

BRAIN WAVE

2021-2022

Company Report

Junior Achievement of North Central Ohio

North Canton, Ohio - Hoover High School

Teacher: Mr. Mike Grady

JA Volunteer: Mrs. Diane Pilati

EXECUTIVE SUMMARY



Brain Wave's mission is to help keep the mind sharp by improving logical thinking skills, memory, and creativity through fun cognitive exercises. Brain Wave created an interactive 90-page cognitive activity book filled with various activities that each challenge a specific area of the brain. Brain Wave's vision is to develop products that slow the rates of cognitive decline and keep consumers' brains operating at an optimal level.

\$13,808

Total Revenue

769.70%

ROI

Individual Books Sold: **1,201**

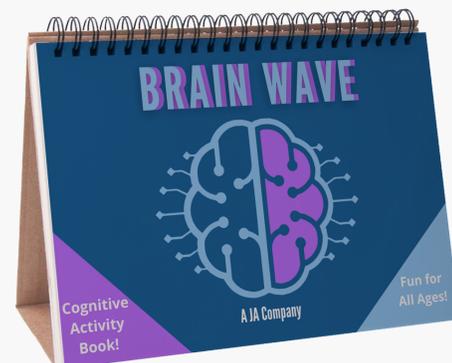
Break-Even Point: **129 Units**

Total Profit: **\$4,348.50**

Capital Stock: **\$500.00**

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FINANCIAL PERFORMANCE

Overview

The Brain Wave Cognitive Activity Book follows a cost-plus pricing strategy. The production cost per book **averages** at \$4.33 (cost varies based on purchase orders). The regular version is sold for \$10.00, leaving a gross profit margin of 56%. The XL version is sold for \$15.00, leaving a gross profit margin of 71%. Brain Wave sold 1,201 total units, resulting in \$13,808.73 in revenue. Brain Wave's total break-even point is 129 units.

Capital

Each member of the Brain Wave team bought one share of stock for \$50.00, generating \$500.00 for start-up capital. Brain Wave also received a \$600.00 loan from Junior Achievement with no interest to contribute to start-up cash.

Return on Investment

With the founder's initial investment of \$500.00 and generating a profit of \$4,348.50, Brain Wave's return on investment is 769.70%.

Product Price Breakdown

	Regular	XL
Retail Price	\$10.00	\$15.00
Sales Tax	\$0.65	\$0.96
Average Production Cost	\$4.33	\$4.33
Commission	\$1.00	\$1.50
Net Profit	\$3.20	\$6.89

Balance Sheet

Assets	
Cash	\$3,569.15
Inventory	\$1,279.35
Total Assets:	\$4,848.50
Liabilities and Capital	
Capital Stock	\$500.00
Net Profit	\$4,348.50
Total Liabilities and Capital:	\$4,848.50

Income Statement

(Profit or Loss)

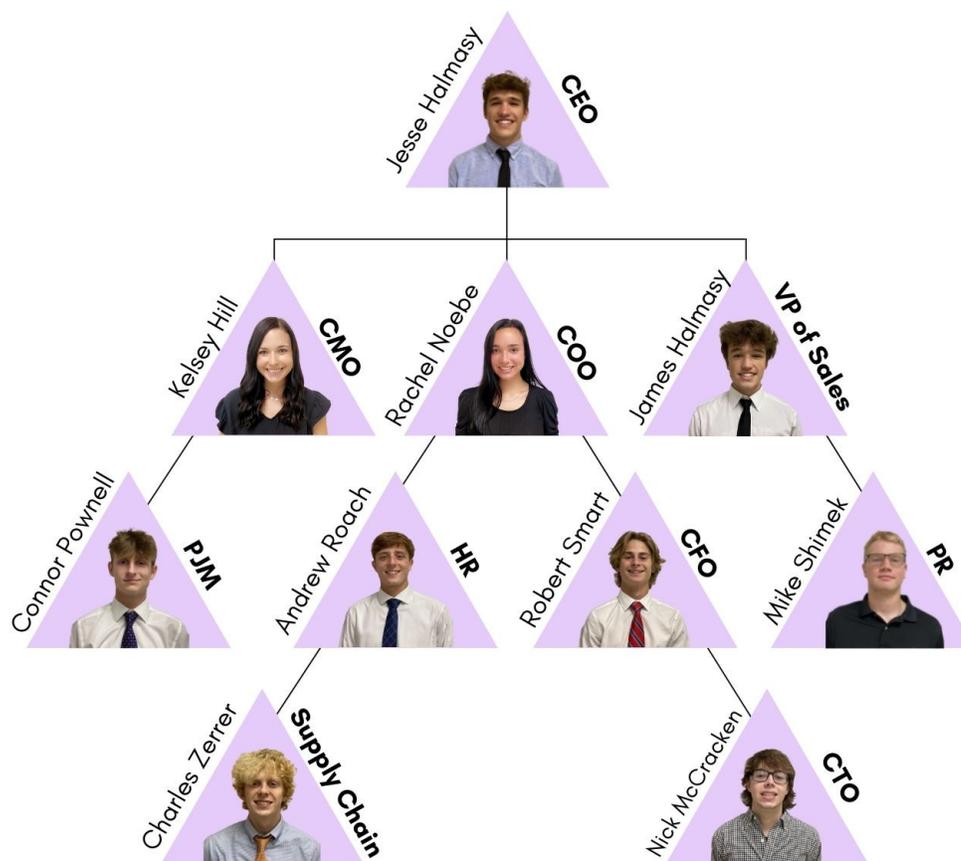
Total Revenue:	\$13,808.73
Sales	\$12,643.73
Other Revenue	\$1,165.00
Expenses	
Sales Tax	\$610.48
Cost of Goods Sold	\$4,694.68
Wages & Commissions	\$1,446.50
Charitable Donations	\$1,095.45
Miscellaneous Expenses	\$1,613.12
Total Expenses:	\$9,560.23
Net Profit:	\$4,348.50

Book Value of Stock

(Upon Liquidation)

Net Profit	\$4,348.50
Capital Stock	\$500.00
Total Owner's Equity:	\$4,848.50
Shares of Stock Sold:	10
Book Value Per Share:	\$484.85
Percent Return Per Share:	769.70%

LEADERSHIP & ORGANIZATION



Structure and Organization

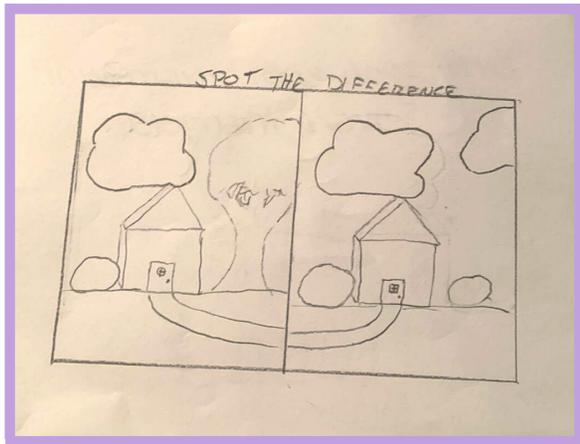
Brain Wave's organizational structure allows the team to delegate tasks effectively and optimize productivity. Department leaders report to the CEO and work with members to maximize each individual's overall strength.

Brain Wave holds weekly meetings to review goals and upcoming tasks. This environment allows the team to adjust tasks, strategies, and goals as needed. Brain Wave creates an environment where all team members have consistent and clear direction regarding design, production, marketing, and sales efforts.

Motivation and Improvement

Brain Wave holds monthly performance evaluation meetings for each employee. Brain Wave follows a rubric that scores productivity, involvement, quality of work, and overall performance. Department leaders follow the same rubric with an additional metric for leadership. Employees are motivated to meet sales goals with an incentive of 10% commission.

INNOVATION



October 21st, 2021



November 10th, 2021

Product Development

After reading an article in Harvard Health Publishing that discussed the benefits of cognitive exercise, Brain Wave began developing its first cognitive activity book, which includes activities proven to slow cognitive decline, such as word searches, scavenger hunts, and logic puzzles.

After two weeks of design, the book was sent to Pinnacle Press Inc. in Canton, Ohio, for manufacturing. The Brain Wave Cognitive Activity Book includes 90 pages with 15 unique, interactive activities. Answers are on the back of each page, and fun facts are included throughout. Brain Wave also developed an extra-large version to provide customers with an easier way to view the book. A digital format made for group settings and larger print was created as well. Version 2 of Brain Wave was released in April, with new activities and a greater emphasis on creativity.

Branding and Content

The logo and graphics for Brain Wave were diligently designed in-house and followed a unique color scheme. The team created each activity, resulting in a product containing all original content unique to Brain Wave. Each activity corresponds with a different area of the brain, with research readily available on Brain Wave's website.

INNOVATION

Partnerships

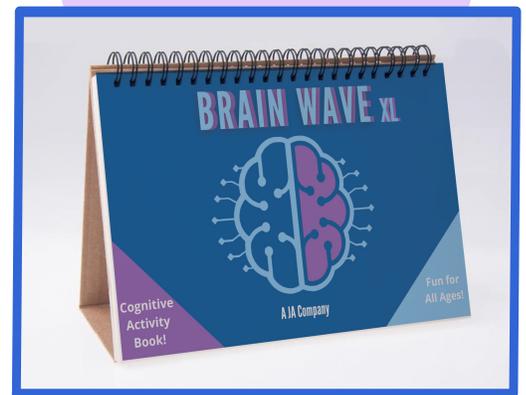
Brain Wave's impact has been overwhelming. Over 400 senior residents received the Brain Wave Cognitive Activity Book. They have been able to connect with other residents, staff, and family by completing the activities together. Brain Wave partnered with Altercare Integrated Health Services, Canton Christian Home, Senior Helpers, and Maplewood Senior Living. The creation of Brain Wave XL drove these partnerships and increased its sales revenue by 36.1%. At the end of the 2021 year, Brain Wave had \$4,678 in revenue. Due to the partnerships created and current opportunities, 2022's revenue is expected to triple compared to 2021.



Innovative Business Strategies

After making successful business-to-consumer sales, Brain Wave then focused on the business-to-business market by developing a targeted marketing campaign focusing on nursing homes and senior living facilities. After soliciting feedback from these potential partners, the sales team learned the original book was too small for many residents to view easily. As a result, Brain Wave developed the XL Version, which contains the same content in larger print and provides an improved experience for senior customers. Brain Wave has a reliable partnership with its manufacturer to ensure that business-to-business sales are processed and shipped efficiently. Brain Wave also developed a business-to-business pricing strategy for bulk orders, enabling the team to get a larger volume of orders.

34%
larger than
the original



MARKETING & SALES

16

million people suffer from cognitive decline in the United States alone.

Target Market

Brain Wave's target buyers are nursing homes and other senior living facilities, with the end-user being senior residents. This was determined through market research and finding that a more significant percentage of sales came from business-to-business interactions. According to a study done by BMC Medicine, senior citizens can reduce their risk of developing progressive brain diseases by participating in activities Brain Wave provides. Brain Wave targets nursing homes and senior living facilities to provide their residents with a fun way to interact with others and improve their overall brain health.

Competitive Advantage

Each page of the cognitive activity book was designed by hand to correlate with a different area of the brain. The book's original content and quality help it stand out from competitors. The team spent time conducting research that allowed each activity to be linked to an area of the brain. Users can improve upon a specific skill by using the book's guide and scanning the QR code located at the beginning of the book. Meeting consumers' needs by creating an XL version, a digital version, and a second edition allows Brain Wave to keep consumers satisfied.

Altercare's Testimonial

"We are thrilled to start utilizing Brain Wave with our residents and appreciate your time and attention to our partnership"

-Jamie Hurlock
(VP of Business Development)



The Research Behind Our Product

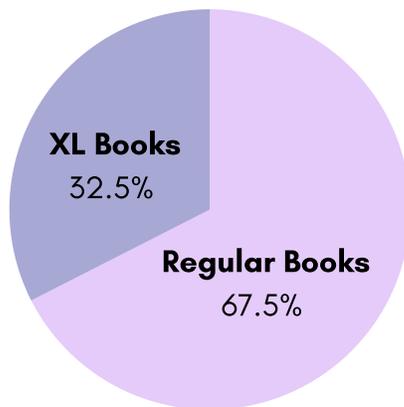
- Rebus and Logic Puzzles -- Frontal Lobe
- Word Searches -- Frontal Lobe
- Word Associations -- Temporal Lobe
- Crosswords -- Hippocampus
- Scavenger Hunts -- Prefrontal Cortex
- Sudokus -- Prefrontal Cortex

MARKETING & SALES

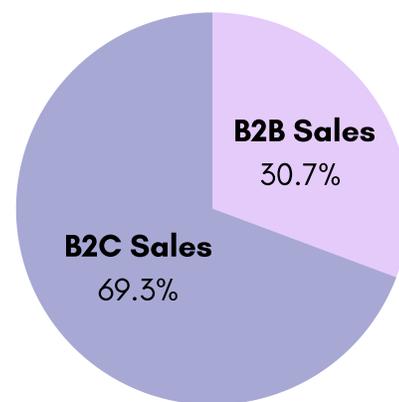
Sales Strategies

Brain Wave's primary sales strategy consists of business-to-business selling, live marketplaces, and selling online. Brain Wave's sales team conducted sales training monthly with every member to increase the percentage of closed sales and perfect pitches. This helped increase the success rate of local trade show sales and cold calls made by team members. The marketing and sales team also collaborated to create social media content that would promote online selling. Finding that Brain Wave's ROI is increased with bulk sales, the strategy shifted to emphasize business-to-business sales rather than business-to-customer sales. Through these strategies, Brain Wave was able to sell over 1,200 units as of May 1st, 2022.

Percentage of Book Sales



Distribution of Sales



Social Media Strategies

Brain Wave's marketing team puts high emphasis on social media advertising to promote awareness of cognitive decline and increase overall sales. Most social media promotions and campaigns occur on Facebook to reach a broad audience of potential buyers. Instagram and Tiktok are also frequently used to engage audiences through interactive media and creative videos. Engagements through social media have led the team to reach users from across the nation and drive more traffic to Brain Wave's online store.

@[brainwaveja](#)



Accounts Reached:
1,980



Accounts Reached:
881



Accounts Reached:
10,194

LEARNING EXPERIENCES

Challenge

Brain Wave projected that its first order of 500 units would last three months; however, all 500 units were sold in only three weeks. This sales surge led to a two-week period in which Brain Wave had no inventory to sell, as the replenishment order was still in progress. During the early stages of product development, Brain Wave struggled to delegate tasks, organize records, and manage inventory. Thus, the company was slow to respond to the high volume of orders and had no dedicated member to report inventory to.

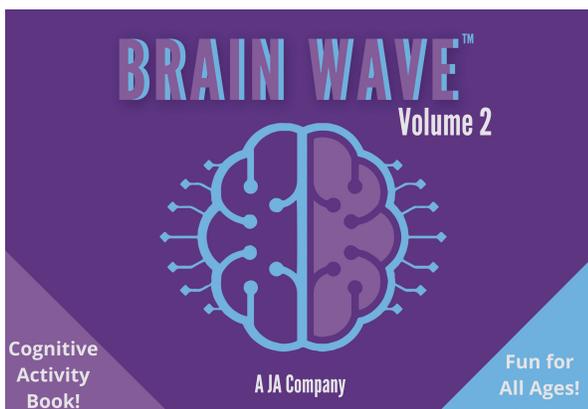
Success

As the company matured and shifted towards a business-to-business market, the company developed more sophisticated methods of communication and internal controls. The Supply Chain Manager was assigned to count and track inventory, while the VP of Sales verified the records and matched them to order forms. After the verification process was complete, all records were delivered to the CEO. This made the company more organized and prepared to track both individual and bulk deals.

The Future

Brain Wave intends to scale the company by further expanding the product line and continuing the development of business-to-business partnerships. Creating more versions that target different age groups along with a Brain Wave app are plans for the future. Regular cognitive exercise is vital in helping to keep a healthy lifestyle, and Brain Wave plans on continuing its mission of making this possible by registering as an LLC. Brain Wave also has donated 10% of all final profits to the Susie V Foundation, a local non-profit researching a cure for ALS, and plans to make further donations.

Brain Wave Volume 2



The Brain Wave Team

