

Ohlyprops: Developing a Premier Prop Shop in Madison Arts Business Competition March 6, 2023

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Executive Summary

My name is Jack Ohly and I am a maker. I have made physical objects through hands-on activities like woodworking, machining, and 3D printing for as long as I can remember. The satisfaction I get from creating something from nothing is unparalleled, and these hands-on activities have flourished into my hobby of creating replica film props. I have made everything from suits of armor to rings. In the past few years I have started to take commissions for projects from my friends and family and I have posted these on my Instagram account, @ohlyprops. Now, with nearly a decade of experience behind me, I am ready to expand my operations and pursue Ohlyprops more seriously.

My goal is to turn Ohlyprops into a for-hire prop shop in Madison, Wisconsin. In addition to taking commissions from my Instagram account, I plan to develop a clientele base in the greater Madison area by accepting projects from fellow movie lovers, student filmmakers, or whoever would like a film prop. In order to expand my operations I need to increase Ohlyprops' social media presence, start marketing to local film and theater productions, and obtain the necessary tools for my shop.

Props and special effects are vital in creating worlds on screen, stage, or in the office. Madison has no real prop shop, so a Madisonian must resort to online retailers to obtain custom props. This can be time consuming, expensive, and greatly reduce the creative control a client has on a project. By founding a local prop shop, Ohlyprops can fulfill the need of making affordable or time-sensitive custom props that do not need to be shipped hundreds of miles.

Project Plan

Ohlyprops has made projects for many of my friends and family but has yet to expand to a wider market. In order to achieve my goal of a local for-hire prop shop I have systematically broken down my project plan into the following tables and paragraphs.

General Production Plan for Ohlyprops

In order to grow the popularity of Ohlyprops, I will continue to network through my student peers and increase activity on the Ohlyprops social media accounts in order to generate more interest. The topic of these marketing techniques is covered in more detail in the *Marketing and Outreach* section of this proposal.

After an initial client base has been established, I plan to grow Ohlyprops by appealing to anyone in the Madison area because of the affordability, locality, and craftsmanship of my props. As my client base grows, I plan to expand my shop with professional level tools that increase the speed and quality of my props. Once Ohlyprops gets off the ground, I hope to maintain this business in perpetuity.

Production Plan for a Single Project

Table 1 describes the steps I normally take once a client has taken interest in my services. One way I will distinguish Ohlyprops is by allowing my clients flexibility and making sure they know all of their material options, fees, paint colors, and any other choices that go into building the prop. Where online retailers restrict customer creative control, Ohlyprops makes sure clients have input in every step of the project.

Table 1: Process for making a single project.

Request	Estimate	Negotiate	Make	Deliver
A Client requests for a prop to be made by Ohlyprops and a meeting to discuss the project occurs.	The cost of the project will be calculated. An example calculation can be found in Table 5.	Another meeting with the client occurs to discuss creative vision, timeline, costs, and materials.	Ohlyprops builds the project based on the agreed specifications of the client.	Project is delivered to the client in accordance with the timeline.

Current and Future Resources

My current resources consist of a single FDM 3D printer, a table saw, a miter saw, a drill press, a myriad of power tools including a drill, sander, and jigsaw, and numerous hand tools. I have amassed these tools over my time as a maker, buying them incrementally when they are needed and essential to a project. While these tools provide a good baseline, I have far to go to develop a shop that can handle the types of projects that I am anticipating.

In order to make my operation more efficient and competitive at a professional level, I have determined six of the next tools I need to purchase to scale up my operation. I have chosen these tools based on my personal experience using them, the multifunctionality of the tool, their reputation within the industry, how unique their duty is compared to tools I already own, and a "Professional Level" which combines the factors of how much the tool will speed up my operation and help increase the professional nature of my props. I have ranked all of these categories from a scale of 0 to 5. This ranking process was completed with a number of tools, and these six tools listed scored the highest. All of these items can easily be bought online or instore when they are required.

Table 2: Essential tools to expand the Ohlyprops shop.

	Table Sander	Scroll Saw	Mini Vacuum Former	Airbrush and Compressor	Cast Resin Kit	SLA Resin 3D Printer
Personal Experience	5	4	3	2	0	4
Multifunctionality	4	5	3	5	2	4
Reputation	5	3	5	5	5	4
Uniqueness	3	3	4	4	5	2
Professional Level	4	5	4	5	5	4
Total	21	20	19	21	17	18

Although other tools like a band saw, rotary tool, or electronics kit will be necessary at some point in my building career, these six tools are what I have determined will provide me with the greatest increase in quality, and are suitable for scaling to a professional operation. Before Ohlyprops takes on any bigger jobs, I believe these tools are essential to my shop. Below I have provided a brief snapshot of why I need each tool in the near future in order to get my operation up and running. Note: There are many reasons to purchase each of these tools, but below I have only included a select number of reasons as examples.

Table Sander

Many of my props are made from 3D prints. When these prints come off the printer, they have a texture that needs to be sanded off. A table sander will greatly reduce the post processing time of 3D prints compared to using my current tool, a hand sander. This time reduction is due to the speed and effectiveness of the table sander's belt.

Scroll Saw

I currently have to complete any intricate cutting in wood or foam by hand with a coping saw. This can take up alot of time and can easily result in error. A scroll saw will increase my precision and reduce my time when making detailed cuts in raw materials.

Mini Vacuum Former

Vacuum forming is one of the most historically important methods of prop making. It allows for the mass production of lightweight shells. Some objects cannot be made any other way, and without this tool in my shop, I severely limit the types of projects Ohlyprops can make.

Airbrush and Compressor

I currently hand paint all of my props with brushes or aerosol cans. Airbrushing is the industry standard for painting and will allow me to have much more control over my paint jobs and remove any brush strokes from finished props, making them look more realistic and professional.

Cast Resin Kit

While not strictly a tool, casting is another essential process in the prop industry. Casting allows the replication of parts via pouring a curable liquid into a mold. This can be done with a number of different materials and make virtually any shape. While I have no previous experience casting, it is a technique that I will most certainly need to know how to do in the future, and I should start building with casts as soon as possible.

SLA Resin 3D Printer

As previously mentioned, many of my props are made from 3D prints. While I already have a FDM printer in my shop, a second printer will double the amount of additive manufacturing I can do at one time. Additionally, SLA printers differ from FDM printers because FDM printers are better for bigger simple parts, while SLA printers can print quite intricately with a high degree of accuracy. With higher accuracy, the post processing time of my 3D prints goes down while the quality increases.

Partners

I am currently the sole employee of Ohlyprops. I do not anticipate needing to hire anyone at this time as the workflow of the company is centered around my building practices and schedule. I will, however, need to partner with other makers if I am employed to make something I have little experience with. Custom clothing, for example, is something I have very little practice in making. In a case like this where a component of a prop cannot be made in my shop, I will outsource the part to other makers by way of *Etsy* (a website to buy handmade items) or the *Replica Prop Forum* (*RPF*) (a source for the reference and purchase for props and models). These two websites have massive communities where I can crowdsource questions or source custom parts for a project. I have used both of these websites extensively during my time as a maker and already have been able to foster relationships with other makers who specialize in different fields.

Through these websites, I work with a diverse group of individuals. Ohlyprops embraces diversity, equity, and access with all partnerships and clients.

Timeline

Ohlyprops has been in operation since May 2020. So far I have made a myriad of personal projects, as well as a few commissions. These projects have been primarily 3D printed, however I work with foam or wood when appropriate. The highlights of my work can be seen in more detail in my portfolio.

Looking into the near future, I have two projects planned in the next calendar year. A friend has hired me to make a replica of the orb from *The Guardians of the Galaxy*. This is a prop I have made before, and will take me about a week with the tools I currently have. The second project is making props for a student film that is shooting in the summer. I do not know what this film will require at the moment, but when I am given more information I will add it to my timeline. Table 3 includes the plan for Ohlyprops in the predicted future.

	31 1
Next 3 months	Finish scheduled projects, grow social media presence, and network through classes.
Next 6 months	Grow Ohlyprops' advertising, reach out to local theaters and directors, and develop more connections through marketing.
Next year	Purchase more essential tools to develop a more efficient system. Take on more projects.
Next 2 years	Increase the number of projects from one every three months to at least one per month.
Next 5 years	Establish Ohlyprops as a reputable Madison brand and continue expanding. Move into a shop space if appropriate.

Table 3: Timeline for Ohlyprops over the next five years.

Audience Analysis

My goal is to accept commissions for a wide range of projects including those from local productions and movie lovers. Currently, the easiest way to commission a prop replica is through online vendors. While this might be okay for a one-off piece to add to a personal collection, this method outprices many prospective customers. By being local in Madison, I can reduce the costs of my projects, creating a more inclusive customer base. Student films with tight budgets can now obtain professional looking props to increase the legitimacy of their projects. Theater productions can locally outsource props that can't be made in house. Perhaps someone is looking for a prop birthday gift for a reasonable price. Any of these scenarios and more are solved with the employment of Ohlyprops. By being local, flexible, and affordable, Ohlyprops is able to firmly establish its own niche market in the Madison arts community.

Looking long term, I believe Madison is the perfect place to develop a premiere prop shop. While bigger for-hire prop studios exist in media centric cities like Los Angeles and New York, Madison and the midwest have been overlooked. Ohlyprops can provide prop services for cheaper and faster without any cross country shipping. In addition to the Madison area, it would be possible for Ohlyprops to expand into the greater Midwest and South. When onsite filming occurs in cities like Atlanta and Chicago, studios periodically require props that cannot be shipped due to time constraints, and are forced to be made locally. A great example of this need is the Madison based company *Dapper Cadaver*. *Dapper Cadaver* makes realistic body parts and stunt dummies and is usually the first call for on-set body parts. This is because Madison is centrally located in the United States and essential props can arrive to on-set locations much faster than if they were made and shipped from a coast. *Dapper Cadaver* has been able to develop a flourishing business within the heart of Madison, and I believe Ohlyprops could fulfill a similar need in the area of hand props, in the not too distant future.

Marketing and Outreach

In order to receive more commissions, Ohlyprops needs to reach more potential clients. I plan to achieve this in two ways.

Social Media

As previously stated, I have had an Instagram account for Ohlyprops since April, 2020. The account's posts and outreach are quite small at the current moment and I plan to ramp up the interaction with my followers in the next three months. Additionally, I plan to start posting weekly updates of my current projects and conduct bi-weekly live streams of me working in my shop. These interactions will begin at the start of my next project. This activity will generate interest in my account, and grow my following of potential clients and viewers.

In addition to Instagram, I will create Ohlyprops accounts for Facebook and TikTok in the next two months, following a similar structure of posts to the Instagram account. Down the line I may develop a Youtube channel to post longer form content for builds or how-tos.

Although social media may not be my primary source for receiving projects, these platforms are a good way to grow my brand and reach new people. I plan to accept commissions via direct message on all social media platforms and do my best to interact with followers to help grow my brand. Social media also helps keep me accountable, ensuring that I stay consistent with Ohlyprops and remain focused on pursuing my goal of a prop shop.

Local Marketing

Outside of social media, I plan to contact local stage managers, film directors, and film buffs to offer my services to. Being a student at UW-Madison and co-president of *Film Review Club* has provided me with some unique networking opportunities already, connecting me with numerous film students and future directors. This has allowed me to be hired for two projects currently in the works. I plan to use the next six months to really focus on reaching out by email and in class to these local contacts and seeing where my connections can take Ohlyprops.

Neither of these methods will cost anything, but they are very time consuming. I believe that between the social media accounts and local marketing, Ohlyprops will be able to grow its reputation and clientele within the next year.

Financial Plan

Over the past 10 years, I have been able to establish my own shop in the basement and garage of my house. As stated in the *Current and Future Resources* subsection of the *Project Plan*, my shop at home contains some baseline equipment. There are no overhead costs for using my shop space besides the electricity to run power tools and lighting. As Ohlyprops grows and accepts new clients, I plan to work on a prop by prop basis, where the cost for any new materials or equipment needed will be contributed in part by the client. As discussed in the *Project Plan*, I have systematically determined what tools I need to acquire next to create a professional shop. Table 4 looks at the costs of each of these tools. If funding is scarce, I plan to prioritize the purchase of a table sander and airbrush as I believe these two tools are the most essential.

	Purchase Cost	Maintenance Cost per Year
Table Sander	\$200	\$10
Scroll Saw	\$200	\$15
Mini Vacuum Former	\$150	\$0
Airbrush and Compressor	\$300	\$10
Cast Resin Kit	\$110	\$0
SLS Resin 3D Printer	\$500	\$10

Table 4: Costs of essential tools.

Table 5 is an example project cost sheet for making a Mandalorian helmet (as seen in my portfolio) with my current tools. Without having to ship this helmet, I can limit the price of packaging and remove the price of postage from the final fee. The labor cost included is working at my usual pace,

^{*}Costs are averages. May vary depending on model, brand, and time of year bought. Price variation is no more than \pm \$25.

which would get this project done in around three months. If the client requires the projects to be expedited, the labor cost will go up on a case by case basis.

Table 5: Example cost breakdown analysis for a Manalroian helmet.

Materials		Other	
3D Printing PLA Spool - 750g	\$18.75	Labor Cost	\$110
Bondo	\$12.00	Purchasing Cost of Printer and Hand Tools	\$5
Paint and Primer	\$21.60	Operation Cost	\$0.70
Welding Visor	\$14.00		
Glue	\$2.00		
Foam Padding	\$3.00		
Total Estimated Cost		\$187.05	

Table 6 below shows the anticipated breakdown for the same helmet, but with the new tools listed in Table 4 included in my shop. Due to the inclusion of a table sander, airbrush, and SLS resin 3D printer the helmet's overall quality improves and the time the whole project takes decreases. With a table sander, I no longer need to hand sand the helmet, cutting the post-processing time by hours. The airbrush provides a better paint finish that dries faster and provides a more realistic metal like appearance. Depending on the paint chosen, the airbrush paint will be cheaper to purchase as well. The SLS resin 3D printer allows the intricate parts of the helmet to be printed in greater detail so they appear more realistic and require less post processing.

Table 6: Example cost breakdown analysis for a Manalroian helmet with new tools. Price reductions in bold

Materials		Other		
3D Printing PLA Spool - 700g	\$14.75	Labor Cost	\$70	
3D Printing Resin	\$6.00	Purchasing Cost of Printer and Hand Tools	\$10	
Bondo	\$12.00	Operation Cost	\$0.70	
Paint and Primer	\$13.60			
Welding Visor	\$14.00			
Glue	\$2.00			
Foam Padding	\$3.00			
Total Estimated Cost		\$146.05		

While total cost is not the only reason for purchasing these new tools, it is one of the primary factors. With the inclusion of the new tools, in this example the client's costs go down \$40.95. The price decrease combined with the increased speed and quality of parts produced makes buying these tools very worthwhile.

In addition to the cost of these tools, Table 7 shows the estimates of the overhead of running my shop in a typical year. These fees are currently paid for out of my personal savings, but would be included in part of the fee for clients under "Materials", "Purchasing Cost", and "Operation Cost".

Table 7: Average costs to run my shop over the course of a single year.

	Cost
Shop Maintenance (includes tool maintenance)	\$100
Electricity	\$70
Materials	\$80
Financial Cushion	\$100
Total	\$350

Funding Request

By combining the total costs of Table 4 and Table 7, the result is that to purchase essential tools and run Ohlyprops at a professional level for a year, \$1855 would be required. Of this total, \$1460 would

contribute to the purchase of the tools in Table 4, and \$395 would pay for keeping the shop running. If I were to purchase only the table sander and airbrush, the cost would be \$520. I received the *Sherry Wagner-Henry Scholarship in the Creative Arts and Entrepreneurship* this past winter, and these funds will also help reduce costs to keep my shop running.

I am asking the Arts Business Competition for \$2000 to fund the costs of running Ohlyprops for my startup year, and cover \$145 for the upfront costs of materials. While this is no small sum, after this start up funding Ohlyprops should be able to run itself independently for years to come.

Possible Challenges

The biggest challenge I foresee is establishing reputability and getting my name on to the special effects scene. As Ohlyprops expands, I have some stage manager and film student contacts I can reach out to, but not getting enough initial clients due to my lack of experience is a legitimate concern. To circumvent this I plan to stay consistent with my marketing and outreach, as well as by using past clients as references for future jobs. In this way, people can see the quality of my work online, and hear testimonies from previous clients. Every job I do will grow my brand and increase the reputation of Ohlyprops.

Another concern that may exist is that Ohlyprops is too "niche". While my experience in the local entertainment industry has led me to believe this is not the case, I understand this worry. Although the name of my business is Ohlyprops and this proposal has highlighted my prop making in the arts communities, I plan to accept any type of project that is suited for my skill set when necessary. I did this previously, when I designed and 3D printed a new choke handle for a client's grass trimmer. While these types of projects are not my main goal for Ohlyprops, they certainly can be completed to keep Ohlyprops going when prop work is scarce.

Portfolio

Below I have attached a portfolio with a selection of props I have made in recent years. This is included to provide a better understanding of what the projects I made look like, and the level of craftsmanship they exhibit.

Portfolio linked here

Key Personnel

Jack Ohly - johly@wisc.edu

Jack Ohly is a junior studying Mechanical Engineering and Communication Arts, with a concentration in Radio, Television, & Film. To Jack, these disparate majors make perfect sense together. Jack has a lifelong passion for making, and his initial interest in engineering and film came from his hobby of creating replica film props. Recent projects include HAL 9000 from 2001: A Space Odyssey and a Doctor Octopus costume from Spider-Man. To combine his two passions, Jack has created Ohlyprops, sharing his love of props with Madison. When not in the workshop or theater, Jack likes to run, read, and play jazz trombone.

Thank you for your time and consideration.

Jack Ohly