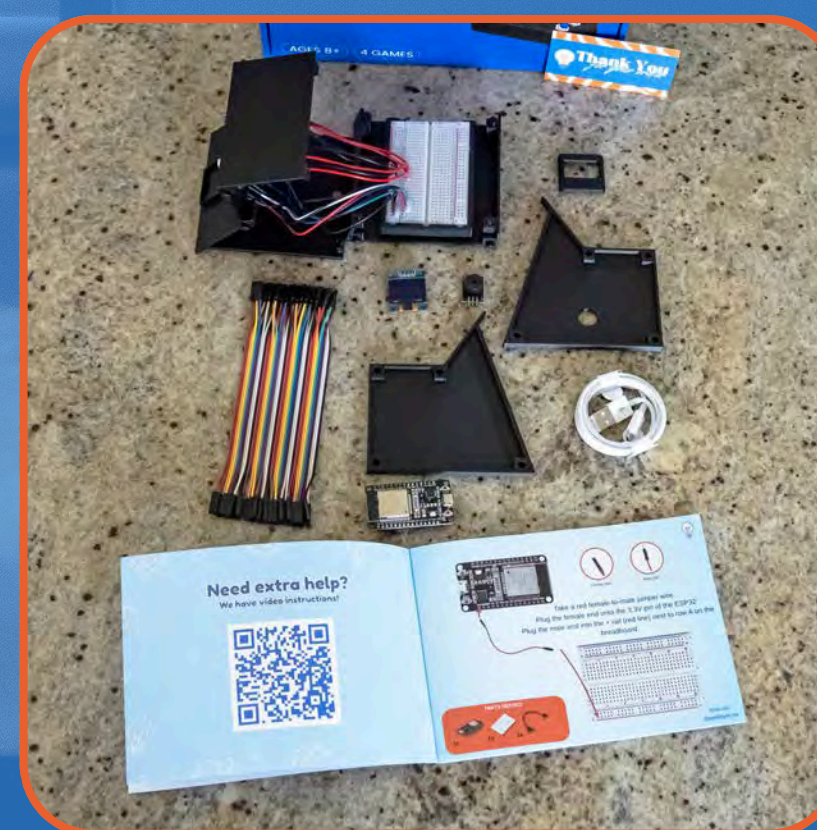


Innovation Process – Product Overview



Product Description

The Sparkbyte 4-in-1 STEM Mini Arcade Kit educates learners about the fundamentals of coding and engineering through hands-on assembly and 4 games that they program themselves. Using a microcontroller, buttons, LEDs, a buzzer, and an OLED display, students build a functional arcade system and upload C++ code through the Arduino platform to run four fully playable games. The integrated hardware-and-software design promotes problem-solving, technical literacy, and real-world engineering skills in an engaging, easy-to-use format, all sold at a price point of \$39.99.



4 Interactive Games

Dino Runner

Tower Stack

Memory Game

Reaction Game



Customer Elements

Customer Service

At Sparkbyte, we are committed to giving customers the experience we know they deserve. We include thank you cards with feedback surveys, along with contact information on both the card and packaging so customers can easily reach out with questions. Each kit also comes with a clear, easy-to-follow instruction manual, supported by QR codes that link to step-by-step video guides for additional help. This approach allows us to better support our customers while continuously improving their experience.

Segments

Sparkbyte is designed for students and young learners, aged 8 and up, who want a fun and engaging way to explore STEM. Our target audience also includes educators, schools, and STEM programs looking to bring hands-on, interactive learning into the classroom. Whether at home, in a STEM club, or during an enrichment camp, Sparkbyte provides students with an affordable, practical, and exciting way to develop their science, technology, engineering, and math skills.

Customer Path



Estimated Viewers

>165,000



Channels

We prioritized direct customer outreach through a multi-channel strategy. Over four months, we attended 15+ in-person events such as the ACCESS STEM Day and the Central Ohio STEM Expo to deliver hands-on demos and meet customer needs. At first, we didn't see much success, but this allowed us to pinpoint our target market and refine our sales strategies. We expanded our reach through social media, Meta ads, and news features, while placing a strong emphasis on educational institutions, actively engaging schools and STEM programs through targeted outreach to hundreds of educators to drive student adoption. This approach strengthened relationships and maximized product visibility.

Examples of Customer Engagement & Promotion



Zach shows product to middle school students

Channel 3 interview at local STEM event



Kids play with Sparkbyte Mini Arcade at ACCESS STEM Day



Sparkbyte on Fox 8!

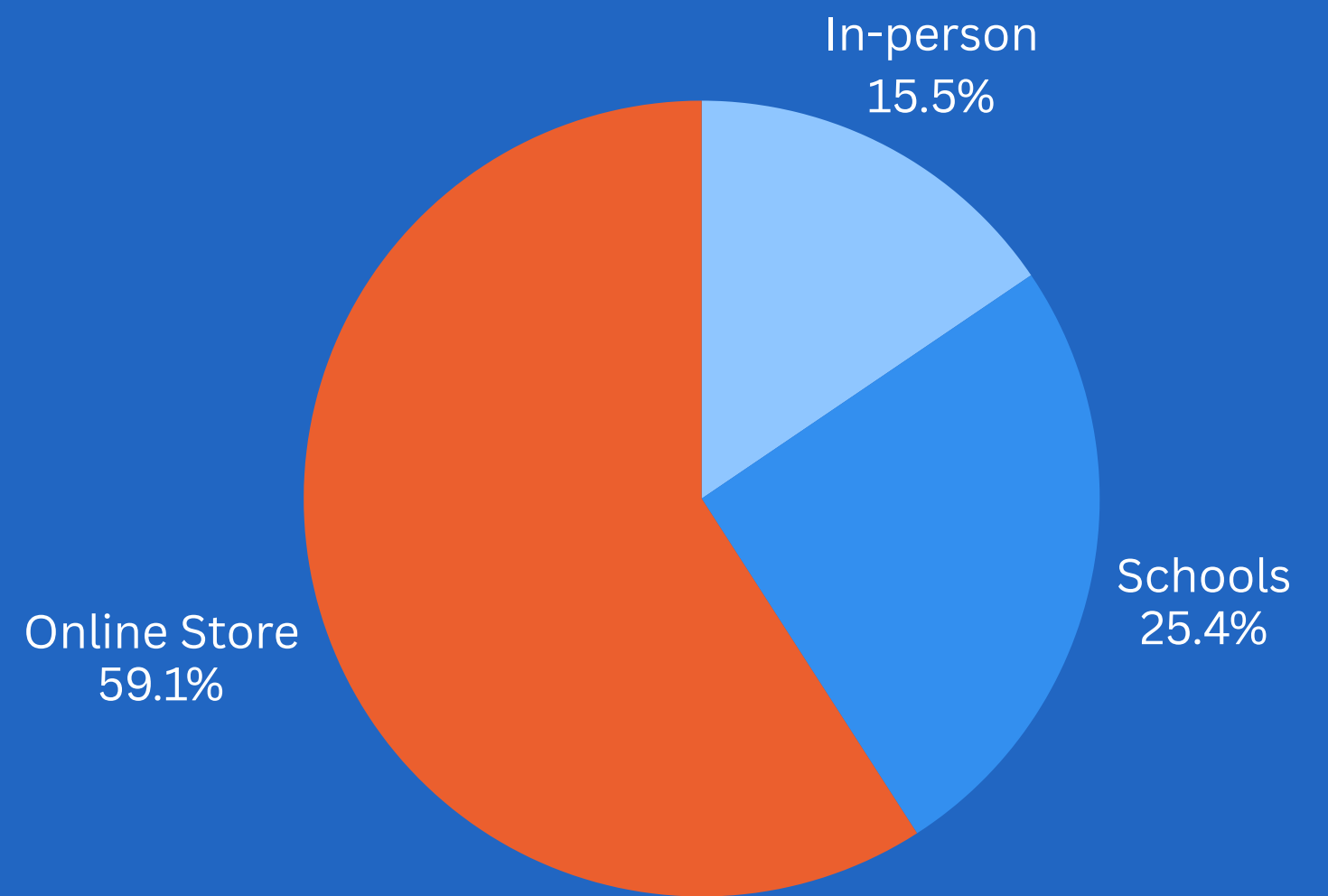


Business Performance

Revenue Streams

Cost Structure

Our cost structure includes both fixed and variable expenses that allow us to keep our product affordable and scalable. Fixed costs include initial design, prototyping, and packaging development. Variable costs consist of electronic components, microcontrollers, circuit boards, packaging materials, and assembly supplies for each unit produced. We selected suppliers based on reliability and affordability, and finalized our product design through multiple prototypes to simplify assembly and reduce unnecessary parts while maintaining quality.



Revenue Breakdown

Our company generates revenue through multiple sales channels. With our price point of \$39.99, we sell our product directly to customers through in-person sales at events and markets, as well as through orders placed on our website. In addition, social media referrals help drive traffic and generate additional sales by directing potential customers to our online store. These combined channels allow us to reach a wider audience and grow our revenue.



Key Metrics

Our key metrics focus on both financial performance and overall impact. We track total units sold, revenue generated, and profit margins to measure financial success. In addition, we monitor customer engagement through website visits, social media interactions, and event sales performance. We also evaluate feedback from customers and students using the product to understand its educational value and identify opportunities for improvement. Together, these metrics help us measure growth, market interest, and the effectiveness of our product.

7.4%

REPEAT CUSTOMER RATE

2.28%

WEBSITE CONVERSION RATE

\$39.99

RETAIL PRICE

\$4.1k

SALES REVENUE

Financial Performance

INCOME STATEMENT	
Revenue	
Sales Revenue	\$ 4,119.53
Cost of Goods Sold	\$ (1,428.99)
Gross Margin	\$ 2,690.54
Other Income	
Prize Winnings	\$ 2,250.00
Fundraising	\$ 1,189.40
Donations	\$ 1,419.33
Expenses	
Advertising and Marketing Supplies	\$ (514.51)
Materials and Supplies	\$ (2,706.10)
Trade Show Expenses	\$ (530.33)
Shipping Expenses	\$ (99.32)
Net Income	\$ 3,699.01

BALANCE SHEET	
Assets	
Cash	\$ 3,408.76
Inventory	\$ 537.51
Total Assets	\$ 3,946.27
LIABILITIES	
Sales Tax Payable	\$ 197.26
Capital Stock	\$ 50.00
Net Income	\$ 3,699.01
Total Liabilities & Equity	\$3,946.27

Book Value of Stock (Upon Liquidation)	
Net Profit	\$ 3,699.01
Capital Stock	\$ 50.00
Total Owner's Equity	\$ 3,749.01
Shares of Stock	5
Book Value of Stock	\$ 749.80
Percent Return per Share	7,398.01%

OVERVIEW

As of March 23, we have successfully validated our first product in the market, moving 109 units to date and generating \$4,119.53 in revenue. By maintaining a 67% margin on our current offering, we've proven the Sparkbyte model is both profitable and scalable. Our current trajectory positions us perfectly to fuel our next stage of growth and product development.

INDEPENDENT ACCOUNTANT'S REPORT

I have looked over the accompanying financial statements of Sparkbyte (a Junior Achievement Company) which comprise the balance sheet as of April 8, 2026, and the related statements of income and liquidation for the period then ended.

Owners' Responsibility for the Financial Statements

The owners are responsible for the preparation and fair presentation of these financial statements.

Accountant's Responsibility

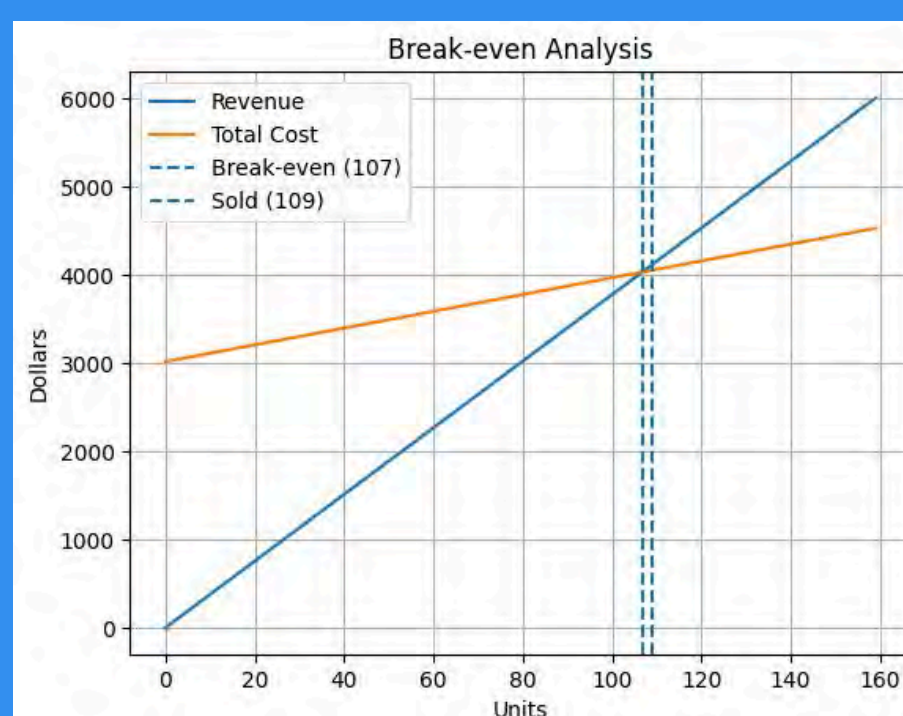
My responsibility was to check over these financial statements for fair presentation. Based upon the results of my work, I believe that the financial statements referred to above are fairly and reasonably presented.

TOPE ACCOUNTING & BUSINESS SERVICES, LLC
STEPHEN A. TOPE, CPA
 Certified Public Accountant

Stephen A. Tope, CPA
 STEPHEN A TOPE, CPA
 CANTON, OHIO

BREAK EVEN ANALYSIS

The break-even point for Sparkbyte was reached at 107 units sold. As of the end of the reporting period, total sales have reached 109 units. We have purchased a total of 150 units for inventory. By surpassing the break-even point, Sparkbyte has begun generating profit, with continued sales contributing to increased profitability. Notably, nearly 60% of total sales have been generated through online channels, largely driven by earned media opportunities.



FUN FACT:

We are still growing! Our most successful month was March, bringing in over \$2,100 in revenue!

Learning Experiences – Future Application



"Through my experience with Junior Achievement, I have developed strong leadership skills and learned to confidently navigate unfamiliar and challenging situations."



"Junior Achievement has shown me how important it is to persevere through adversity."



"Junior Achievement has shown me how to make the best out of a setback."



"Junior Achievement has taught me how to deal with failure and be comfortable with confrontation."



"Junior Achievement has taught me critical thinking skills dealing with the business world."

Successes

Aside from our financial success, we are most proud of the impact we were able to make in STEM fields in the communities around us. We started this company because we wanted to share our love for building and creating, and we did just that. We were able to expand access to hands-on learning by going to multiple STEM events in underfunded areas and showcasing our product as well as teaching simple circuits for kids who don't usually get these kinds of opportunities. Passing our knowledge to kids who don't usually get to learn about these kinds of things is the biggest success we could ask for.

Challenges

Our company faced several challenges while developing and launching our product. Early on, we originally planned to sell smart carbon monoxide detectors, but the product proved too risky, which forced us to pivot and develop a new idea. We also worked through multiple prototypes to refine our design while keeping production costs affordable. These roadblocks required us to work through challenging problems, ultimately helping us improve both our product and our process.

Global Possibilities

Our company recognizes that the need for accessible and engaging STEM education extends far beyond our local community. By offering an affordable, easy-to-use product, we have the potential to reach students and educators in a variety of markets, including schools, after-school programs, and educational organizations both nationally and internationally. Our online presence through our website and social media platforms allows us to connect with customers outside of our immediate area, making it possible to expand into new markets without the limitations of physical location.

Collaboration has also played an important role in our innovation and growth. As a team, we worked together to design, prototype, and refine our product entirely in-house, combining different skills and perspectives to improve both the product and the user experience. We also gathered feedback from potential customers and educators, which helped us make design improvements and ensure that the product is both educational and engaging for younger learners.

Looking ahead, there are many opportunities for global expansion through new products, improved curriculum, and so much more. Educational technology and hands-on STEM learning are becoming priorities worldwide, and our affordable approach makes our products accessible to a broader range of students and schools. By continuing to leverage online sales, social media outreach, and potential partnerships with educators or educational programs, we believe our company could reach classrooms and learners in many different regions.

Overall, our focus on affordability, accessibility, and collaboration positions our company to expand into new markets and contribute to increasing access to STEM education on a broader scale.





Sparkbyte

Spark The Mind



Scan Here



THANK YOU

