

RoMow

A Business Plan

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Executive Summary

In this report we will cover the business plan we hope to implement as the founders of RoMow. This includes how the business will operate, the products and services it will offer, and how we plan on making this business a success.

Our company is attempting to produce an autonomous lawn mowing system to work with the customer's existing lawn mower. The product itself will be a platform, on which the lawnmower rides, but rather than being manually pushed it will be controlled autonomously allowing the customer to just sit back and watch. This product was designed to meet a couple needs that we identified in the marketplace. We wanted to create a product which makes taking care of the lawn a task which those, who lack much mobility, can accomplish with ease. At the same time we wanted to create something that the common homeowner or small business owner could appreciate as well. Finally we think that hobbyists would appreciate the RoMow as well. They could program some of their own protocols and paths into the on-board computer or use the included remote control.

The biggest issue with launching this product is the relatively small market we are trying to enter. However there has been lots of promising growth in the market of robotic lawnmowers. Sales for robotic mowers have increased by thirty percent, in Europe, over the previous year and predicted that sales would increase at a similar rate until 2015. We are hoping that Americans are soon ready for robotic lawnmowers just as Europe is.

We hope to use a couple key strategies to make this product a success in the U.S. First of all we have to cater to the needs and desires of the homeowner because they comprise the largest market portion of lawnmower purchases. Secondly, the cost of production must be kept low enough to keep the selling price low in order to offer a competitively priced alternative to a big-company robotic lawn mower. Lastly we are going to try to sell our product through home improvement stores to improve the company's credibility and to ease the worries that the customers may have.

The legal form of RoMow is going to be a limited liability company (LLC) and will be structured with a management team, each overseeing a different division of the company. There will be four divisions each overseen by an engineer: Production, mechanical design, electrical design, and sales. For this business endeavor our company will require \$500,000 to cover building rental, equipment, initial building materials and as well as salaries.

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1. Vision and Mission Statement

1.1 Entrepreneur's Vision for the Company

The vision of RoMow is to become the foremost company in the area of autonomous lawn care equipment. To do this we want to develop production processes which decrease the overall costs of our products to make them affordable for the general populous, and in turn sell more of our products to make the company a sustainable venture. We at RoMow recognize that in order to stay competitive in the market, our products must be innovative while maintaining a cost level that is more enticing than the competition.

1.2 Values and Principles

At RoMow we base all of our designs and business model around a couple of key design norms, namely transparency and caring. We want customers to be aware of all the capabilities, and also the dangers of using an autonomous piece of equipment. RoMow also designs based on caring. We want our products to be accessible to the people who need them the most, such as those who are elderly or disabled but still want to live independently. Another part of caring is valuing safety above everything. Using a lawnmower is dangerous, and we want to make the operation of one as safe as possible.

2. Industry Profile and Overview

2.1 Industry background and Overview

The lawn care industry has been around for quite some time but the area that RoMow wants to break into is a relatively new part of the industry. We wish to become the foremost in the autonomous lawn mower industry. The industry is made up of companies who already produce standard lawn mowers. Their autonomous model is a secondary product to them, making production an expensive venture that translates to a high cost to the customer. The characteristics of these designs are aesthetics, accuracy and environmental impact. To succeed in the marketplace our product will have to be a combination of these factors as well as priced competitively in the small market.

2.2 Major Customer Groups

2.2.1 Elderly and Disabled

The primary group of customers that RoMow wants to market toward is those who are disabled or elderly. We want to design a product which makes taking care of the lawn a task which those who lack much mobility can accomplish with ease. This customer base would require a product that needs little maintenance, and one that is easy to control. These customers most likely will not have the disposable income that others might have, so developing an affordable product is crucial to our success with this market.

2.2.2 Store and Small Business Owners

Traditionally many stores that own land have a smaller area of grass they need mowed each week, which has been done by a landscaping company. This product would be ideal for them especially if the savings could pay for the cost of the mower in a short period of time. Similar to the previous group, small business owners want a product that is simple to use and mows the grass like it is supposed to when it is supposed to. They could save a large sum of money over the lifespan of the mower, which is mostly like the most important thing for them.

2.2.3 Hobbyists

This product could also be marketed to the hobbyist. The product will have the option to be controlled via remote-control which the hobbyist would enjoy. The design will have the capability to be modified by those who have some programming experience. They would be able to modify the path the mower takes, which would make the RoMow even more flexible for numerous different applications.

2.2.4 Homeowners

The RoMow also would be perfect for the general population who is tired of mowing their own lawn. A homeowner is looking for a product that is safe to operate around children or pets, one that is reliable and doesn't require much maintenance and something that does not require much expertise to operate but is still flexible for many applications. Price will likely be a big factor to these customers, so an affordable product that meets the other needs is necessary to reach this customer base.

2.3 Regulations and Restrictions

Currently, there are no restrictions on autonomous or remote controlled yard equipment for residential usage. There are restrictions on the design of the radio and signaling frequencies, so as to not interfere with planes or other communications systems.

2.4 Significant Trends

The market for robotic lawn mowers is growing by leaps and bounds in recent years, especially in Europe. The products are marketed towards homeowners who are "tired" of mowing their own lawn. The growth in this market has increased due to the growing number of companies entering the marketplace, whether small robotics companies or large equipment enterprises such as John Deere and Husqvarna. With the increase of competition, the prices have begun to shrink to the point where owning a robotic lawn mower is an economic option for homeowners.

2.5 Market Growth Rate

As previously mentioned, the market for robotic lawnmowers is increasing at quite a pace. In June of 2013, Robotics Business Review reported that sales for robotic mowers have increased by thirty percent in Europe over the previous year, and predicted that sales would increase at a similar rate until 2015. Currently, robotic lawn mowers make up 6% of all mowers sales in Europe. The total market for them in Europe is 170 million dollars. The market share in the U.S. is a bit harder to find because the majority of sales are for gas-powered walk behind mowers, unlike Europe where electric lawn mowers are much more common. In 2002 Husqvarna entered the American market but pulled out a year later because it determined the market was not yet ready. It appears that America is nearing a point where consumers will want a robotic lawnmower.

2.6 Barriers to Entry

There are a few factors which might make entry into the market a bit difficult for RoMow. The companies that already exist in the market are quite large, and have many resources and production capabilities which would be hard to compete with on a strictly cost basis. If RoMow wants to distinguish itself from the other options in the market there will be a larger cost associated with the technology development and implementation which is going to raise the price of our product. Another factor in the market is name recognition. Customers prefer buying lawn care equipment from companies that they already know of. If RoMow is to succeed in the market, it will need to develop a credible name before it can become a profitable business.

2.7 Key Success Factors in Industry

To succeed in this marketplace it will be crucial to focus on the needs and desires of the typical homeowner. The vast majority of the money in the market is from this customer base. To succeed in the United States, RoMow must focus on reliability, ease of maintenance, safety features, and performance. The mower must first cut the grass as well as a typical lawn mower. It also would require the battery life to mow a standard sized lawn on one charge. If these two requirements are not met the product will not be able to succeed.

2.8 Future Outlook

The future outlook in this industry looks very promising for a couple important reasons. People are becoming busier and have less desire to spend time mowing the lawn. Also, with new companies entering the marketplace, competition will drive the prices down and the ingenuity will increase. Finally with the advances in battery life, programming, and location services available to the general public, the ability to deliver a flexible and highly functional product will be much simpler.

3. Business Strategy

3.1 Desired Image and Position on Market

At RoMow, we wish to compete in the market by creating a product at a low cost to the customer which performs the intended function. To gain a hold in the market the RoMow will be a low cost alternative to other robotic mowers out there. As sales and market share grow the quality of the RoMow can increase due to added volume.

3.2 Company Goals and Objectives

3.2.1 Operational

The team at RoMow has the goal of designing a product to balance quality of function and materials with affordability. This design will implement technology that our competition does not yet use to compete on uniqueness.

3.2.2 Financial

RoMow is going to be a LLC (Limited Liability Corporation). To provide the owners with financial security, the profits of the initial design of the RoMow will be used to pay off loan debt accrued at company startup. The second generation product will not require much more R&D because of the lack of technological upgrades to it.

3.3 SWOT Analysis

3.3.1 Strengths

One of the most important strengths of the company is our product. It will be competitively priced and simple, yet durable in design. This will translate into customer satisfaction with our product, giving RoMow a good name in the market. Another strength of the company will be the initial size of it. Most of the company's capital can go towards the production of the product, especially early on. Also, changes in the market will be easier to adapt to. Finally, our product will be made in the United States and can be marketed as such. Much of the competition is based overseas and the profits are going to large corporations. Customers will appreciate the "small" and "homegrown" aspect of our company.

3.3.2 Weaknesses

One major weakness in the marketing of our product arises in the relatively small nature of the market itself at the moment. Robotic lawn mowers are not a big portion of the lawn care market so to establish a presence in it, aggressive marketing techniques must be employed. Initially the profit margin for the product will be low due to the small size of the company and the price point of the product.

3.3.3 Opportunities

The main opportunity for growth of the company is to pursue the residential market. As robotic lawn mowers become more prevalent in the market, homeowners will become more comfortable with the idea of having such a product. To initiate this market growth heavy marketing towards safety and ease of use will be done.

3.3.4 Threats

The biggest threat to the company will be having the competition adopt similar technology to ours. This would remove the advantage the RoMow has over other products in the market. Another threat to success is having other companies lowering the price of their product to a point which reduces the importance of the uniqueness of the product in our customer's eyes.

3.4 Competitive Strategy

3.4.1 Cost Leadership

The company is trying to become the leader in the automated lawn mowing market by creating a product which is unique in its programming and in usage capabilities. We will compete in the market by offering a product with more customer friendly features, at a price which can compete with the prices of the competition's products. As our market share broadens we hope to maintain the same price range while increasing the visual appeal and adjustability of our product.

3.4.2 Focus

RoMow is going to be designed with the customer in mind. This means the product will be designed for how most customers would want it to be used. This means that the platform will be designed to be used with a standard range of residential push mowers. The safety features of the product will be designed to protect the operator, and their property. In the future RoMow could expand into commercial applications, but the greatest growth potential is in the residential market.

4. Company Products and Services

4.1 Description

The Ro-Mow is a remote control platform that can be mechanically attached to a variety of push lawn mower models. It includes a wireless controller, the platform itself, and a cable for battery charging. The platform is capable of remote control operation within a half-mile range, and advanced models will contain a camera that feeds video to a screen on the controller. This allows for the user to steer the mower without it being directly in sight. This is a truly unique product that is not currently on the market.

4.1.1 Warranties and Guarantees

The Ro-Mow team guarantees that this product will withstand any collision that may result from operation as it is durable enough to survive any impact that can come from its operating speed. An optional one-year warranty will be offered that will cover any electronic equipment failures within the product. We are not, however, responsible for any damages done to the actual lawn mower during operation.

4.2 Future Product Offerings

The team is working to develop an extension of this product that features automatic lawn mowing. With this version of the Ro-Mow, the user will be able to save a successful mow to the platform's memory. The platform can then be told to mow along the same path that it did under user control.

5. Marketing Strategy

5.1 Target Market

Our product will address a problem that is faced by individuals who either cannot mow their property easily, or simply do not enjoy doing so. This might include people in their fifties or sixties who own a push lawnmower, but find it too physically demanding to walk behind it for hours at a time. This product is also targeted towards anyone who owns property and enjoys using technology to make household tasks simpler to complete.

5.2 Motivation to Buy

This product is practical and a cool item to own at the same time. Purchasing it will give the user a clear benefit by removing the arduous task of walking behind a push lawn mower for extended durations of time. While safety precautions must always be observed, use of the RoMow can even be made into a hobby for those who find interest in remote control vehicles.

5.3 Market Size and Trends

As mentioned in the industry profile, there is an existing market for robotic mowers in Europe, but the market is still essentially non-existent in the US. However, since we feel consumers in America are nearly ready for electric lawn mowers rather than gas-powered versions, we plan to establish a presence in the US to begin with. The team's goal at RoMow is to be one of the main driving forces in the growth of this market.

5.4 Advertising and Promotion

The team has decided to dedicate a large budget to advertising and promotion because of the thin market in the United States. The goal is to convince people on the receiving end of the advertisements that a remote control lawnmower is a legitimate alternative to the widely accepted gas-powered mowers. We will be dedicating \$150,000 annually to producing both internet and television advertisements, as well as having our products promoted by home-improvement stores including The Home Depot, Lowe's, and Menards. Since a remote-control lawnmower is a thought provoking idea, word-of-mouth should be another contributor in the process of generating publicity.

5.5 Pricing

The team has a moderate amount of flexibility when it comes to pricing because of the thin market in the US. Through financial analysis, it was determined that the standard RoMow lawnmower could be sold for \$1,000 with a gross profit margin of 51.15% in the first year. Since the product will be sold

in bulk to home-improvement stores, the consumer will be able to buy the mower for a price marked up from the even \$1,000. The prices of robotic lawn mowers in Europe range from \$1,300 to over \$2,000, so the price of the RoMow mower for consumers in the US will likely be lower than most of the mowers that exist overseas. Since we will be mainly selling to home-improvement stores, the unit price was determined with the assumption of bulk purchases. Therefore there will not be a discount policy at startup.

5.6 Distribution Strategy

As mentioned earlier, the team's primary method of distribution is through bulk sales to home improvement stores, specifically The Home Depot, Lowe's, and Menards. Since these stores have thousands of locations in the country, we will start by selling the product to a fraction of the locations of each store since we will not be large enough to provide inventory to every retail location. This approach will test the market response and give feedback on the feasibility of expanding to eventually make our product available nationwide.

6. Competitive Analysis

6.1 Existing Competitors

Currently there is no mower dock system available. There are, however, several different robotic lawnmowers on the market.

6.1.1 Strengths

The companies that have robotic lawnmowers also have experience in the field, and the quality of the work they provide is strong. They currently have lines in place to make their products and could potentially be a threat to our product.

6.1.2 Weaknesses

The weaknesses of the current competitors are that they have either a very expensive product, or they have "do it yourself" projects that many people do not feel qualified to do. Our system would have very minimal adjustment to the original mower allowing users to feel comfortable operating our product. Additionally, the simplistic design would cause people to feel more confident with our product and using it in the future.

6.2 Potential Competitors

The companies currently making totally enclosed automated systems would be a significant threat to business. If the market proved to be lucrative they would have the facilities and space to easily compete. The impact on the business would effectively allow them to be able to compete at lower prices and drive this product out of existence. However, the use of Patents would allow the company to maintain a monopoly.

7. Management Team and Operations

7.1 Key Employees

The management team will be comprised of Nathan Terschak, Dustin Brouwer, Andy Frandsen, and Jordan Newhof. Each member will cover a different division of the company in order to have a strong control of the company and its leadership. Nathan Terschak will lead the electrical engineering

division. This division is small but has potential to grow as more electrical components can be added to affect performance of the RoMow. Andy Frandsen will lead the mechanical design division. He will be in charge of a small division that will design frames for the RoMow that will be able to fit different mowers and house current and future electronics. Dustin Brouwer will lead the manufacturing engineering division. This will include layout improvement, manufacturing machinery upgrades, process control, and quality management. Under Dustin will be Scott Hollander, an Advanced Manufacturing Producibility Engineer. He will help Dustin establish a strong manufacturing base for the company. Jordan Newhof will lead the sales, marketing, and HR departments. He will focus in sales, however he will have authority over marketing and HR. There will be two hires underneath Jordan initially, Mary Jane and Anna Banana. They will cover marketing and HR respectively. They are professional Calvin grads who would do well in the company. They will also help bring a gender balance to the leadership of the company. For simplicity on the sales front, only large home improvement stores (Menards, Lowes, and Home Depot) will be vendors.

7.2 Compensation

The company will offer the industry average for the given experience for standard salary positions. For hourly labor, the company will offer \$15 per hour. Employees will be offered standard practice insurance.

7.3 Legal Form

The legal form of this company would be a Limited Liability Company. This would be necessary as the product would be housing potentially dangerous lawnmowers. In order to protect personal assets for the owners from possible lawsuits, this option has been chosen for the legal form of the company.

7.4 Decision Making Authority

All major decisions regarding the company structure, company function, and non-production raw material expenditures over \$2000 need to be approved by two of the managers. Non-production expenditures exceeding \$5000 requires three approvals, and exceeding \$10000 requires all four. Expenditures less than \$2000 need one manager approval. For small decisions the company structure is shown in the following figure.

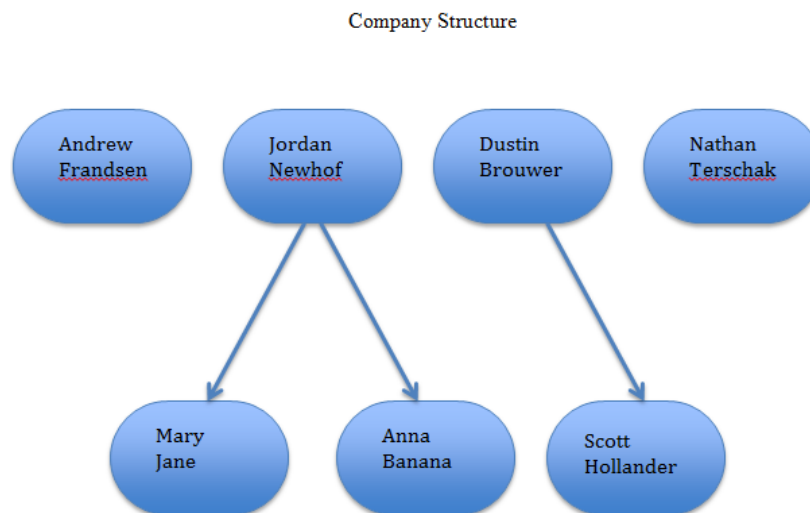


Figure 1 - Company Structure Diagram

7.5 Facilities

7.5.1 Location

The ideal location for our manufacturing facility would be near Albany, Georgia. This area of the United States is home to many elderly people. This is also a fairly central location to the region. We believe they would benefit most from our product. Additionally, the south will have longer mowing seasons. This would make the investment more desirable for those who have a longer season to mow. Additionally, being near a smaller city allows for a large group to choose from for employees.

7.5.2 Layout

This layout is designed to utilize a lean production scheme. The supplies come in the dock, go where they are needed, the production floor converts them, and then they are ready to be sent out the door or put into storage. The maintenance shop is next door to the production floor to assist with any problems. High voltage power systems will be focused on the center as the production floor will have welders, and the maintenance shop may also need high voltage equipment. The offices are nearby so the engineers can be called out quickly to the production floor in quality or production issues.

7.5.3 Production Floor

At Electrical Build 1 the components will be wired together and prepared for mounting. At Electrical Build 2 the components will be mounted onto a bracket that will be easily mounted in Component Housing 2. Component housing 1 will make the structural housing to protect the electrical components. In step 2 the electrical parts are mounted in the protective housing. After the frame is welded and the housing is ready, the final assembly will fasten the two parts together, attach the wheels, and test the product. The output stream is nearest the dock in order to have minimal wasted energy for moving product.

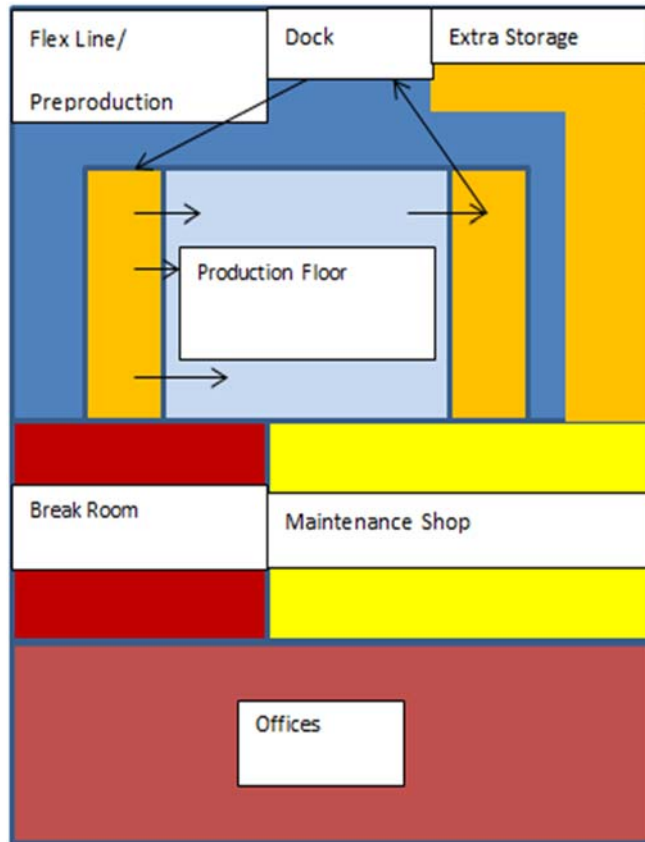


Figure 2 - Plant Floor Plan

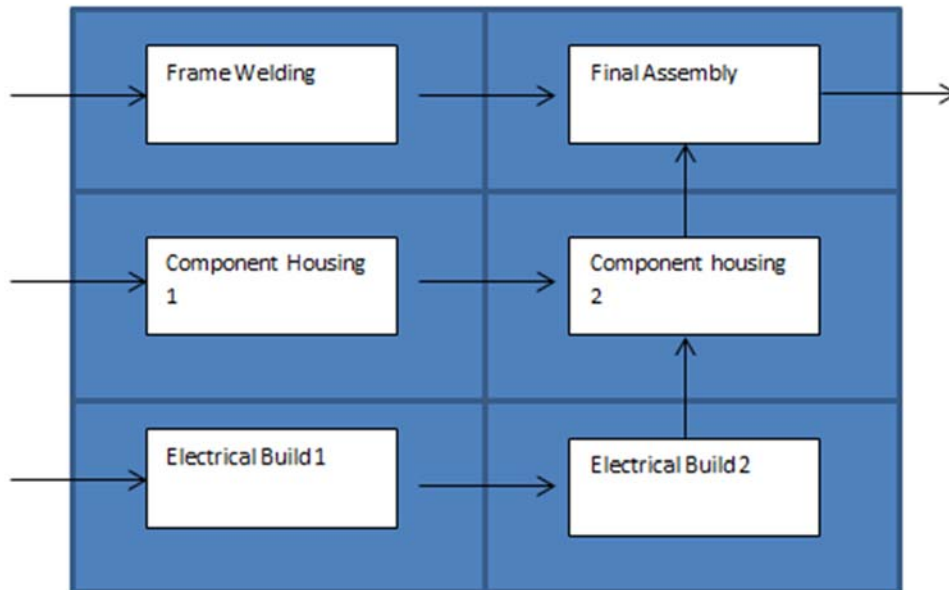


Figure 3 - Production Floor Plan

7.6 Capacity Issues

Currently there will not be capacity issues as there will only be a need to make approximately one platform per two hours initially and one platform an hour after year three. The preproduction and flex line can also take off some of the stress if necessary.

7.7 Key Supply Chain Components and Costs

The key supply chain components are relatively widely made. Square steel tubing, Arduino microcomputers, batteries with chargers, electrical motors, welding material, and RF transmitters all have many manufacturers or similar products from other manufacturers. This will keep the costs competitive and will not put the company at risk should a supplier go under. The cost of steel will be approximately \$10 per unit. The total cost of the electrical components will be approximately \$250 per unit.

8. Financial Forecasts

8.1 Key Assumptions

The financial analysis is supported by some key assumptions. Some financial assumptions include an evenly distributed cash flow, 10% interest rate on debt, and capital on sales is the expected amount received from sales each year from selling each unit at \$1,000. Assuming evenly distributed cash flow gives simplified calculations that should not significantly distort the values of a realistic cash flow analysis. Additionally, a 10% interest rate on debt realistically varies depending on economic factors, however a conservative interest rate was used due to uncertainties with future interest rates. Research shows a typical interest rate for \$500,000 and above to be 4.3%. Other assumptions can be summarized in the tables below.

Table 1 - Fixed Operating Costs

Building	-
Advertising	150,000
General and administrative salaries	500,000
Selling	10,000
Total	660,000

Table 2 - Variable Operating Costs

	Year 1	Year 2	Year 3
Sales commissions	100,000	150,000	225,000
Shipping Costs	300,000	450,000	675,000
Total	400,000	600,000	900,000

Table 3 - Variable Costs of Goods Sold

	Year 1	Year 2	Year 3
Direct Materials	460,000	695,000	1,042,500
Direct Labor	230,400	345,600	460,800
Variable manufacturing overhead	10,000	10,000	10,000
Total	700,400	1,050,600	1,513,300

Table 4 - Fixed Costs of Goods Sold

Manufacturing Facilities	5,000
Manufacturing management salaries	90,000
Benefits	100,000
Rent	81,600
Total	276,600

Table 5 - Material Cost

	Year 1	Year 2	Year 3
Steel	10,000	20,000	30,000
Motors	100,000	150,000	225,000
Batteries	150,000	225,000	337,500
Electronics	200,000	300,000	450,000
Total	460,000	695,000	1,042,500

Table 6 - Units Sold

	Year 1	Year 2	Year 3
Units Sold	2,000	3,000	4,500

The key assumptions being made considering price and demand are that RoMow LLC will produce 2000, 3000, and 4500 units in consecutive years. All units will be sold immediately after fabrication, and the entire inventory will be sold as well. Each unit will be sold for \$1,000. The increasing sales revenue correlates to introducing the RoMow into a market not yet available. With advertising, we will be able expand the market and support an increase in sales and revenue.

8.2 Financial Statements

8.2.1 Income Statement

The income statement presented in Table 7 shows the financial expectations of the first 3 years. The most important numbers to notice is the Net Income after Tax. Given the key assumptions, the first year RoMow LLC will lose money in the first year due to introducing our product into a new market. Once the market is established, the sales will increase and RoMow LLC will become profitable.

Table 7 - Income Statement

RoMow LLC			
Pro-Forma Statement of Income			
	Year 1	Year 2	Year 3
Sales revenue	2,000,000	3,000,000	4,500,000
Variable Cost of Goods Sold	700,400	1,050,600	1,513,300
Fixed Cost of Goods Sold	276,600	276,600	276,600
Depreciation	4,287	11,634	16,881
Gross Margin	1,018,713	1,661,166	2,693,219
Variable Operating Costs	400,000	600,000	900,000
Fixed Operating Costs	660,000	660,000	660,000
Operating Income	(41,287)	401,166	1,133,219
Interest Expense	25,000	45,000	25,000
Income Before Tax	(66,287)	356,166	1,108,219
Income tax (40%)	(26,515)	142,466	443,288
Net Income After Tax	(39,772)	213,700	664,931

8.2.2 Balance Sheet

The balance sheet shows the current assets and liabilities of the company. Assuming that the customer pays in cash rather than credit allows for a \$0 accounts receivable amount. Below in Table 10, shows these values. Currently the company has fewer assets than liabilities; in the future the assets should be a more realistic value consistent with typical companies.

Balance Sheet			
Assets	Year 1	Year 2	Year 3
Cash	(39,772)	213,700	664,931
Accounts Receivable	-	-	-
Inventory	460,000	695,000	1,042,500
Total	420,228	908,700	1,707,431
Long-term Liabilities			
Leasehold			
Improvements	10000	0	0
Accumulated			
Depreciation	4,287	11,634	16,881
Total	14,287	11,634	16,881
Liabilities			
Accounts Payable	460,000	695,000	1,042,500
Annual Expenses	936,600	936,600	936,600
Total Current Liabilities	1,396,600	1,631,600	1,979,100
Long-term Liabilities	14,287	11,634	16,881
Total	1,410,887	1,643,234	1,995,981

8.2.3 Cash Flow Statement

The cash flow statement shown below in Table 8 highlights the areas where cash will be spent and received. The significant values to notice in this statement are the Increase (decrease) of borrowed funds. The payback period is 4 years.

Table 8 - Cash Flow Statement

RoMow LLC Pro-Forma Statement of Cash Flows			
	Year 1	Year 2	Year 3
Beginning Cash Balance	-	434,515	529,848
Net Income After Tax	(39,772)	213,700	664,931
Depreciation expense	4,287	11,634	16,881
Invested Capital (Equity)	-	-	-
Increase (decrease) in borrowed funds	500,000	(100,000)	(300,000)
Equipment Purchases	(30,000)	(30,000)	(30,000)
Ending Cash Balance	434,515	529,848	881,661

8.3 Break-even Analysis

The break-even analysis is highlighted in Table 9 below. According to these calculations, RoMow LLC will break-even when the sales revenue reaches a little over 2 million. This break-even point is calculated based off of a unit price of \$1,000. RoMow is optimistic that the sales will increase consistently to make up for the lack of sales in year 1.

Table 9 - Break-even Analysis

RoMow LLC Break - Even Analysis			
	Year 1	Year 2	Year 3
Sales revenue	2,000,000	3,000,000	4,500,000
Less: Variable Costs:			
Variable Cost of Goods Sold	700,400	1,050,600	1,513,300
Variable Operating Costs	400,000	600,000	900,000
Total Variable Costs	<u>1,100,400</u>	<u>1,650,600</u>	<u>2,413,300</u>
Contribution Margin	899,600	1,349,400	2,086,700
Less: Fixed Costs			
Fixed Cost of Goods Sold	276,600	276,600	276,600
Fixed Operating Costs	660,000	660,000	660,000
Depreciation	4,287	11,634	16,881
Interest Expense	25,000	45,000	25,000
Total Fixed Costs	<u>965,887</u>	<u>993,234</u>	<u>978,481</u>
Income Before Tax	<u>(66,287)</u>	<u>356,166</u>	<u>1,108,219</u>

	Year 1	Year 2	Year 3
Total Fixed Costs	965,887	993,234	978,481
Contribution Margin %	45%	45%	46%
Break Even Sales Volume	<u>2,147,370</u>	<u>2,208,168</u>	<u>2,110,109</u>

8.4 Ratio Analysis

The ratio analysis is used to numerically compare companies and consider where to allocate resources. RoMow LLC bases their financial situations on 4 different ratios. Seen below in Table 10, shows these ratios.

Table 10 - Ratio Analysis

	Year 1	Year 2	Year 3
Gross Margin of Revenue	51.15%	55.76%	60.22%
Profit Margin on Sales	-1.99%	7.12%	14.78%
Total Asset Turnover	4.08	3.97	3.97
Debt to Assets Ratio	102.04%	52.98%	8.83%

9. Loan Proposal

9.1 Amount Requested

RoMow LLC would apply for a \$500,000 loan from the bank at 10% interest.

9.2 Use of Funds

The loan would be used to rent a manufacturing facility along with purchasing start-up equipment such as, computers and furniture. \$30,000 will be allocated towards purchasing new machinery. The majority of the loan will be spent on purchasing the materials necessary to continue to build the RoMow.

9.3 Repayment

RoMow LLC's repayment plan consists of a 4-year payback period. If RoMow LLC is financially unstable within the first couple years an "exit strategy" would consist of liquefying all assets in order to payback the bank.

9.4 Timetable

The business will launch in the summer of 2015. The business plan will be implemented immediately upon start up of the business.

10. Appendix: Table of Content

Appendix 1: Mary Jane's Resume

Appendix 2: Anna Banana's Resume

Appendix 3: Scott Hollander's Resume

Appendix 1: Mary Jane's Resume

Mary Jane

616.633.0058

maryjane@gmail.com

PROFILE	A collaborative visionary, conscientious and articulate, seeking a dynamic career in Business
EDUCATION	<p>Calvin College, Grand Rapids, MI Bachelor of Arts in Business, Marketing Concentration Bachelor of Arts in Spanish</p> <ul style="list-style-type: none">• Graduation: May 2015• GPA: 3.75; Dean's List: all semesters• Semester Abroad in Arequipa, Peru, Fall 2013• National Merit Finalist, Spring 2011• ACT score: 31
EXPERIENCE	<p>Wolverine Worldwide, Rockford, Michigan Qualitative Market Research Class Project, Fall 2014</p> <ul style="list-style-type: none">• Worked in team to design and conduct focus groups for representative from <u>Cushe</u> shoe brand <p>Auto-Owners Insurance, Lansing, MI Advertising Intern, Summer 2014</p> <ul style="list-style-type: none">• Took initiative to develop and present new billboard design concept later adopted by company• Compiled data for various industry research topics; organized competitive analysis reviews• Qualified and processed advertising reimbursement submissions <p>National Heritage Academies, Grand Rapids, MI Admissions Representative, Summer 2013</p> <ul style="list-style-type: none">• Conducted school tours; implemented grassroots marketing strategies• Established relationships with local business vendors to organize successful Community Resource Fair marketing event• Managed multiple projects simultaneously to market company's mission in English and Spanish through written, oral, and printed communications <p>March of Dimes, Grand Rapids, MI Communications Intern, Summer 2013</p> <ul style="list-style-type: none">• Drafted donation solicitation letter to 100+ local businesses• Revised Donation Impact Report presentations for Van <u>Andel</u> Institute and Helen <u>Delos</u> Children's Hospital <p>Applebee's Inc., Gaines Township, MI Server, Summer 2012 - Summer 2013</p> <ul style="list-style-type: none">• Provided friendly and efficient service to guests; communicated with clarity and enthusiasm• Demonstrated thorough knowledge of menu offerings while promoting sale of featured items
ACTIVITIES	<p>Women's Varsity Lacrosse Team Member, Calvin College, Fall 2011 – Fall 2014</p> <p>Economics Tutor, Calvin College Student Academic Services, Fall 2014</p>

Appendix 2: Anna Banana's Resume

<i>Current</i>	Anna Banana	<i>Permanent</i>
Beta 4 Grand Rapids, MI 49546	annabanana@gmail.com 123-456-7890	22 Bellwood Drive Holland, MI 49423
Education	Calvin College – Grand Rapids, MI Bachelor of Arts, anticipated May 2015 Majors: Spanish; Business, Human Resource Management Concentration (Honors) Minor: Sociology Current/Major G.P.A.: 3.86/3.93	
Business Experience	<i>HR Collaborative, Grand Rapids, MI</i> Human Resource Intern, September 2014 – Present <ul style="list-style-type: none">• Update job descriptions for various companies• Implement effective talent calibration system• Assist other HR associates as needed <i>West Michigan Processing Co-op, Holland, MI</i> Human Resource and Office Manager, Summers 2011 – 2014 <ul style="list-style-type: none">• Interviewed, hired, and on-boarded 80-130 employees• Managed payroll including assigning wages, monitoring and recording weekly hours via paper time cards and online badge IDs• Facilitated personnel feedback, recorded attendance, and released personnel• Tracked invoices for various suppliers and wrote memos for growers and suppliers• Monitored incoming and outgoing produce via computer programs and paperwork• Kept inventory and ordered supplies for smooth facility operations• Directed interaction with business owners, truck drivers, growers, service men, and storage facilities• Communicated via written and verbal English and Spanish• Wrote and implemented policies for Food Defense programs <i>Gilmore Collection Catering, Grand Rapids, MI</i> Server, March – October 2014 <ul style="list-style-type: none">• Set-up event space; prepared and served food to clients and their guests• Worked as part of a team to assure quality experience for all diners• Learned and maintained protocols for excellent service• Followed rigorous time schedules to assure events were satisfactory for clients• Recognized, identified and solved problems before they became issues for clients <i>Global Business Brigade, Piriati Embara, Panama</i> Volunteer Consultant, May 2012 <ul style="list-style-type: none">• Consulted three families on future business practices• Explained basic accounting principles to heads of families• Created and implemented learning tools for families	
Other Experiences	<i>Calvin College Spanish Department, Grand Rapids, MI</i> Spanish Conversation Group Leader, Spring 2014 – Present <i>Calvin College Student Academic Services, Grand Rapids, MI</i> Tutor, Spring 2014 – Present <i>Calvin College Business Department, Grand Rapids, MI</i> McGregor Research Fellow, Summer 2013 <i>Ditto Upscale Resale, Holland, MI</i> Customer Service Representative, Fall 2009 – Summer 2011	
Activities	<ul style="list-style-type: none">• Raising Up Communities, President, 2014-2015	

Appendix 3: Scott Hollander's Resume

Scott Hollander

105 Brown Lane
Waverly, IA 50677
Home: 319.352.4880
Cell: 630.815.4876
scott.hollander@yahoo.com

ADVANCED MANUFACTURING PRODUCIBILITY ENGINEERING

**Manufacturing Process Development and Continuous Improvement Project Management.
Strategic Commodity Sourcing, Supplier Development and Engineering Project Supervision.**

A diverse hands on mechanical engineer, who manages the technical / commercial events for highly engineered systems and sub systems. Significant achievements and break through results produced that are based on applying the disciplines of classical manufacturing process engineering, process mapping and process development.

A consistent history of manufacturing management improvements with expertise in product and process development for complex commodities, i.e., consumer products for sanitary plumbing/faucets and architectural security hardware for (cosmetic) door locks, power train auto / agri / construction, consumer goods, complex electric high voltage utilities switch gear and circuit protection, aerospace fluid filtration and wind turbine power systems in fleet wide farms.

Goal oriented and trusted project manager with solid expertise in creating and leading cross-functional teams through dramatic change and improvement. Thorough background in global sourcing, supply chain management, product development, supplier development and negotiations. Deals well with ambiguity and translates information into workable strategies.

EXPERTISE – MATERIALS, PROCESSES AND SYSTEMS

- Castings: raw, machined, sand cast, gravity cast, die cast, low/high pressure cast aluminum, steel, iron, zinc
- Drive train: axles, transmissions, drive shafts, brakes, gear boxes, wheels, tires
- Contracts: supply agreements, long term design and development agreements
- Fabrications: weldments, forgings raw and machined, brake forming, punch press, turret press, wire rope, cable, pendants, rigging
- Power train: engines off and on highway, engine dress up, tier 4 emissions treatment, heat exchangers
- Tooling: fixtures, cutting, gauging, casting patterns prototype and production
- Hydraulics: pumps, motors, filter modules, tubing, hoses, fittings
- Project Management: leadership thru crisis change, team building
- Design for manufacture / assembly DFM / DFA
- Failure modes and effects analysis (FMEA)
- Manufacturing analysis / out sourcing
- Manufacturing analysis / in sourcing
- Supply chain advanced strategic sourcing
- Supplier development and quality
- Value analysis Value engineering
- Activity based scrutiny: cost analysis, cost control, cost abatement, cost adjustment, cost reductions
- Warranty vendor recovery
- AS 400 MRP software system
- WDS MRP software system
- MAS 500 MRP software system
- SAP MRP software system

EDUCATION, PROFESSIONAL DEVELOPMENT AND PATENTS

- Bachelor of Science, Mechanical Engineering, Illinois Institute of Technology, Chicago, IL
- Inventor: Utility Patents 6,817,032 and 7,197,771 and Trademark for Garment To Prevent Muscle Strain
- Professional development courses including management, engineering, quality, HR and finance
- Bi-lingual, conversational German