

University of Arkansas, Fayetteville
ScholarWorks@UARK

Accounting Undergraduate Honors Theses

Accounting

5-2016

4 Wynnes Boating Manufacturing Company: A Market Analysis and Business Plan for Northwest Arkansas

Hayden S. Wynne
University of Arkansas, Fayetteville

Follow this and additional works at: <http://scholarworks.uark.edu/acctuht>

 Part of the [Accounting Commons](#), and the [Entrepreneurial and Small Business Operations Commons](#)

Recommended Citation

Wynne, Hayden S., "4 Wynnes Boating Manufacturing Company: A Market Analysis and Business Plan for Northwest Arkansas" (2016). *Accounting Undergraduate Honors Theses*. 25.
<http://scholarworks.uark.edu/acctuht/25>

This Thesis is brought to you for free and open access by the Accounting at ScholarWorks@UARK. It has been accepted for inclusion in Accounting Undergraduate Honors Theses by an authorized administrator of ScholarWorks@UARK. For more information, please contact scholar@uark.edu, ccmiddle@uark.edu.

**4 Wynnes Boating Manufacturing Company:
A Market Analysis and Business Plan
for Northwest Arkansas**

By

Hayden S. Wynne

Advisor: Gary Peters

**An Honor's Thesis in partial fulfillment of the requirements for the degree of
Bachelor of Science in Business Administration in
Accounting**

**Sam M. Walton College of Business
University of Arkansas**

May 13, 2016

Table of Contents

- I. Executive Summary
- II. Product Services and Design
- III. Industry Analysis and Competitors
- IV. Potential Population and Growth of Northwest Arkansas
- V. Two Methods to Estimate Potential Boat Buyers
- VI. Capital Requirements
- VII. Financial Projections
- VIII. Conclusion

I. Executive Summary

This thesis focuses on a business plan for the opening and developing of a boat manufacturing company in Northwest Arkansas and, specifically, manufacturing of duck hunting boats. South Arkansas and Eastern Arkansas have boat-manufacturing companies, but none exist in Northwest Arkansas. Having developed an interest in duck hunting over the years, I have discovered a tremendous need to bring the boats to where a large portion of Arkansas population exists. With the potential for much more growth in the populations of Northwest Arkansas corridor from Fort Smith to Bentonville, the time appears ripe for this kind of endeavor. Duck hunting trends indicate an explosion of next generation hunters. While most of the habitats for ducks are in Eastern Arkansas, once a person discovers duck hunting, places to hunt become more apparent in surrounding areas near where that person lives. This thesis supports the concept of manufacturing duck and other recreational boats where people live and will allow for customizing and providing an opportunity for hunters and others seeking recreational boats to experience firsthand how boats are made and the specific interest of the soon-to-be new boat owner.

Northwest Arkansas's growth prospective paints an encouraging picture for new startup business such as this. With Walmart, Tyson Foods and J. B. Hunt leading the way for economic growth in all areas, a boat manufacturing company will benefit from, not only the population growth, but also the economic growth. Owning a duck or other recreational boat, will not only provide additional quality of life opportunities but also can be seen as "keeping up with the Jones". Duck hunting, like many sports, can be very expensive. But someone who is committed

to duck hunting will see owning a customized duck boat from 4 Wynnes as a necessity and also attractive for a successful hunt.

Business Plan Objective

The objective of this business is to identify the Northwest Arkansas market viability for a customized duck boat manufacturing company. This analysis and evaluation is meant to provide a business prospectus for a successful and long-term company.

II. Product Services and Design

Introduction

Duck hunting, like many hunting activities, is a very specialized sport. To increase the opportunity for a successful hunt, a hunter must have all the best gear, equipment and boat. There appears to be a saturation of everything needed for the hunt except for a customized boat, which is readily available for hunters in Northwest Arkansas. It is important for the hunters to be prepared in all conceivable ways for the hunt since it can be quite time consuming. Therefore, the customized boat gives the hunter a “leg-up” on those who do not have the advantage of getting a manufactured boat to meet that person’s specification.

Design

The customization of a duck boat includes the interior and exterior of the boat. The interior needs to meet the needs of the hunter for convenience, comfort and reliability. Some of the options for interior customization include front deck options, colors and camouflage, and accessories. The standard features for 4 Wynnes Duck Boat include 8 Degree V-Bow and Hull

with Keel Saver, 36” Mid-Deck with storage, T-Lock Gunnel, Navigation Lights, 100 Ga. 5052 Alloy Hull, Diamond Plate Floor, All Aluminum Transom and Cobblestone Base Color. The starting price for our 15ft. model is \$3,083. Price adjustments are based on costs of add-ons and accessories. The following price charts display costs to the customer for each specific option and accessories for customizing their duck boat.

Deck Options	Pricing
High Deck	\$295
Low Deck	\$225
Mid-Deck	\$438
Mid/Storage	Standard option

*Based off Havoc Boats price sheet



High deck
48”









Low deck
42”



Mid Deck/Storage
36”



Mid Deck
36”

Colors and Camouflage	Pricing
Cobblestone 	\$300
Green 	\$300
Digital Tan 	\$312
Digital Green 	\$312
HD Timber Tan 	\$437
NatGear Black 	\$437

*Based off Havoc Boats price sheet

Accessories	Pricing
Light Panel	\$282
Cup/Shell Holder	\$66
Gun Box	\$505
OS Handle	\$60
Bow Rails	\$205
Logo Seats	\$196
Live Well	\$600
Sound System	\$250
Light Bar	\$281
Trolling Motor	\$167
Bilge Pump	\$156

*Based off Havoc Boats price sheet

Technology/Performance

The boat is built for durability and speed. In addition to durability and speed, the boat is more specifically built to maneuver through the thickest of timber and the shallowest of water and to outrun and outperform most other ordinary duck boats.

What makes this an exceptional boat is its design. The hull is grooved on each side for stability, speed and cutting through the water. The bottoms of the boats are riveted differently based on specific use and customer's preference.

Different Models

There are numerous models for building a duck boat. For convenience of the purchaser we have four specific models available. Each model has individual distinctions, but 4 Wynnes will primarily focus on #1 Duck Boat Model.

1. Duck Boat Model
2. The Phantom
3. DBST Model
4. MST Model

In addition to a customized boat, 4 Wynnes will offer four different models for the boat trailers. The following are options and prices for these models.

Trailer Options:

Basic Steel	\$1,416
Elite Steel	\$1,505
Basic Aluminum	\$1,670
Elite Aluminum	\$1,818

*Based off Havoc Boats price sheet

III. Industry Analysis and Competitors

Potential Customers

The potential customers fall into three categories: non-hunters/recreational, duck hunters and fishermen. The focus on non-hunters/recreational customers would also allow for

customization of boats including design, color and accessories. Requests for recreational uses would be easy to accommodate since the company has the ability and flexibility to create any design for a specific use. The focus on duck hunters would be the specialty of the company. As explained above the company would have extensive options for satisfying the most particular duck hunter. And the third customer would be the fisherman, who likewise could work with our design team in crafting a customized fishing boat.

Competitors

There are several competing boat manufacturing company who already have presence in Arkansas. These include War Eagle, Weldbilt, and Edge. None of these companies have a manufacturing site in Northwest Arkansas. So the customer NW Arkansas who wants a customized boat must either attempt to do it on-line or travel some distance for custom design.

Competitive Advantage for 4 Wynnes

	4 Wynnes	War Eagle	Weldbilt	Edge
One month turnaround	X			
Life-time warranty	X	X	X	X
Standard Audio	X			
Cutting-Edge Technology	X			X
Work-it-off Program	X			

Corporations

An advantage for this company in NW Arkansas is the possibility of retail sales at Walmart stores and distribution by JB Hunt. 4 Wynnes marketing strategy includes eventually contracting with Walmart to help increase sales and also with JB Hunt to make 4 Wynnes boats accessible all over the United States.

IV. Potential Population and Growth of Northwest Arkansas

There is no doubt that because of the population of Northwest Arkansas the startup business has great potential. In July 2015, there were approximately 491,000 people in Northwest Arkansas, primarily in Washington and Benton Counties. With an anticipated annual growth of 2.08%, this represents 11,000 new residents per year. There will be nearly 550,000 people by the year 2020.

Presently, Northwest Arkansas represents 16.5% of the total population in Arkansas. Since the growth rate in NW Arkansas is 2.08% compared to the rest of Arkansas, which is less than 1% annual growth rate, one can readily see the advantage of a new business in NW Arkansas. Growth in population is but one of the considerations for the 4 Wynnes boat business.

V. Two methods to estimate Potential Boat Buyers in NW Arkansas

The first method to determine potential boat buyers is to calculate the population of NW Arkansas and the number of boat purchasers for the past five years.

The Arkansas Department of Finance and Administration provides information about new boat purchasers on an annually basis. Records for the past five years of boat purchasing in Arkansas is a valuable tool for analyzing projections for the boat business. (For purposes of this analysis, an assumption is made that all new 16 ft. & under aluminum boat registrations are for new purchases.)

Year/ Aluminum Boats (16 ft. & under)

2011: 65,730

2012: 61,426

2013: 58,025

2014: 77,803

2015: 43,483

The total 16 ft. boats purchased during this five year period was 306,467 or 61,293/year in Arkansas. This number will assist in determining how many of these boats were purchased in Northwest Arkansas during the same five years.

As noted above, the population of NW Arkansas is approximately 16.5% of the total population of Arkansas. If this figure is also applied to the number of boats purchased statewide, it can be used to reasonably estimate the number of boats sold in NW Arkansas during the same time period. The total number of boats purchased state-wide (306,467) multiplied by the percent age (16.5%) of state-wide population generate a ball-park figure of the number of boats sold in NW Arkansas. $306,467 \times 16.5\% = 50,567$ boats for a five year period from 2011-2015. Dividing this number by 5 will give the annual yield of 10,113 boats purchased per year in NW Arkansas.

The second method to determine potential boat buyers is to determine the number of duck hunters to the number of duck hunters who own boats.

The number of duck boats purchased in NW Arkansas can be made by examining the number of duck hunters in Arkansas and then the number in NW Arkansas. The Arkansas Game and Fish Commission keeps the records for the number of Duck Stamps purchased each year. Each hunter is required to purchase duck stamps to be a legal hunter. This will help determine the number of duck hunters in NW Arkansas and the number of duck boat purchases in the same area.

Number of Duck Stamps (State and Federal) Sold for a Five-Year Period

2011: 136,588

2012: 149,583

2013: 160,713

2014: 172,486

2015: 181,582

The total for this five year period was 800,950 stamps sold. (An assumption is made at this point to equate number of stamps to an equal number of hunters.) The average for the five years was 800,950 divided by 5 or 160,190 hunters per year.

Once again using the 16.5% for NW Arkansas it can be determined with some certainty that 160,190 state-wide hunters multiplied by 16.5% will determine the number of hunters in NW Arkansas or 26,530 hunters per year. To determine the number of duck boat owners to the number of duck hunters one must use the following formula:

Total of Duck Hunters Annually divided by Total of Duck Boats Sold Annually

Taking our previous figures of 160,190 hunters average divided by 50,567 boats sold = 3.16 hunters. The final analysis is for every 3 duck hunters one duck boat is owned/purchased. Taking the average of number of annual hunters in NW Arkansas of 26,530 and divide it by 3 hunters per boat, it can be determine how many boat buyers there are annually. These calculations are 26,530 divided by 3 = 8,843 boats/year.

Using our two different methods to determine the number of annual boat sales for NW Arkansas provides valuable numbers for our business. The population x boat purchasers = 10,113 per year while our analysis of duck hunters x boat purchasers = 8,843 per year. An average of these two figures indicates that approximately 9,478 boats are purchased annually in NW Arkansas.

An estimate of future growth in boat sales can be made based on the following information. If the population growth in NW Arkansas is 2.08% per year, we can take that figure and multiply it time the number of boats sold annually or 9,478. ($9,478 \times 2.08\% = 197$) It is anticipated and calculated that for the next five years in NW Arkansas that the number of boat sales will increase from 9,478 to over 10,500.

Financial projections will be made based on the following figures:

Year	Estimated # of Boat Sales	High (5%)	Low (5%)
2016	9,675	10,159	9,191
2017	9,875	10,369	9,381
2018	10,080	10,584	9,576

2019	10,289	10,803	9,775
2020	10,503	11,028	9,978

4 Wynnes projects acquiring at least 10% of the market share in its first year of operations. With the population growth of 2.08% annually, 4 Wynnes market share of 10% will also increase proportionately.

VI. Capital Requirements:

Building and Facility

The real estate market in NW Arkansas provides opportunity for 4 Wynnes either to purchase real property and construct a building to our specific needs or to locate and existing building that meets the requirements and needs of our business.

The location of the facility is not as important as the building itself. The business requirements and the facility sketch call for a minimum of 15,000 square feet. A building has been located near Hwy 540 centrally located between Springdale and Bentonville. After negotiations with the owner 4 Wynnes has agreed to a ten-year contract with another automatic renewal for another ten years for \$4,000 per month. The initial investment for this property for rent alone will be \$8,000 or a \$4,000 deposit and \$4,000 for the first month. The rent will be payable by the fifth of each succeeding month for a period of 120 months.

The owner of the property has agreed to allow 4 Wynnes to make improvements to the property to include constructing specifics inside the building to creating staging areas for each of the construction phases for the manufacturing of the boats. This includes all of the necessary

equipment and machinery for manufacturing of all aspects of constructing the boats. The initial investment for the equipment and machinery is \$500,000 based off data received from the Boat Center in Rogers, Arkansas (Stancil).

In addition to the building meeting specifications for the construction and manufacturing of the duck boats, the back of the building will have a large metal door opening for loading and unloading the boats. The back lot of the building will include a one-acre fenced in area for storage of completed boats for retail sales. Once the business is in full operations, the lot will house over 100 boats for sale or pickup for customers who have ordered customized boats. The parking lot and storage area will cost approximately \$75,000, which will include asphalt and fencing. An additional \$10,000 is necessary for signage and lighting all outside areas.

The total amount for the building, facility, equipment, machinery, materials and first month move-in is \$493,000. 4 Wynnes has made arrangements with First National Bank of NW Arkansas for an initial business line of credit for \$750,000 at 4.5% annual interest. Payments on this line of credit will be on an annual basis to be determined by 4 Wynnes and First National Bank. The Bank has agreed to automatic renewal of the line of credit as long as a minimum annual payment of at least the interest due at the time. For the first year a minimum payment of \$22,185 ($\$493,000 \times 4.5\%$) will be due.

The utilities for the facility have been estimated at 15% of the monthly rent payment or \$600/month. 4 Wynnes have estimated that \$5,000 per month will cover the costs for rent and utilities. To insure the facility, equipment and machinery, 4 Wynnes has been issued an insurance policy, which includes a general liability clause (for personal injury on the premises) for an annual premium of \$12,000 or \$1,000/month.

Monthly Expenses for 4 Wynnes:

Rent:	\$4,000
Utilities:	\$ 400
Insurance	<u>\$1,000</u>
Total	\$5,400

A Summary of Initial Costs for 4 Wynnes is a following:

Facility Improvements and machinery:	\$400,000
Parking Lot and Lighting:	\$ 75,000
Signage	\$ 10,000
First Month's Expense	<u>\$ 8,000</u>
Total	\$493,000

Employees

4 Wynnes has projected the need for 8-10 employees. There will be positions for facility manager, operations manager, quality control manager, an account and payroll manager and 2 skilled laborers and 2 unskilled laborers.

Facility Manager:	\$ 48,000
-------------------	-----------

Operations Manager: \$ 45,000

Quality Control Manager: \$ 40,000

Payroll Manager: \$ 35,000

2 Skilled: \$18/hour \$ 74,880 (2hrs.labor/boat x \$18 = \$36/boat x 2employees = \$72/boat x 4boats/daily = \$288 x 260 days (5 day work weeks)) *based off average hourly rate of aluminum welders

2 Unskilled: \$10/hour \$ 41,600 (2hrs.labor/boat x \$10 = \$20/boat x 2 employees = \$40/boat x 4boats daily = \$160 x 260 days (5 day work weeks))

Total Payroll for Employees \$284,480

Taxes and Benefits \$99,568 (35% of total payroll)

Capital requirements for 4 Wynnes can be summarized as follows: To create a manufacturing facility to meet the specifications to build boats and to be able to sale on the retail and customize market an initial investment of \$493,000 is necessary. In addition to the initial investment, 4 Wynnes has committed to staffing the facility with top-notch employees with an annual payroll of \$284,480. The company believes that these investments will meet the market demands for manufacturing what it believes will become the #1 boat manufacturing company in NW Arkansas.

VII. Financial Projections:

4 Wynnes financial projections over the next five years contemplates an aggressive advertising program which will include a budget for marketing on several medias - television, website, Facebook, Twitter and radio. The budget for our marketing strategy will start at 5% of

our annual revenue. The marketing plan projects to capture a minimum of 10% of all boat sales in NW Arkansas. The following projections can be made for the number of boat sales by 4 Wynnes for a five-year period assuming a 10% share of the market.

Year	# Boat Sales – NW Ark.	10% Capture Sales 4 Wynnes
2016	9,675	967.5
2017	9,875	987.5
2018	10,080	1,008
2019	10,289	1,028.9
2020	10,503	1,050.3

The minimum cost for a 4 Wynnes duck boat is \$2,890 plus the cost to build a basic trailer of \$1,210 for a total of **\$4,100**. The average cost of a duck boat includes another \$1,200 worth of accessories; therefore, the average duck boat will cost 4 Wynnes **\$5,300**. These numbers are based off the basic 1550 DB model. Prices will vary depending on length and width, type of paint and accessories.

4 Wynnes production cost breakdown to build one 1550 DB model:

Aluminum (30sq. ft @ \$91.02 per sq. ft)	\$2,730.5
Paint (Gallon of Sherman Williams)	\$47.50
Labor (2 hrs. for 2 skilled/2 hrs. 2 unskilled)	\$112
Trailer	\$1,210

*each variable is subject to change

Assumption:

- Customers do have the option to only purchase a boat. For the purpose of calculating the financial projections, we are assuming that each customer will purchase a boat as well as a trailer.

The minimum revenue for a 4 Wynnes duck boat is \$3,083 plus the cost of a basic aluminum trailer of \$1,416 for a total of **\$4,499**. The average revenue of a duck boat includes another \$1,500 worth of options or accessories. The total revenue of an average duck boat is **\$5,999**. These prices are based off the average pricing of competing brands.

Minimum Profit:

Year	Revenue (\$4,499)	Production Cost (\$4,100)	Gross Margin	Period Cost	Net Profit
2016	\$4,352,783	\$3,966,750	\$386,033	\$373,855	\$12,178
2017	\$4,442,763	\$4,048,750	\$394,013	\$374,253	\$19,760
2018	\$4,534,992	\$4,132,800	\$402,192	\$374,662	\$27,530
2019	\$4,629,021	\$4,218,490	\$410,531	\$375,079	\$35,452
2020	\$4,725,300	\$4,306,230	\$419,070	\$375,507	\$43,563

Average Profit:

Year	Revenue (\$5,999)	Production Cost (\$5,300)	Gross Margin	Period cost	Net Profit
2016	\$5,804,033	\$5,127,750	\$676,283	\$388,367	\$287,916
2017	\$5,924,013	\$5,233,750	\$690,263	\$389,066	\$301,197
2018	\$6,046,992	\$5,342,400	\$704,592	\$389,782	\$314,810
2019	\$6,172,371	\$5,453,170	\$719,201	\$390,513	\$328,688
2020	\$6,300,750	\$5,566,590	\$734,160	\$391,261	\$342,899

* Period cost include: fixed salaries, rent, utilities, insurance, bank payment, marketing, taxes & benefits

The profit represents a minimum of 10% of the market share of boat sales in NW Arkansas. Future marketing strategies indicate potential growth at a rate much greater than 10% of the market share. The potential for 4 Wynnes is directly related to the population and per capita income growth in NW Arkansas, which, at least for now, appears to be a secure investment. Unfortunately, 4 Wynnes has little control over the migration of ducks each year into Arkansas. Otherwise, an investment in a 4 Wynnes Duck Boat certainly will provide many years of pleasurable and, hopefully, successful duck hunting.

VIII. Conclusion

A careful examination of NW Arkansas - its growth in population and per capita income – is a key indicator for the success of a new company that manufactures boats, customizing specifically for the avid duck hunter in Arkansas. There are very few competitors in NW Arkansas for customized duck boats and none who offer the service and warranty of 4 Wynnes

Boat Manufacturers of NW Arkansas. In addition to the service the proximity of the manufacturer to the potential growth of duck hunters in NW Arkansas, this company is ideally positioned to claim at least a 10% market share of the new boat owners.

The bright future of population growth and income growth are excellent indicators that a regional boat manufacturer will be successful. 4 Wynnes offers a unique combination of customized boats at a reasonable and competitive price. If the duck hunter will travel to Central Arkansas, Eastern Arkansas and South Arkansas to buy a boat, to bring the boat to the hunter should produce more sales and service in NW Arkansas. 4 Wynnes is positioned to take full advantage of the expanding duck boat market in NW Arkansas.

Just ask yourself – in which direction will the boat market move? – all indicators point to the grand opening of 4 Wynnes Boat Manufacturers of NW Arkansas and the future success of bringing the boats to the customers of Northwest Arkansas.

Citations

"Aluminum Welding Hourly Rate - PayScale." Aluminum Welding Skill Wages, Hourly Wage Rate. Web. 21 Apr. 2016.

<http://www.payscale.com/research/US/Skill=Aluminum_Welding/Hourly_Rate>

Arkansas Department of Finance and Administration. *ARIS- Count on active boats*. 2011-2015. PDF File.

Arkansas Game and Fish Commission. *Five Year Comparison of License Sales, 2011-2015*. Hard Copies. 15 February 2016.

Charles S. Gascon, Michael A Varley. "Metro Profile: A Tale of Four Cities: Widespread Growth in Northwest Arkansas." Federal Reserve Bank of St. Louis. The Regional Economist, January 2015. Web. <<https://www.stlouisfed.org/publications/regional-economist/january-2015/metro-profile>>

"Havoc Boats Wreckin Havoc." Havocboats.com. 4 January 2016. Web.

<<http://www.havocboats.com/products/duck-boats/>>

How to Set a Marketing Budget That Fits Your Business Goals and Provides a High Return on Investment | The U.S. Small Business Administration | SBA.gov." How to Set a Marketing Budget That Fits Your Business Goals and Provides a High Return on Investment | The U.S. Small Business Administration | SBA.gov. Web. 16 Apr. 2016.

<<https://www.sba.gov/blogs/how-set-marketing-budget-fits-your-business-goals-and-provides-high-return-investment>>

Stancil, Jim. Boat Center. Personal Interview. 25 March 2016.

