

Bridgemark MARKETING PLAN

RAIL-D SHORT-TERM MARKET RESEARCH & MARKETING PLAN

CONTENTS

M	arketing Plan	2
	Plan Overview	2
	Objective & Deliverables	2
	target market	3
	SWOT	3
	Strength	3
	Weaknesses	3
	opportunities	4
	Threat	4
	Survey Results	5
	Industry analysis	5
	Feasibility analysis	9
	Market Strategy (Jaiden)	14
	Animal Tracking	16
	Data Analytics (Trucking)	19
	Sports / Events Analytics	21
	Conclusion	23

MARKETING PLAN

The Remote Artificial Intelligence Logo Device (RAIL-D) is a low-powered, Alassisted device that can track the logos on freight cars. This device is initially being created for equity analysts to understand the sales and merchandise on trains for crucial marketing statistics. It will rest alongside a railway, and we assume it has the following characteristics:

- solar panels
- no cell or Wi-Fi reliance
- data collection
- fast-tracking

Above the Curve Consulting was tasked with finding two to three industries in which this device can be applied without major adjustments to the device. We have done this through surveys, market research, and business analysis. We will analyze the North American market. The device modification is short-term, meaning it will take under one year to apply to the device.

PLAN OVERVIEW

Practice:	Above the Curve (AC) Consulting						
Name of Campaign:	Rail-D Short-term Marketing Plan						
Project Managers:	Jaiden Angeles, Emily Chan, Yuling Dai, Daisy Huynh, James Lee, Tianci Qiao						
Project Sponsor:	Simran Gill, Bridgemark Advisory Services						

OBJECTIVE & DELIVERABLES

Our objective is to provide two to three alternative industries in which the RAIL-D could be profitably marketed towards in the short term. Our deliverables are **market research** which includes surveys and industry identification, **marketing plan** which includes a feasibility and marketing strategy, and **marketing proposal**

(included separately) which include a pamphlet to be submitted to customers explaining the product.

TARGET MARKET

The original market for the RAIL-D are analytics firms, who will be utilizing this data to better understand their needs.

Our target criteria are therefore:

- Similar enough to be able to use RAIL-D with minimal adaptation
- Profitable and stable
- Economically/technically/organizationally feasible
- Operating within Canada

SWOT

We have analyzed Bridgemark's capabilities regarding its strengths, weaknesses, opportunities, and threats. This is important as it provides insights into Bridgemark's position in the market, its capabilities in marketing this project, and the internal and external factors that play a role in the RAIL-D's success.

STRENGTH

- Large client base
- Professional financial advice
- Full service
- Easy to access

WEAKNESSES

- Small organization
- Limited human capital
- Offers mainly financial services
- Limited marketing expertise
- Lack of resources compare to other AI firms

OPPORTUNITIES

- Expanding team size
- Al tool
- Overseas manufacturing companies

THREAT

- Competitive pressures
- Lack of interest for product
- Firms' releasing similar AI tool
- We could easily substitute Ai tool
- Economic changes
- Consumer bargaining power

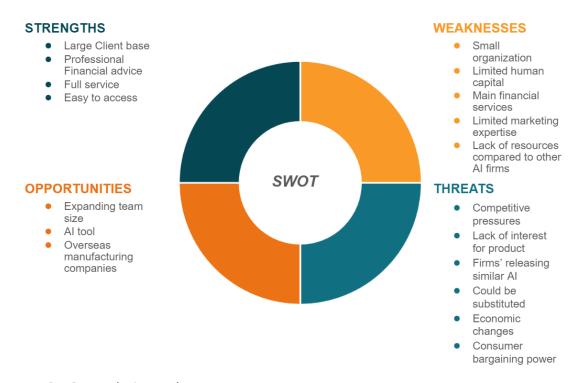


Figure 1: SWOT Analysis graph

SURVEY RESULTS

Our initial plan was to collect survey results, agglomerate our data with other surveys, and make our decision based on the findings. Our methods of contacting members of the industry were primarily by email, but also posting on relevant forums and even directly messaging individuals on LinkedIn. To broaden the pool of survey participants, a decision was made to expand the surveys sent to U.S. based companies as well.

Despite our best efforts we have only collected 11 survey results that provide meaningful data for our market research and insights on the potential industries that Bridgemark can introduce the RAIL-D to. Because our N = 11, the results are of little statistical relevance, so we were forced to place greater emphasis on online research.

INDUSTRY ANALYSIS

After finding our survey results, we conducted an industry analysis of 22 industries (Table 2,3,4). Through this, we selected four potential industries that could yield profit based on important metrics like CAGR, number of competitors, and income level. After analyzing 22 different industries, our team selected four industries as potential target customers: Sports Merchandising market, data analytics: Cargo trucks, conservation/research (animal tracking) industry, and self-driving. According to our industry analysis, these three industries are the areas with a growth rate over 5% and are the most suitable for our products.

Chosen Markets through Industry Analysis:

Sports Merchandise Market

First, the sporting goods marketplace tracks sports team logos to see how many fans are interested in buying their merchandise. In our report, the market CAGR of sporting goods retailers is 4.9% (IMARC, 2021) (globally). However, the CAGR for the AI market in sports is 29.7% and projected to reach \$7.8 billion in 2028 (Vantage Market Research, 2022).

One of the difficulties facing marketing professionals is the relative difficulty of measuring return-on-investment (RoI). Implementing RAIL-D to analyze sporting goods merchants can help stores understand customer traffic through tracking information. This product will serve the sports or event marketing sector.

Marketing Analysis – Cargo Trucks

Secondly, the Cargo Trucks market is analyzed. According to our investigation, there are only 18 competitors in the freight truck market (Government of Canada, 2021). Due to the lack of related industries, we can customize the details for these 18 industries more specifically. For example, our product can do data analysis-specifically reflected in truck tracking. At the same time, our products can help companies track truck logos on highways and obtain real-time dynamic information on trucks. By using our products, truck companies can collect previously unimaginable data and buy competitors' data like data companies. This data gives companies a deeper understanding of competitors and enables analysts to manage data efficiently and accurately.

• Conservationists/Scientists

We chose the conservation/research industry as a potential target customer. Different from the choice of the last two industries, the main reason why our team values the animal market is that the CAGR is as high as 18.2%, which means that more animal supply companies will be able to cooperate with us in the future (Boesch, 2021). We think we can focus on the field of animal tracking. Existing animal tracking often uses chips built into the body. Such chips are expensive to manufacture, and it is difficult for farmers to install such tracking chips on all animals. Our products will focus on tracking animals' animal metrics, helping hands-free research, sorting and classifying large amounts of data without a lot of human effort, and understanding the location, date, migration frequency, social group, and most dangerous animals of animals. And to ensure that the time required to deploy our product is short and relatively simple, we simplified the tracking device so that farmers can track it without microchipping the animal. Compared with other markets, such as food delivery, energy, government, infrastructure, etc. Animal tracking allows us to design products as low as possible with a relatively low cost and relatively simple procedure.

Self-Driving

Finally, we selected the self-driving and delivery industry. The self-driving industry is expanding rapidly, increasing by a CAGR of 16.3%. Furthermore, the number of competitors is low at 41. The industry is relatively new, meaning there is the potential to break in and monitor ride-sharing activity like through companies like Uber or Door dash.



Table 2: Industry Analysis Original RAIL-D

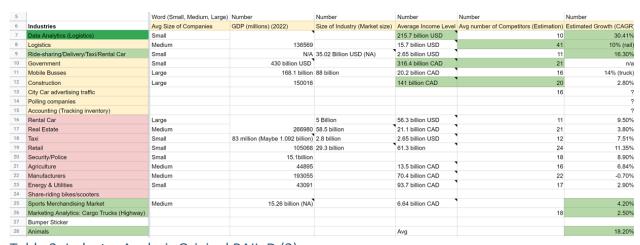


Table 3: Industry Analysis Original RAIL-D (2)

	Number (Us and Survey)	Word (Minimal, moderate, high)	Word (Small Medium Large)	Number	Number	Number
Industries	Avg # of Employees	Current Usage of data analytics		GDP (millions) (2022)	Size of Industry (Market size)	Average Income Leve
Data Analytics (Logistics)	87,627		Small	ODI (IIIIIIOIIS) (2022)	Olze of fridastry (Market Size)	215.7 billion USD
Logistics	6,526		Medium	136569		15.7 billion USD
Ride-sharing/Delivery/Taxi/Rental Car	0,320		Small		35.02 Billion USD (NA)	2.65 billion USD
Government			Small	430 billion USD	33.02 Billion GGD (14A)	316.4 billion CAD
Mobile Busses			Large	168.1 billion	88 hillion	20.2 billion CAD
Construction	7,721			150016	OO DIIIIOTT	141 billion CAD
	1,721		Large	150016		141 billion CAD
City Car advertising traffic						
Polling companies						
Accounting (Tracking inventory)	0.050	5.4 billion			5.000	50.01.111
Rental Car			Large		5 Billion	56.3 billion USD
Real Estate	1,815		Medium		58.5 billion	21.1 billion CAD
Taxi	412		Small	83 million (Maybe 1.092 billion)	2.8 billion	2.65 billion USD
Retail	15,829		Small	105068	29.3 billion	61.3 billion
Security/Police			Small	15.1billion		
Agriculture	210,380		Medium	44895		13.5 billion CAD
Manufacturers	12,922		Medium	193055		70.4 billion CAD
Energy & Utilities	982,723		Small	43091		93.7 billion CAD
Share-riding bikes/scooters						
Sports Merchandising Market	2,334		Medium	15.26 billion (NA)		6.64 billion CAD
Marketing Analytics: Cargo Trucks (Highway)						
Bumper Sticker						
Animals						Avg

Table 4: Industry Analysis Original RAIL-D cont'd (2)

FEASIBILITY ANALYSIS

Technical Feasibility

Sports merchandising market, Marketing analytics: Cargo trucks and Animal Tracking Industry have a very strong technical feasibility. For sports merchandising, such as apparel, shoes and anything with a sports team logo, RAIL-D can collect and record using low-power image recognition technology. RAIL-D transmits this information to a database for post-analysis, providing merchants with reports on consumer preferences, frequency, and profitable product categories. For the freight truck (highway) industry, RAIL-D can be placed along Canadian highways to track truck signs to record information such as point in time, license plate number and speed of passing trucks. For the Animal Tracking Industry, the RAIL-D is installed deep in the bush or on the fence of a fence and can be used during the day by converting solar energy for use at night, saving energy. At the same time, RAIL-D does not need to rely on WIFI to transmit the information collected by low-power image recognition technology to the information center. This can be used to analyze the number of endangered wildlife, their habits, etc.

• Organizational feasibility

Organizational feasibility is designed to assess management's ability and adequacy of resources to bring a product or idea to market. For the Sports merchandising market, RAIL-D provides insightful data and allows companies to understand the popularity of different sports teams. This allows merchandising companies to identify profitable items to produce and sell. On the other hand, RAIL-D is very easy to implement and adapt for the truck industry because it can be placed anywhere on the highway. RAIL-D helps the truck industry to quickly record and report on data related to signs on trucks, which helps to increase efficiency. For the Animal Tracking Industry, there is a moderate risk to the organizational viability of RAIL-D. RAIL-D can be difficult to maintain when installed in remote areas. Also, RAIL-D may require satellite connectivity to operate, which can be relatively costly.

Economic Feasibility

Through all our calculations, we calculated the present values of the cost and benefits of the four industries to see the profit Bridgemark would make with this device over five years using a discount rate of 4%. The final Net Present Value (NPV) is the sum of money that will be accumulated to Bridgemark over five years.

In calculating our **Benefits**, we are assuming that the initial product fee we will charge customers to purchase this device is \$1,000. Afterward, the cost per month to lease this device is \$200 for a 20-year contract (Contract value \$4,000), in which Bridgemark will handle the maintenance and updates of the RAIL-D device throughout the lease's term. Although this may not be the pricing model Bridgemark plans to use with the RAIL-D, these values can be changed to measure the profitability of the pricing in each industry. Furthermore, this pricing model is the same in every sector presented in our economic feasibility analysis to see the profits after cost for comparison.

For the **Initial Costs**, we assume "Market, sales, advertising costs", "Prototyping", "Software Development Wage" and "Market Research" remain the same in each industry. This is because "Marketing, sales, and advertising costs" will be Business-to-Business when Bridgemark advertises. Furthermore, "Prototyping" will involve redrafting the original RAIL-D to fit each industry, and the same process will likely be done each time at a fixed cost. Furthermore, the "Software Development Wage" takes the average yearly cost of a software developer and assumes they will alter the product's programming. "Market Research" is also fixed since extensive industry reports typically cost around \$5,000. However, the "Initial Design (Adjustment Cost)" was changed because each industry requires different adjustments to the RAIL-D that may cost differently than another industry.

As for **Product Costs**, we assume the product will mostly remain the same as little adjustments will need to be made in entering another industry. However, there is a constant "adjustment cost" that changes across each industry, which shows the cost of whatever adjustment is needed to enter an industry per product.

Finally, the **Operational Costs** assume that "shipping and import costs" and "Maintenance costs" are the same across all industries due to the minimal adjustments to the device. We assume that its size is that of a mini fridge and have calculated the costs for shipping with that. For maintenance, we consider

the solar panel, cameras, hardware, and programming, and have discounted \$25 per year for five years if specialization allows the maintenance costs of the product to decrease.

	Ride-sharing/Delive	ery/	Taxi/Re	ent	al Car										
		Year													
			0		1		2		3		4		5		Total
Benefits															
	Initial Fee (Per Product = \$1,000)	-		\$	10,000.00	\$	14,000.00	\$	18,000.00	\$	22,000.00	\$	26,000.00	\$	90,000.00
	Leasing/Subscription (Per product = \$150/month) (20 years) (CV = 3000)	-		\$	40,000.00	\$	56,000.00	S	72,000.00	\$	88,000.00	S	104,000.00	\$	360,000.00
	Total Benefits			\$	50,000.00	\$	70,000.00	\$	90,000.00	\$	110,000.00	\$	130,000.00	\$	450,000.00
	Total PV Benefits			\$	48,076.92	\$	64,718.93	S	80,009.67	\$	94,028.46	S	106,850.52	\$	393,684.52
Costs															
	Initial Costs														
	Marketing, sales, advertisting costs	\$	33,953.00											\$	33,953.00
	Prototyping	\$	15,000.00											\$	15,000.00
	Software Developer Wage	S	75,000.00											\$	75,000.0
	Initial Design (Adjustment Cost)	S	5,000.00											\$	5,000.00
	Market Research	S	5,000.00											\$	5,000.0
	Total Initial Costs	\$ 1	33,953.00											\$	133,953.00
	Product Costs (Per Product)														
	Packaging			\$	4.40	\$	4.10	S	3.80	\$	3.40	\$	2.30	\$	18.00
	Solar panel			5	180.00	\$	168.00	5	156.00	\$	144.00	\$	120.00	\$	768.00
	Al Camera			\$	1,000.00	\$	800.00	S	600.00	\$	400.00	S	300.00	\$	3,100.00
	Battery			5	213.00	s	213.00	S	213.00	S	213.00	S	213.00	5	213.00
	Connection Hardware			\$	3.13	\$	3.13	S	3.13	\$	3.13	S	3.13	\$	15.65
	Other Hardware Costs			\$	87.50	S	87.50	S	87.50	S	87.50	s	87.50	\$	437.50
	Adjustment Cost			\$	100.00	\$	100.00	S	100.00	s	100.00	S	100.00	\$	100.00
	Total Product Costs			\$	1,588.03	\$	1,275.73	S	1,063.43	\$	851.03	\$	725.93	\$	4,552.15
	Operational Costs														
	Shipping & Import Costs			S	300.00	s	300.00	S	300.00	s	300.00	s	300.00	S	1.500.00
	Ongoing Sales and Marketing			5	50.000.00	S	40.000.00	5	30,000.00		30.000.00	S	20.000.00	\$	170,000.00
	Maintanence Costs			S	225.00	s	200.00	S	175.00	S	150.00	S	125.00	S	875.00
	Total Operation Costs			5	50.525.00	_	40,500.00	5		\$	30,450.00	\$	20,425.00	\$	172,375.00
	Total Costs	S 1	33.953.00	S	52.113.03	s	41.775.73	S	31.538.43	s	31.301.03	S	21.150.93	S	176.927.15
	PV Costs	\$ 1	33,953.00	\$	50,108.68	\$	38,624.01	S	28,037.55	\$	26,756.25	S	17,384.52	\$	294,864.02
	Net Benefits	\$ (1	33.953.00)	\$	(2.113.03)	s	28,224.27	S	58.461.57	S	78,698.97	S	108.849.07	\$	138,167.85
	Cumulative Cash Flow	\$ (1	33,953.00)	\$ ((107,841.76)								
Discount Rate	4%														
NPV	\$ 98,820.50														
ROI	-0.7110347394														
B/E	4.7306474														
Customers	41														

Table 5: Feasibility Analysis Original RAIL-D (Khair, 2022; BDC.ca, 2022; Kerr, 2021; Teel, 2022;, Usm, 2022; Marketsandmarkets, 2021; Ride Sharing Market Size, Share, Growth & Forecast [2028]., 2022; Greasly, 2021; Sunrun, 2021; Luo, 2022; Lane, 2018; Prokopiev, 2022; Coolparcel.com, 2021; The Farnsworth Group, 2022; Fixr.com, 2021; Vigerman, 2022; Zimmermann, 2022)

				A	nimal Tr	ac	king					
								Year				
			0		1		2	3	4		5	Total
Benefits												
	Initial Fee	-		\$	10,000.00	S	14,000.00	\$ 18,000.00	\$ 22,000.00	\$	26,000.00	\$ 90,000.00
	Leasing/Subscription	-		\$	40,000.00	\$	56,000.00	\$ 72,000.00	\$ 88,000.00	\$	104,000.00	\$ 360,000.00
	Total Benefits			\$	50,000.00	\$	70,000.00	\$ 90,000.00	\$ 110,000.00	\$	130,000.00	\$ 450,000.00
	Total PV Benefits			\$	48,076.92	\$	64,718.93	\$ 80,009.67	\$ 94,028.46	\$	106,850.52	\$ 393,684.52
Costs												
	Initial Costs											
	Marketing, sales, advertisting costs	\$	33,953.00									\$ 33,953.00
	Prototyping	\$	15,000.00									\$ 15,000.00
	Software Developer Wage	\$	75,000.00									\$ 75,000.00
	Initial Design	S	1,000.00									\$ 1,000.00
	Market Research	S	5,000.00									\$ 5,000.00
	Total Initial Costs	S	129,953.00							П		\$ 129,953.00
	Product Costs (Per Product)											
	Packaging			\$	4.40	\$	4.10	\$ 3.80	\$ 3.40	\$	2.30	\$ 18.00
	Programming			\$	180.00	\$	168.00	\$ 156.00	\$ 144.00	\$	120.00	\$ 768.00
	Solar panel			\$	1,000.00	\$	800.00	\$ 600.00	\$ 400.00	\$	300.00	\$ 3,100.00
	Al Camera			\$	213.00	\$	213.00	\$ 213.00	\$ 213.00	\$	213.00	\$ 213.00
	Other Development Costs			\$	3.13	\$	3.13	\$ 3.13	\$ 3.13	\$	3.13	\$ 15.65
	Bluetooth			\$	56.25	\$	56.25	\$ 56.25	\$ 56.25	\$	56.25	\$ 281.25
	Adjustment Cost			\$	25.00	\$	25.00	\$ 25.00	\$ 25.00	\$	25.00	\$ 125.00
	Total Product Costs			\$	1,481.78	\$	1,269.48	\$ 1,057.18	\$ 844.78	\$	719.68	\$ 4,520.90
	Operational Costs											
	Shipping & Import Costs			\$	300.00	\$	300.00	\$ 300.00	\$ 300.00	\$	300.00	\$ 1,500.00
	Ongoing Sales and Marketing			\$	15,000.00	\$	15,000.00	\$ 15,000.00	\$ 15,000.00	\$	15,000.00	\$ 75,000.00
	Maintanence Costs			\$	225.00	\$	200.00	\$ 175.00	\$ 150.00	\$	125.00	\$ 875.00
	Total Operation Costs			\$	15,525.00	\$	15,500.00	\$ 15,475.00	\$ 15,450.00	\$	15,425.00	\$ 77,375.00
	Total Costs	\$	129,953.00	\$	17,006.78	\$	16,769.48	\$ 16,532.18	\$ 16,294.78	\$	16,144.68	\$ 81,895.90
	PV Costs		\$129,953.00		\$16,352.67		\$15,504.33	\$14,697.05	\$13,928.85		\$13,269.75	\$73,752.64
	Net Benefits	\$	(129,953.00)	\$	32,993.22	\$	53,230.52	\$ 73,467.82	\$ 93,705.22	\$	113,855.32	\$ 368,104.10
	Cumulative Cash Flow	\$	(129,953.00)	\$	(96,959.78)	\$	(43,729.26)	\$ 29,738.56	\$ 123,443.78	\$	237,299.10	\$ 249,792.40
Discount Rate	4%											
NPV	\$ 319,931.87											
ROI	3.050120946											
B/E	3.682637104											
Customers	32											

Table 6: Feasibility Analysis Original RAIL-D (The Farnsworth Group, 2022; Wells et al., 2017; Teel, 2022; Braeden, 2022; Gouvernement du Canada, 2019)

	Sports Mercha	ndising M	larket					
	·				Year			
		0	1	2	3	4	5	Total
Benefits								
	Initial Fee (Price = \$1,000)	-	\$ 10,000.00	\$ 14,000.00	\$ 18,000.00	\$ 22,000.00	\$ 26,000.00	\$ 90,000.00
	Leasing/Subscription (Per product = \$200/m) (20 years) (CV = 4000)	-	\$ 40,000.00	\$ 56,000.00	\$ 72,000.00	\$ 88,000.00	\$ 104,000.00	\$ 360,000.00
	Total Benefits		\$ 50,000.00	\$ 70,000.00	\$ 90,000.00	\$ 110,000.00	\$ 130,000.00	\$ 450,000.00
	Total PV Benefits		\$ 48,076.92	\$ 64,718.93	\$ 80,009.67	\$ 94,028.46	\$ 106,850.52	\$ 393,684.52
Costs								
	Initial Costs							
	Marketing, sales, advertisting costs	\$ 33,953.00						\$ 33,953.00
	Prototyping	\$ 15,000.00						\$ 15,000.00
	Software Developer Wage	\$ 75,000.00						\$ 75,000.00
	Initial Design (Adjustment Cost)	\$ 1,000.00						\$ 1,000.00
	Market Research	\$ 5,000.00						\$ 5,000.00
	Total Initial Costs	\$ 129,953.00						\$ 129,953.00
	Product Costs (Per Product)							
	Packaging		\$ 4.40	\$ 4.10	\$ 3.80	\$ 3.40	\$ 2.30	\$ 18.00
	Al Camera		\$ 1,000.00	\$ 800.00	\$ 600.00	\$ 400.00	\$ 300.00	\$ 3,100.00
	LiPo Battery		\$ 37.50	\$ 37.50	\$ 37.50	\$ 37.50	\$ 37.50	\$ 187.50
	Connection Hardware		\$ 3.13	\$ 3.13	\$ 3.13	\$ 3.13	\$ 3.13	\$ 15.68
	Other Hardware Costs		\$ 87.50	\$ 87.50	\$ 87.50	\$ 87.50	\$ 87.50	\$ 437.50
	Adjustment Cost		\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00	\$ 250.00
	Total Product Costs		\$ 1,182.53	\$ 982.23	\$ 781.93	\$ 581.53	\$ 480.43	\$ 3,758.69
	Operational Costs							
	Shipping & Import Costs		\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 300.00	\$ 1,500.00
	Ongoing Sales and Marketing		\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 250,000.00
	Maintanence Costs		\$ 225.00	\$ 200.00	\$ 175.00	\$ 150.00	\$ 125.00	\$ 875.00
	Total Operation Costs		\$ 50,525.00	\$ 50,500.00	\$ 50,475.00	\$ 50,450.00	\$ 50,425.00	\$ 252,375.00
	Total Costs	\$ 129,953.00	\$ 51,707.53	\$ 51,482.23	\$ 51,256.93	\$ 51,031.53	\$ 50,905.43	\$ 256,133.65
	PV Costs	\$ 129,953.00	\$ 49,718.78	\$ 47,598.22	\$ 45,567.22	\$ 43,621.97	\$ 41,840.55	\$ 358,299.74
	Net Benefits	\$(129,953.00)	\$ (1,707.53)	\$ 18,517.77	\$ 38,743.07	\$ 58,968.47	\$ 79,094.57	\$ 63,663.35
	Cumulative Cash Flow	\$(129,953.00)	\$ (131,660.5	\$ (113,142.76	\$ (74,399.69)	\$ (15,431.22)	\$ 63,663.35	\$(270,970.85
Discount Rate	4%							
NPV	\$ 35,384.78							
ROI	-1.05792757							
B/E	5.195098349							
Customers	4.580							

Table 7: Feasibility Analysis Original RAIL-D (Teel, 2022; The Farnswoth Group, 2022; Market Prospects, 2022)

	Marketing Analytic	s:	Cargo	Trucks	(H	ighway))							
	Year Year													
			0	1		2		3		4		5		Total
Benefits														
	Initial Fee (Per Product = \$1,000)	-		\$10,000.00)	\$14,000.00	\$18	3,000.00	\$2	2,000.00	\$	26,000.00	S	90,000.00
	Leasing/Subscription (Per product = \$200/month) (20 years) (CV = 2000)	-		\$40,000.00)	\$56,000.00	\$72	2,000.00	\$8	8,000.00	\$1	04,000.00	\$	360,000.00
	Total Benefits			\$50,000.00)	\$70,000.00	\$90	,000.00	\$ 1	110,000.00	\$1	30,000.00	\$	450,000.00
	Total PV Benefits			\$48,076.92	2	\$64,718.93	\$80	,009.67	\$9	4,028.46	\$1	06,850.52	\$	393,684.52
Costs														
	Initial Costs													
	Marketing, sales, advertisting costs	\$	33,953.00										\$	33,953.00
	Prototyping	\$	15,000.00										\$	15,000.00
	Software Developer Wage	\$	75,000.00										\$	75,000.00
	Initial Design	\$	1,000.00										\$	1,000.00
	Market Research	\$	5,000.00										\$	5,000.00
	Total Initial Costs	\$	129,953.00										\$	129,953.00
	Product Costs (Per Product)													
	Packaging			\$ 4.40)	\$ 4.10	\$	3.80	\$	3.40	\$	2.30	\$	18.00
	Programming			\$ 180.00)	\$ 168.00	\$	156.00	\$	144.00	\$	120.00	\$	768.00
	Solar panel			\$ 1,000.00)	\$ 800.00	\$	600.00	\$	400.00	\$	300.00	\$	3,100.00
	Al Camera			\$ 213.00)	\$ 213.00	\$	213.00	\$	213.00	\$	213.00	\$	213.00
	Other Development Costs			\$ 3.13	3	\$ 3.13	\$	3.13	\$	3.13	\$	3.13	\$	15.65
	Adjustment Cost			\$ 100.00	1	\$ 100.00	\$	100.00	\$	100.00	\$	100.00	\$	100.00
	Total Product Costs			\$ 1,500.53	3	\$ 1,188.23	\$	975.93	\$	763.53	\$	638.43	\$	4,114.65
	Operational Costs													
	Shipping & Import Costs			\$ 300.00)	\$ 300.00	\$	300.00	\$	300.00	\$	300.00	\$	1,500.00
	Ongoing Sales and Marketing			\$30,000.00)	\$30,000.00	\$30	,000.00	\$3	80,000.00	\$	30,000.00	\$	150,000.00
	Maintanence Costs			\$ 225.00	١,	\$ 200.00	\$	175.00	\$	150.00	\$	125.00	\$	875.00
	Total Operation Costs			\$30,525.00)	\$30,500.00	\$30	,475.00	\$3	80,450.00	\$	30,425.00	\$	152,375.00
	Total Costs	\$	129,953.00	\$32,025.53	3	\$31,688.23	\$31	,450.93	\$3	31,213.53	\$	31,063.43	\$	156,489.65
	PV Costs	\$	129,953.00	\$30,793.78	3	\$29,297.55	\$27	,959.76	\$2	6,681.46	\$	25,531.88	\$	140,264.42
	Net Benefits	\$((129,953.00)	\$17,974.47	7	\$ 38,311.77	\$58	,549.07	\$7	8,786.47	\$	98,936.57	\$	292,558.35
	Cumulative Cash Flow	\$((129,953.00)	\$ (111,978.	50	\$ (73,666.76	\$ (1	5,117.69	\$6	3,668.78	\$1	62,605.35	\$	25,511.15
Discount Rate	4%													
NPV	\$ 237,194.87													
ROI	0.1630213244													
B/E	4.356468695													
Customers	35,464													

Table 8: Feasibility Analysis Original RAIL-D

(Gouvernement du Canada, 2019; The Farnsworth Group, 2022)

MARKET STRATEGY (JAIDEN)

For determining how the RAIL-D will enter each market, we have created a marketing strategy on *product*, *price*, *place*, *promotion*.

For product, we determine who the product serves, which organizations would require it, the benefits of the product, the company's goals through the life cycle, and the adjustments to be made to the product.

In determining the price, we look at the type of pricing (out of 3 different pricing methods) (see appendix 1&2&3), financial pain points, how competitors' price, drawbacks to competitors' pricing models, and legal/ethical constraints.

For place, we look at the type of distribution strategy (intensive, selective, inclusive) and choose the most appropriate one. We also select the best

distribution channel (between direct and indirect), and an example of where the product can be sold.

Finally, our promotion strategy reviews the three best types of promotion strategies we have chosen across all chosen industries.

ANIMAL TRACKING

PRODUCT

Who the Product serves:

Conservationists, technologists, researchers

Organizations:

Conservations NGOs, University/Research institutes, Tech companies, Government

Benefits:

- Early detection of disease
- Animal behavior and psychology
- Helps researchers track animal population
- Human less intervention in research
- Data sorting without massive human labour
- Stopping poachers
- Understand animals' migration, dates, locations, social groups, high-risk animals

Company's goals through life cycle:

Training guide for users so it's easier for users to understand and use the RAIL-D. Users of animal AI products have previously stated that their lack of technical skills and access to training are two of the top five constraints in using this technology, so an in-depth training manual will assist them.

Transparency about the tool's features and performance. This is because tech performance and that tools don't meet the needs that they desire are the sixth and tenth greatest constraints for customers (WildLabs, 2020).

Ensure set-up time is low and simple. As having time to engage and learn the product is the third greatest challenge for customers.

Ensure data collected is solely their property. Data breach and security is becoming an increasingly problematic as more people become accustomed to technology, especially as quantum computing is seeing its way on the market. It is a huge turnoff for customers who engage in very discrete data research, like government and ground-breaking research specialists. Thus, ensuring that the data is theirs alone and we do not have a connection is important.

Adjustments:

The RAIL-D will need original programming to switch the RAIL-D from tracking logos to tracking animals.

PRICE

Type of pricing: Competition-based pricing

Keep costs low relative to competitors. Limited funding is the greatest obstacle to companies who use conservation technology (See Figure 2). Furthermore, upfront costs are also the greatest issue that prevents companies from buying products like the RAIL-D (See Figure 3). That's why pricing as low as possible relative to competition is the best strategy for profitability.

Financial pain points:

- Costs
- Ease of use
- Underperformance

Competitors pricing:

Lowest: \$700 for regular trap camera (World Wildlife Fund, 2020)

Competitor pricing varies extremely, with a regular trap camera in the woods with no AI costs upwards of \$700 to deploy and maintain (World Wildlife Fund, 2020). (Furthermore, companies either exclusively produce software (like Google Wildlife Insights) or hardware (like Deepmind's ai-based tool), so it's difficult to determine an exacting price in the animal tracking sector (AI World School, 2022). However, pricing below the overall costs of the current technology will ensure strong market penetration.

Drawbacks:

- Requires massive time to scour through results
- Competitors exclusively sell software or hardware separately
- Exacting pricing difficult to measure

Legal/ethical constraints: Predatory pricing

Since this is a relatively new industry that only in the recent decade has started implementing AI and computer vision to track animals, costs are very high, and competition is projected to continually grow. As such, when considering a pricing strategy for this industry, one must ensure that predatory pricing (pricing to eliminate competition) is avoided for legal and moral reasons.

Different hardware will be required to allow the RAIL-D to be placed in wilderness rather than in train tracks. This will include a tougher exterior and some way to defend against animal intrusion. However, given the current qualities of the RAIL-D, we believe the difficulty of having it placed in the wilderness regarding hardware won't be difficult due to its ability to survive in remote locations.

PLACE

Type: Selective

We recommend using a "selective" place strategy in the animal tracking industry, as this product is expensive and unique. Only a handful of companies would require animal-tracking hardware, so having an "intensive" plan (making it available to everyone) or "exclusive" plan (Selling to just one client) are not feasible.

Distribution channel: Direct

There are few customers who will purchase this technology. Thus, forfeiting profit and allowing middlemen or intermediaries to sell this product will only decrease the profit margin and increase the price of the RAIL-D. Furthermore, customers in this industry are very pricesensitive, with a survey of 248 people across 37 different countries indicating that upfront costs were the biggest issues of obtaining conservation technology (Wild Labs, 2020).

Example: A good option as a selling channel for Bridgemark could be an online store, which we have seen with other competitors in the industry. In doing this, Bridgemark could have a customer contact line if customers would like a price quote to determine the details of the product they want.

PROMOTION

Due to the specialized nature of Bridgemark's offering, most conventional forms of advertising would be incredibly inefficient, if not outright wasteful. To target industry-specific companies (more specifically, individuals with decision-making authority), we recommend the following:

1. Trade exhibition

A traditional venue for B2B marketing, trade fairs offer an excellent opportunity to showcase Bridgemark's innovative new offering. In addition, a large convention will feature an abundance of exhibits where Bridgemark can acquire more data on:

- Consumer & business trends and expectations
- · Competitors' offerings, their respective appeal/drawbacks
- Products/services that can complement Bridgemark's own offerings or be fused together to create another good/service altogether

Furthermore, this is not just a one-way street; clients (industries) who were not even on the radar may be interested in RAIL-D for a wholly different purpose

2. Online presence/search engine optimization

Bridgemark Advisory Services has managed to secure an excellent domain name (https://www.bridgemark.com). However, in Above the Curve's view, the website's content, and information features only a general description of Bridgemark's offerings.

We understand this is deliberate to protect the interests and privacy of both Bridgemark and their clients/partners, but this makes it exceptionally difficult for search engine optimization, an essential part of attracting new customers.

3. Interpersonal marketing

In an increasingly digitized, exceptionally interconnected world, it's easy to focus solely on perceived value for the

buyer, and consequently overlook the personalized aspect of a sales pitch. Especially considering the reduced pool of potential buyers, having a positive liaison with individuals from Bridgemark and a client can be the deciding factor for organizations over other aspects, such as price and brand recognition. Since business needs are constantly shifting, the importance of investing time & resources into relationships is essential to build a mutually beneficial partnership.

Appendix 1: Animal Tracking Marketing Mix

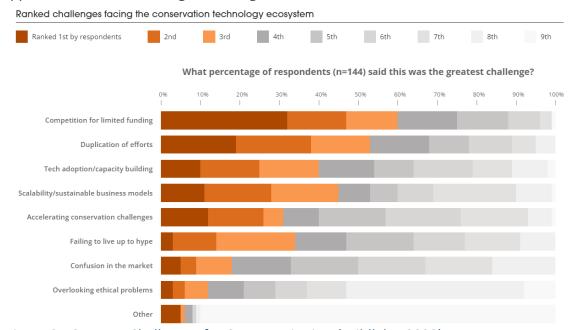


Figure 2: Greatest Challenges for Conservationists (Wildlabs, 2020)

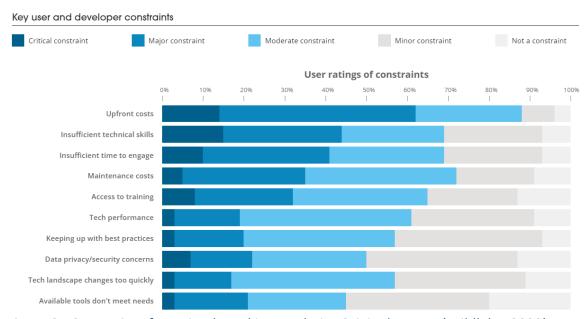


Figure 3: Constraints for Animal Tracking Analytics Original RAIL-D (Wildlabs, 2020)

DATA ANALYTICS (TRUCKING)

PRODUCT PRICE Who the Product serves: Type of pricing: Skimming pricing **Equity Analysts** RAIL-D (Remote AI Logo-Tracking Device) is a new

Organizations:

Marketing analytic firms, data brokerages, government

Benefits:

- Collect previously inconceivable data
- Provide companies with a more in-depth understanding of competitors
- Enables analysts to collect data efficiently and accurately

Company's goals through life cycle:

Provide in-depth understanding of merchandise on specific highway routes. For instance, monitoring the TransCanada Highway to see the merchandise coming in, the most prevalent companies, the frequency and time of travel, and much more will provide valuable insight to analysts. These insights could help analysts determine sales, strength, or other indicators of a company.

Adjustments:

The RAIL-D's logo-tracking abilities, remote location capabilities, and other aspects of the RAIL-D will remain the same on the highway tracking trucks as it is beside the railway tracking trains. One crucial change will be changes to the hardware, as the platform of the RAIL-D must be able to stand beside highways instead of train tracks.

technology product that combines data collection, fast tracking, and solar panel functions, unlike the widely used electronic cameras and speedometers in the highway industry. RAIL-D can accurately and

quickly track advertisements/signs on trucks and record related data. As the product technology is upgraded and more and more competitive products of the same type appear, Bridgemark can reduce the price of RAIL-D appropriately.

Financial pain points:

- **Product Obsolescence**
- **Annoy Customer**
- Price cut during time

Drawbacks (Nikita, 2022):

- Cannot learn to think outside the program
- High cost
- May cause misjudgement

PLACE PROMOTION

Type: Selective or exclusive

Like the animal tracking industry, it makes sense to only be selling the product to a few select companies who will use the product with using a "selective approach". There are few organizations who can afford, maintain, and provide business to Bridgemark for the RAIL-D since data analytics for the trucking industry are very niche.

An" exclusive" approach can also be considered. This is because the Al tracking tool may require strong salespeople who convey a lot of information on the product, so selling it to a separate retailer may be optimal, especially since customers in the data analytics industry can afford higher prices and a product like this currently doesn't exist on the market.

Distribution channel: Direct

The promotion strategy is the same as the Animal Tracking Promotion Strategy. This is because many qualities of the product are still the same, and the same promotion strategies are appliable.

- 1. Trade exhibition
- 2. Online presence/search engine optimization
- 3. Interpersonal marketing

19 Dec 1, 2022

Bridgemark will probably sell only a few devices to targeted companies. Thus, direct distribution will allow for immediate interaction with customers and gauge a better understanding of their needs. This way, we can further make adjustments to appeal to the customer. Bridgemark will also make more money.

Example: Websites like Visosuite's <u>viso.ai</u> is a perfect example of how to sell this product in the data analytics industry. This gives customers the option to request a demo, ask about pricing, know further details on the product, and talk to sales.

Appendix 2: Data Analytics (Trucking) Marketing Mix

SPORTS / EVENTS ANALYTICS

PRODUCT

Who the Product serves:

Sports Analysts, Marketing Analysts, Sports Merchandisers

Organizations:

Sports Organization, Marketing Analytics, Retailers

Benefits:

- Understand who walks in with merchandise and walks out without merchandise
- Understand people who walk in with merchandise and don't buy anything new
- Understand the frequency and location of their merchandise in and around stadiums
- Understand the brand visibility of their organization
- Better understanding of when and where to advertise their merchandise

Company's goals through life cycle:

Provide in-depth understanding of merchandise on logos. For instance, monitoring the TransCanada Highway to see the merchandise coming in, the most prevalent companies, the frequency and time of travel, and much more will provide valuable insight to analysts. These insights could help analysts determine sales, strength, or other indicators of a company.

Track traffic through an event. This will allow a sports or event company to reconfigure the layout of their stadium or event premise to make it easier for customers to go through. Furthermore, they can effectively place advertising in the most accessed places.

Discover most profitable location at an event. People with a large concentration of sports clothing will mean there is a higher number of sales happening in that area. Thus, they can mimic the type of environment that area holds to increase sales throughout the event.

Understand the brand visibility of a product. This is helpful to know the success a particular brand of merchandise. This gives an understanding of current market trends so merchandisers can sell more of the product that consumers tend to wear.

Know the frequency of who buys the products by analyzing amount of people walking in with merchandise already and those without and compare the numbers after they leave.

PRICE

Type of pricing: Skimming Pricing & Premium Pricing

We choose Skimming pricing and Premium pricing is because as a technology product, Bridgemark did not provide any price/product/target market information. Therefore, we can only take an estimation approach to price analysis. Also, for sports merchandising market, there is no competitor in this market, which means we do not have existing price information to following. (See Table 6&7&8)

Financial pain points:

- Annoy Customer
- Attract Competitor
- Price depends on Market
- Luxury Positioning

Competitors pricing:

For sports merchandising market, there is no competitor in this market, which means we do not have existing price information to followed. Due to limited information, we have, we choose these two-price strategy that all the price strategies are based on our estimation.

Drawbacks:

- We analyzed no existing products
- Hard to determine the size of potential available market

Often with pricing using this strategy, the product becomes less relevant. While selling a product well beyond its novelty after a price reduction, the strategy can also annoy consumers who bought the product at full price when it launched and attract competition that recognizes "fake" pricing margins as the price drops opponent.

Adjustments:

The RAIL-D will have to change its software from tracking one logo at a time at high speeds to tracking multiple logos at a time at slower spends.

The RAIL-D will also have difficulty using solar panels unless placed at an outdoor event. Therefore, an electronic battery or connection hardware will be the likely source of power required for the RAIL-D to function in the sports industry

The camera will also need to be capable of tracking farther distances to locate the logos on people's clothing.

Furthermore, changes to hardware to allow the RAIL-D to be elevated instead of being on the ground beside a railway are required.

PLACE

Type: Selective or exclusive

Like the animal tracking industry, it makes sense to only be selling the product too a few select companies who will use the product with using a "selective approach". There are few organizations who can afford, maintain, and provide business to Bridgemark for the RAIL-D since data analytics for the trucking industry are very niche.

An" exclusive" approach can also be considered. This is because the AI tracking tool may require strong salespeople who convey a lot of information on the product, so selling it to a separate retailer may be optimal, especially since customers in the data analytics industry can afford higher prices and a product like this currently doesn't exist on the market.

Distribution channel: Direct

Bridgemark will probably sell only a few devices to targeted companies. Thus, direct distribution will allow for immediate interaction with customers and gauge a better understanding of their needs. This way, we can further make adjustments to appeal to the customer. Bridgemark will also be making more money.

Example: Websites like *Viso suite's* viso.ai is a perfect example of how to sell this product in the data analytics industry. This gives customers the option to request a demo, ask about pricing, understand further details on the product, and talk about sales.

PROMOTION

The promotion strategy is the same as the Animal Tracking Promotion Strategy. This is because many qualities of the product are still the same, and the same promotion strategies are appliable.

- 1. Trade exhibition
- 2. Online presence/search engine optimization
- 3. Interpersonal marketing

Appendix 3: Sports/Events Analytics Marketing Mix

CONCLUSION

Bridgemark Advisory Services' upcoming RAIL-D (Remote Artificial Intelligence Logo Device) project has exceptional potential; the set of data, otherwise unobtainable, is intrinsically valuable for data analytics. Above the Curve Consulting has conducted a feasibility analysis to help ensure that introducing RAIL-D in current market conditions is successful.

To identify the potential companies, our team performed a market analysis on a few selected industries. The feasibility analysis allowed us to whittle down the list of potential industries based on the respective economic, organizational, and technical feasibility of acquiring customers in the targeted industries. This, in conjunction with our market analysis, formed the basis on which we graded the relative attractiveness of select firms. Based on our findings, we finalized Bridgemark's ground-breaking device in the short term.

Out of all the risks involved in Bridgemark's project, arguably the most impactful area of concern is the record low levels of consumer confidence, combined with a sharp downward (sources in appendix E). Rampant inflation, a global energy shock, geopolitical tension between the U.S. and China, and the ongoing Russia-Ukraine War will most likely lead to a global recession soon.

Furthermore, since this is an ongoing trend with no foreseeable resolution in the short-term, expert opinions vary wildly on the impact of this recession. Despite this, Above the Curve is confident that, given the right marketing & pricing strategy, Bridgemark's RAIL-D can find its rightful place in the market.

Appendix

Skimming Price analysis for Sports/Events Analytics Original RAIL-D

'ear	1		2		3		4			5
	Product Cost to Produce	\$ 1,182.53	Product Cost to Produce	\$ 982.23	Product Cost to Produce	\$ 781.93	Product Cost to Produce	\$ 581.53	Product Cost to Produce	\$ 480.43
	DI 4.0.1.1	4 0.000.00	DI 4.0.1.1	6 4 000 00	Phase 1 Pricing	6 4 (00 00	Phase 1 Pricing	4 000 00	Phase 1 Pricing	4 200 00
	Phase 1 Pricing Projected Units Sold	\$ 2,000.00	Phase 1 Pricing Projected Units Sold	\$ 1,800.00 916	Phase 1 Pricing Projected Units Sold	\$ 1,600.00 1832	Phase 1 Pricing Projected Units Sold	5 1,200.00 1832	Phase 1 Pricing Projected Units Sold	\$ 1,000.00 1832
	Projected Units Sold	\$ 1,832,000.00		\$ 1,648,800.00	Projected Units Sold	\$ 2,931,200.00	Projected Units Sold Projected Revenue	\$ 2,198,400.00	Projected Units Soid Projected Revenue	\$ 1,832,000.00
	Projected Gross Margin	\$ 748,802.52		\$ 565,602.52	Projected Gross Margin	\$ 764,805.04	Projected Gross Margin	\$ 32,005.04	Projected Gross Margin	\$ (334,394.96)
	110 octob Gross margin	J 740,002.32	Trojected Gross Wargin	5 505,002.52	r rojected Gross margin	5 704,003.04	Trojected Gross Margin	5 52,005.04	riojected Gross margin	5 (554,574.70)
	Phase 2 Pricing	\$ 1,800.00	Phase 2 Pricing	\$ 1,500.00	Phase 2 Pricing	\$ 1,300.00	Phase 2 Pricing	\$ 1,000.00	Phase 2 Pricing	\$ 800.00
		1832	Projected Units Sold	1832	Projected Units Sold	2748	Projected Units Sold	2748	Projected Units Sold	2748
		\$ 3,297,600.00		\$ 2,748,000.00	Projected Revenue	\$ 3,572,400.00	Projected Revenue	\$ 2,748,000.00	Projected Revenue	\$ 2,198,400.00
	Projected Gross Margin	\$ 1,131,205.04	Projected Gross Margin	\$ 581,605.04	Projected Gross Margin	\$ 322,807.56	Projected Gross Margin	\$ (501,592.44)	Projected Gross Margin	\$ (1,051,192.44)
	Phase 3 Pricing	\$ 1,500.00	Phase 3 Pricing	\$ 1,300.00	Phase 3 Pricing	\$ 1,000.00	Phase 3 Pricing	\$ 800.00	Phase 3 Pricing	\$ 600.00
	Projected Units Sold	2748	Projected Units Sold	2748	Projected Units Sold	3664	Projected Units Sold	3664	Projected Units Sold	3664
	Projected Revenue	\$ 4,122,000.00		\$ 3,572,400.00	Projected Revenue	\$ 3,664,000.00	Projected Revenue	\$ 2,931,200.00	Projected Revenue	\$ 2,198,400.00
	Projected Gross Margin	\$ 872,407.56	Projected Gross Margin	\$ 322,807.56	Projected Gross Margin	\$ (668,789.92)	Projected Gross Margin	\$ (1,401,589.92)	Projected Gross Margin	\$ (2,134,389.92)
	Phase 4 Pricing	\$ 1,300.00	Phase 4 Pricing	\$ 1,000.00	Phase 4 Pricing	\$ 800.00	Phase 4 Pricing	\$ 600.00	Phase 4 Pricing	\$ 500.00
		3664	Projected Units Sold	3664	Projected Units Sold	4,580	Projected Units Sold	4,580	Projected Units Sold	4,580
		\$ 4,763,200.00		\$ 3,664,000.00	Projected Revenue	\$ 3,664,000.00	Projected Revenue	\$ 2,748,000.00	Projected Revenue	\$ 2,290,000.00
		\$ 430,410.08	Projected Gross Margin	\$ (668,789.92)	Projected Gross Margin	\$ (1,751,987.40)	Projected Gross Margin	\$ (2,667,987.40)	Projected Gross Margin	\$ (3,125,987.40)
		1200	Final Total		Final Total		Final Total		Final Total	
		9160	Total Projected Units Sold	9160	Total Projected Units Sold	12824	Total Projected Units Sold	12824	Total Projected Units Sold	12824
		\$ 14,014,800.00	Total Projected Revenue	\$11,633,200.00	Total Projected Revenue	\$ 13,831,600.00	Total Projected Revenue	\$ 10,625,600.00	Total Projected Revenue	\$ 8,518,800.00
	Total Projected Gross Margin	\$ 3,182,825.20	Total Projected Gross Margin	\$ 801,225.20	Total Projected Gross Margin	\$ (1,333,164.72)	Total Projected Gross Margin	\$ (4,539,164.72)	Total Projected Gross Margin	\$ (6,645,964.72)

Premium Price analysis for Sports/Events Analytics Original RAIL-D

	Customers	4,580	
	Sports Merchendising Market		
	Initial Cost	129,953	
ar 1	Unit Variable Cost	\$ 51,707.53	
	Projected # of Units Sold	916	
	Choose wheth	ner you want to apply a percentage-based premium or a fixe	ed dollar premium.
	Fixed Dollar		Percentage-Based
	Fixed Dollar Increase	\$ 100.00	Markup % 28.5189%
	Unit Seeling Price	\$ 51,807.53	Unit Selling Price \$ 66,453.93
	Gross Revenue	\$ 47,455,697.48	Gross Revenue \$ 60,871,802.76
	Gross Margin	\$ 91,600.00	Gross Margin \$ 13,507,705.28
	Unit Variable Cost	\$ 51,482.23	
	Projected # of Units Sold	2748	
ar 3	Choose wheth	ner you want to apply a percentage-based premium or a fixe	ed dollar premium.
	Fixed Dollar		Percentage-Based
	Fixed Dollar Increase	\$ 300.00	Markup % 29%
	Unit Seeling Price	\$ 51,782.23	Unit Selling Price \$ 66,175.43
	Gross Revenue	\$142,297,568.04	Gross Revenue \$ 181,850,090.02
	Gross Margin	\$ 824,400.00	Gross Margin \$ 40,376,921.98
	Unit Variable Cost	\$ 50,905,43	
	Projected # of Units Sold	4,580	
r 5	Choose wheth	ner you want to apply a percentage-based premium or a fixe	ed dollar premium.
	Fixed Dollar		Percentage-Based
	Fixed Dollar Increase	\$ 500.00	Markup % 28%
	Unit Seeling Price	\$ 51,405.43	Unit Selling Price \$ 65,374.29
	Gross Revenue Gross Margin	\$235,436,869.40 \$ 2,290,000.00	Gross Revenue \$ 299,414,253.64 Gross Margin \$ 66,267,384.24

Premium Price analysis for Sports/Events Analytics Original RAIL-D



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