

Self-Liquidating Sales Funnel for a Cloud Manufacturer

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Table of Contents

Contents

Table of Contents	2
Table of Figures	3
Acknowledgements	
Abstract	5
Chapter 1: Introduction	θ
1.1 Sponsor	θ
1.2 Problem Statement	
1.3 Project Goals and Objectives	
Chapter 2- Background	<u>c</u>
2.1 Digital Marketing	<u>c</u>
2.1.1 Consumer Behavior	<u> </u>
2.1.2 Rising Use of Digital Marketing	10
2.1.3 Digital Marketing Channels	11
2.1.4 Digital Inbound Marketing	11
2.2 Cloud Manufacturing	12
2.3 Sales Funnels	13
2.3.1 Digital Sales funnels	13
2.3.2 Russell Brunson and Click Funnels	14
Chapter 3- Methods	15
3.1 Market Research	15
3.2 Click Funnels	16
3.3 Financial Analysis	20
Chapter 4- Results	21
4.1 Marketing Persona	21
4.2 Self Liquidating Sales Funnel	22
4.3 Financial Analysis	27
Chapter 5- Conclusion	30
Bibliography	31

Table of Figures

Figure 1: One Funnel Away Challenge Outlook (www.onefunnelaway.com 2019)	18
Figure 2: Advance Marketing Institute Headline Analyzer	19
Figure 3: Marketing Personas Pt. 1 (Lee 2015)	22
Figure 4: Marketing Personas Pt. 2 (Lee 2015)	22
Figure 5: Facebook Targeted Advertisement	
Figure 6: Audience Interest Selection	23
Figure 7: Squeeze Page	24
Figure 8: Sales Page	25
Figure 9: Order Bump Page	25
Figure 10: One Time Offer Page	26
Figure 11: Outreach Potential for Facebook Ads Campaign	27
Figure 12:Estimated ad clicks, leads, revenues, and costs	28
Figure 13: Cash Flow NPV Calculations	
Figure 14: Chart of Estimate Cash Flows	

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Abstract

The overall objective of this MQP was to develop a self-liquidating sales funnel for a Worcester based cloud manufacturing (CMfg) company. The rationale for the project included the potential cost effectiveness of self-liquidating sales funnels to generate leads, the growing market pull for online manufacturing services, and the ability to inform and educate customers through content marketing and information products. A review of the state of the art provided no evidence that CMfg companies are currently using self-liquidating sales funnels, but the use of content marketing has been observed. The team enabled the implementation of the selfliquidating sales funnels by performing market research, participating in Click Funnels SLSF building webinar, and running a financial analysis on Facebook advertisement spending. The results of the methods provided us with marketing personas of our customer segments, a new sales funnel design incorporating information products, high-value targeted-offers, and offer sequencing, and a cost benefit analysis for Facebook ads spending. The implementation of the self-liquidating sales funnel could prove beneficial for our sponsor as well as other ecommerce companies, engaging in a new style of marketing strategy that trades information products to customers for lead information while also providing the customer with several sales opportunities could be an effective use of company resource.

Chapter 1: Introduction

1.1 Sponsor

The sponsor is a cloud manufacturing service, the company offers waterjet cutting as well as traditional milling, turning, grinding, 3D printing, and other custom operations, all through the company's website. While they are offer manufacturing services, they own no manufacturing equipment, this is because the sponsor acts as a middleman between their customers and partnered manufacturing job shops, facilitating the interaction between the two parties. The sponsor is currently partnered with over 70 machine shops around the U.S., allowing them to provide their services to customers around the nation quickly, and efficiently. The sponsor interacts with customers, processing orders, providing engineering support and logistic information, while the actual manufacturing operations are offloaded onto partnered machine shops.

As a tech company in the ecommerce space, the sponsor has relied on "pay-per-click" (PPC) targeted internet advertisements to draw in business. Using Facebook ads, they saw moderate success in acquiring customers, placing ads on specific Facebook pages of customer interest. However, most of their orders have been small in quantity and one-time orders from customers seeking prototypes. They were also experiencing a large percentage of abandoned carts, meaning customers either uploaded a part and failed to submit it for a quote or they received a quote and did continue to place an order. In hopes of increasing the number of orders received, quantity of parts per order, and decreasing the percentage of cart abandonment, the sponsor desires to educate customers and make them better engineers.

1.2 Problem Statement

With the growing popularity of ecommerce solutions, it is becoming more difficult and expensive for small online companies to increase brand awareness, including those in CMfg. Pay per click advertising, a staple marketing strategy for ecommerce stores, is continuing to grow in popularity. As the demand for PPC services increases, so has the cost associated with using this form of advertisement. From 2010 to 2016, the "cost per click" nearly doubled, increasing from an average price of \$1.24 to \$2.14, and the "cost per conversion" almost tripled, going from \$13.14 in 2010, to an average price of \$33.00 in 2016 (Hochman 2017). As the cost of online advertisements continues to increase, small online business is forced to adapt in order to make the most out of their advertising budget as they compete for market share with larger more resourceful companies. In 2014, Russell Brunson introduced his start up Click FunnelsTM, offering online businesses a strategy for generating customer leads, while also increasing customer conversion rates. By utilizing social media presence, content marketing, offer building and sequencing, small companies are given the chance to make revenue during the process of lead generation. This project aims to implement Russell's "self-liquidating sales funnel" into a Cloud Manufacturing service's website.

1.3 Project Goals and Objectives

The overall goal of this project was to produce a new, lead generating sales funnel that has the potential to offset advertising costs through sales opportunities. The MQP team conducted market research in order to identify the demographics of our potential customer segments, as well as their motivations and incentives. The team and sponsor were able to identify plausible products and benefits to sell within the sales funnel. A financial analysis based on advertising costs and plausible funnel sales was performed in order to determine a cost effective PPC ad campaign. Three project deliverables were provided to the sponsor:

- 1. Identify our customer segments by developing marketing personas, capturing their demographics, motivations and incentives.
- 2. Build and sequence the offers we want to make within the self-liquidating sales funnel by analyzing current best practices as well as the wants and needs of our customer segments.
- 3. Produce a financial analysis on the profitability of the sales funnel

Chapter 2- Background

2.1 Digital Marketing

As the internet becomes more of an integral part of modern life and society, digital marketing is becoming one of the most widely used tools by ecommerce, traditional, and hybrid businesses alike to market their products and services to potential customers. Businesses are spending less money on traditional forms of marketing in order to increase their investments in digital marketing channels (The CMO Survey 2018). Digital marketing channels include email, social media, affiliates, search engines, and display advertising. Emerging strategies are increasing the effectiveness observed within these digital channels, as online shoppers are looking for more engaging consumer experiences than that of what one-way communication strategies provide (Truong, Simmons 2010).

2.1.1 Consumer Behavior

Business to business customers are spending more time online now than ever, and the trend is still increasing. In a report published by eMarketer, the average U.S. adult (age 18 and over) was said to have spent approximately 343 minutes per day accessing digital media through connected devices such as mobile phones, desktops, laptops, and other devices in 2016, and was expected to increase by another 10 minutes in 2017(eMarketer 2017). In a report on the frequency of internet usage by adults published in January 2018, 77% of Americans reported daily internet use, 39% of 18-29-year old's and 36% of 30-49-year old's admit to being online almost constantly (Perrin 2018). The widespread popularity of smartphones and other mobile devices could offer some explanation. Out of all of those who use the internet, 80 percent of them own smartphones (Chaffey 2017), and mobile usage per B2B worker is expected to increase from two hours a day to three by 2020 (Google 2018). Out of all the time being spent

online, a large portion goes toward social medias. In 2017, the average amount of time spent by users 18 and older on social media (Facebook, Snapchat, Instagram) was 91 minutes a day, and is expected to continue increasing (eMarketer 2018).

More consumers are turning to the internet to make purchases as well. According to a market forecast from Statista, the number of digital commerce customers in 2018 was almost 3.5 billion and is expected to grow to about 4.5 billion by 2023. With a consumer base of this size, knowing how customers react to digital advertisements is critical when choosing a digital marketing strategy. A 2010 study showed how its participants reacted poorly to intrusive digital display advertisements, such as banner ads, pop-up ads, and video ads. In general, display advertisements were seen as impersonal, one-way, and irrelevant (Truong, Simmons 2010). However, companies still invest heavily in digital advertisements. In 2016 the U.S. total advertising expenditure was \$290.08 billion dollars (Hageman 2019), and approximately \$57 billion of this was spent on digital advertising (Dentsu Aegis Network 2019).

2.1.2 Rising Use of Digital Marketing

With the ease of access to digital marketing, and the wealth of information available on the topic, it has never been easier for small businesses to implement cost effective digital marketing strategies. In 2018, the leading marketing tactic for U.S. small businesses (of less than 500 employees) was the use of social media. 74.4 percent of small businesses surveyed reported the use of social media in their marketing strategy (Bihnam 2019). In addition, companies like Facebook and Google are offering pay-per-click advertising solutions, where advertisers only pay when their advertisement is clicked on. This is an attractive service model, especially for small companies that have never advertised before, now having the ability to invest as much as

they want at daily rates. From 2016 to 2018 the number of active Facebook advertisers doubled from approximately 3 million to over 6 million (Facebook 2018).

2.1.3 Digital Marketing Channels

Businesses have several choices when it comes to how they distribute their digital marketing strategies. The various "channels", or vehicles for distribution, each have their own costs and benefits associated with them and can be used in conjunction with each other. Digital marketing channels include one-way communication channels; company websites, email, and display advertisements, and two-way communication channels; social media, affiliate marketers, content publishing platforms, and company generated blogs & communities. Research has shown more consumers respond better to two-way marketing channels, as it provides greater opportunity for "one-to-one" engagement, the collaborative sharing of benefits between parties, and mutual dialogues (Truong, Simmons 2010).

2.1.4 Digital Inbound Marketing

Unlike the push-oriented nature of traditional marketing strategies, the digital inbound marketing (DIM) concept focuses on an organic approach to attracting valuable prospects.

Interactivity and engagement drive DIM, this offers marketers the chance to build valuable relationships and converse with customers interested in their products and services (Opreana, Vinerean 2015). Digital content marketing (DCM) is a component of DIM, where marketers create and distribute valuable, informative content focused on the nature of the product being marketed. Search engines are a common starting point for the consumer's online buying process, companies can use search engine optimization (SEO) to improve their website's visibility when being searched by customers. Keywords, page optimization, content creation, and choosing website links related to customer keywords all increase a website search relevancy. Social

networks provide companies with a platform for sharing content where customers can interact in real time, increasing the perceived authenticity of the content (Opreana, Vinerean 2015).

2.2 Cloud Manufacturing

As technology advances, so does the way we conduct business. Cloud manufacturing is just one example of how advancements in web-based technology are allowing for more efficient interactions between businesses and their customers. The National Institute for Standards and Technology defines cloud manufacturing as "a model for enabling ubiquitous, convenient, ondemand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction." Through the utilization of cloud computing, the on-demand availability of computer resources (i.e. storage, computing power) via internet connection, manufacturing services can now be completed entirely through web-based interaction (Xu 2011).

Cloud manufacturing provides end-users with access to manufacturing resources and capabilities through a web-based client, commonly known as a web browser (e.g. Google Chrome, Microsoft Internet Explorer, Mozilla Firefox). Cloud manufacturing platforms are typically owned and operated by third party agents who manage all customer interactions and provide order details to partnered manufacturers (Balta, Lin, Barton, Tilbury, Mao 2018).

This framework provides an advantageous service model, allowing partnered manufacturers to fill excess production capacity on otherwise unused equipment with orders made directly from consumers. The customers receive several benefits including a high degree of customization and the offloading of vendor qualification, inspection, and supply chain scaling

onto the manufacturers. Agents receive a small percentage of the total profit earned from order partnered manufacturers complete (Ameri, Patil 2010).

2.3 Sales Funnels

The sales funnel concept was initially described by E. St. Elmo Lewis in 1898 as a process to improve performance in personal sales. His AIDA (Attention, Interest, Desire, Action) model laid out the framework for building a customer's motivation to purchase, and is composed of the following four distinct stages (Rowley 1998);

- 1. Attention- customer becomes aware of the product
- 2. Interest- customer interest in product benefits develop
- 3. Desire- customer develops a wanting for product benefits
- 4. Action- customer takes the required action to purchase product

While Lewis's model was focused on the improvement of personal selling, it was widely adopted by marketing and advertising theorists throughout the 20th century and is still being used today. Throughout the past century, the model has evolved, variations have been produced to examine how new product introduction, product trials, repeat purchases and long term product satisfaction can impact the Action stage, but these variations have not strayed away from the basic principles of Lewis's model (Stacks, Michaelson 2010).

2.3.1 Digital Sales funnels

Online businesses, small and large, adopt sales funnel-based strategies for both product and service-oriented selling. Even though variation exists in modern digital sales funnels, many still display the basic concepts laid out by Lewis's AIDA model (Hassan, Nadzim, Shiratuddin 2015).

Ecommerce businesses gain the attention of prospective customers using digital marketing channels such as, but not excluded to, social media, advertisements, and affiliate

marketers. Prospects then display their interest by visiting a business's website. Before a customer leaves the website, it is imperative for a business to confirm a prospect's interest by extracting their contact information, most often an email address. Over 90% of people who leave an ecommerce website without making a purchase will not visit the website for a second time (Courday 2014). Because of the phenomenon, generating leads is one of the most important aspects of the digital sales funnel. By directing prospects to a "landing page", also known as a "squeeze page", ecommerce businesses provide a prospect with limited navigation options, including the opportunity to receive something of value, typically an information product geared toward educating the customer on the products and services the company provides in exchange for their email address, and the chance to continue deeper into the website towards a sale (Courday 2014). Desire is built through the educational product provided from the landing page, additional email sequences, and the content of the company's sales pages, social media, blogs and other publishing platforms. Providing prospects free content that is "useful-but-incompleteinformation" with embedded links allowing them to be directed to a sales page, helps an ecommerce company build toward a customer action, making an order (Courday 2014).

2.3.2 Russell Brunson and Click Funnels

Russell Brunson is an American entrepreneur and founder of Click Funnels. He is credited with the most recent popularization of digital sales funnels and sells training material and software for creating self-liquidating sales funnels through his company. As of 2018, Russell's products have aided in creating over 206 millionaires who are in his exclusive 2 Comma Club, a group dedicated to ecommerce business owners who have built sales funnels achieving over one million dollars in revenue (www.russellbrunson.com 2019).

Chapter 3- Methods

3.1 Market Research

There were two objectives that needed to be accomplished through our market research.

- 1. Identify our competitors and common digital marketing tactics
- 2. Identify our customers and common motives and incentives

In order to complete the first objective, the team used the Google search engine to search for businesses offering cloud manufacturing services. The terms used for our search include; "CNC machining service", "CNC on demand", and "online CNC quote". Using Google allowed us to quickly identify possible competitors by noting which results were being promoted with Google Ads. We followed the resulting links to each company's home page, where we looked for the cloud manufacturing services being provided.

With the competitor list we gathered, we searched their web addresses on the analytics website Similarweb.com, this provided us with additional competitors through their "Competitors & Similar Sites" function. Additionally, we collected information on competitor web traffic including total website visits, bounce rate (percentage of visitors who navigate away from the site after viewing only one page), traffic by country, and desktop traffic sources via referrals, search engine results, social media, emails, and display advertising.

We visited competitor Facebook pages, specifically the "Info and Ads" section of their pages, in order to identify current and prior advertisements and the content used to market cloud manufacturing services. While examining these advertisements we identified the hooks, stories, and offers used to attract potential customers.

The team continued to use competitor Facebook pages in order to gain perspective on cloud manufacturing customers. By referring to the "Reviews" section of competitor pages, we

identified customers who have reviewed the service of competitor cloud manufacturers. We collected information made publicly available by these customers from their personal Facebook pages to use for marketing persona development. This information included gender, employment, education, residing community, interests, and age. In addition to helping us identify customers, analyzing customer reviews by finding common/recurring sources of complaints and praise also provided us with insight on the wants and needs of CMfg customers.

The team collected information on customer interests and hobbies by visiting the sponsor's account on Instagram account where they post pictures of manufacturing processes and parts they have made. The sponsor had over eight thousand Instagram followers during the time of the project, the team went through their list of followers and identified personal accounts, as opposed to business accounts which were easily identifiable due to the additional contact options available on their account. When we visited customer profiles, if an account was set as a "private account" we were only able to gather information from the account biography, which was often very limited in information relative to interests and hobbies. When we examined public customer profiles, we looked for similar subjects and topics of pictures being posted as well as public figures and hashtags followed.

We used demographic segmentation in order to group our potential customers by common demographic variables. The variables we relied on for segmentation included age, gender, geographical location, income level, occupation and company size, education level, and hobbies.

3.2 Click Funnels

The team met with the sponsor Monday through Thursday in order to partake in a training webinar by Click Funnels. Each installment of the series included a lesson on sales

funnel building as well as a "mission" to complete that tied in to the lesson. The webinar was broken down into four weeks. Week one focused on creating the offers to be made in the funnel, sequencing the offers in a logical order, and how to outsource the creation of information products included in your offer. Week two focused on developing stories and hooks for content marketing and sales funnel pages, we chose the publishing platforms to post content on, learned a format for sales-centric stories, and created hooks based on these stories. Week three was on building the design of each sales funnel webpage. Finally, week four focused on finding and converting traffic to a funnel as well as benchmarking the success of a funnel, and how to continue optimizing it. The following table lists the title and objective of each mission:

Week	Mission	Objective
1	1-Offer Hacking	Identify Hook, Story and offer in competitor Facebook Ads
		Learn to Build practice offers by combining different
1	2-The Greatest Showman	products
1	3-Offer Sequencing	Create your own Offer & Offer Sequence in a Funnel Map
	4-E Covers and Offer	
1	Assets	Find the Who to create the Offer Assets & eCovers
1	5-Create	Find the Who to build the content in your offer pieces
		Learn how to utilize publishing platforms for content
2	1-Publishing	creation
2	2-Epiphany Bridge	Study the Epiphany Bridge Script
2	3-Your Origin Story	Develop your own epiphany bridge script

	4-Hooks, Hooks, & More	Learn to create and use hooks for content and funnels
2	Hooks	creation
		Pub platform, Ep Bridge, Origin Story published, Created
2	5-Mission Review	hooks for content
3	1-Core Funnel Strategy	Generate a lead, make a sale. (squeeze, sale, OTO)
3	2-Your Share Funnel	Learn to use predesigned funnels to plug your content into
3	3-The Squeeze Page	Design and build a squeeze page (hook story offer)
	4-The Sales Page & Order	
3	Form	Build a sales page and or order form (hook story offer)
3	5-The OTO Page	Build a one-time-offer (OTO) page
	1-The Three Types of	Find your congregations of people who might want your
4	Traffic	offer
		Build out a dream 100 list and start following them on all
4	2-The Dream 100	available platforms
4	3-Earn Your Way In	Setup methods for "earning your way in" to those audiences
4	4-Buy Your Way In	Learn to setup a Facebook ad campaign
4	5-Funnel Audibles	Learn to benchmark and optimize funnel
	1	I

Figure 1: One Funnel Away Challenge Outlook (www.onefunnelaway.com 2019)

The team and sponsor developed the offers for the funnel together. Project Gutenberg, a website gathering works for which U.S. copyright has expired, provided the team with free products that could be used to supplement our offers with written content. We searched the website's limited collection with the term's "engineer", "science" and "invention" to find books that could be relevant to our customers. Using a mind map allowed us to visually organize and

rationalize our thought process. We brainstormed potential written, spoken, and physical products, writing down every product we thought of and every relevant free press book we found. Then, we made links between related products and the customer segments with a general interest in them.

The sponsor took on the responsibility of creating the "story" aspects of the self-liquidating sales funnel, this content would be posted on the social media websites; YouTube, Facebook, and Instagram. The sponsor used the epiphany bridge script and origin story concept as a basis for beginning content creation.

We utilized an Emotional Marketing Value Headline Analyzer from the Advanced Marketing Institute to measure the emotional impact of our headlines. Sales are made by



Figure 2: Advance Marketing Institute Headline Analyzer

communicating with customers on a deep and emotional level. We wanted to ensure our headlines would make emotional impacts on potential customers.

Facebook Ads were our primary method for driving traffic to our funnel, using its ability to target customized audiences at a pay-per-click rate. We developed a "Dream 100" list, which is a list of influencers, popular forums, social media accounts, and content publishing platforms followed by our customer segments. This list helped us determine the types of interests we targeted on Facebook, and who the sponsor could approach in the future as an attempt to drive organic growth to their manufacturing services.

3.3 Financial Analysis

The financial analysis interprets the implementation of the self-liquidating sales funnel with estimated costs, net revenue, and net present value. Performing two different analyses allowed the team to estimate the net present value of profitability for the funnel, as well as the net present value of the leads generated.

In the profitability analysis, the estimated costs were made up of a onetime licensing fee for Click Funnels web development software, the monthly Facebook pay-per-click advertising campaign budget and the cost of goods sold. Net revenue is comprised of the sales made within the funnel. Net present value was the difference between net revenue and the estimated expenses, set to a discounted rate to account for the "time value of money".

Chapter 4- Results

4.1 Marketing Persona

Using the information, we gathered from our market research on potential and existing cloud manufacturing customer demographics, hobbies and interests, as well as the customer segmentation we performed, the team developed several marketing personas. These personas were meant to provide us with a semi-fictional representation of the ideal customer from each segment based on their demographics, goals, challenges, values, and fears.

Johnny Makerman Design engineer

- Key info about company: Small to medium size company making medical devices, consumer electronics, automobile parts, etc
- · Role: product engineer

Demographics

- Age: early 20's-30's
- Gender: Skews Male
- Salary: \$65-80k
- · Location: urban / suburban
- Education: College graduate
- · Family: Wife and kids
- Tags: "young engineer", "hobbyist", "employee",

Goals and challenges

- Primary Goal: Outsource manufacturing of a prototype for work
- Secondary Goal: Implement required design changes
- How you help achieve these goals: Providing the tools and engineering support in order to make the part as good as can be
- Primary challenge: Having the part made on time and to specs
- Secondary challenge: Getting rework done as soon as possible
- How you help solve these problems: With proper communication and the ability to expedite products we can ensure parts are made correctly and on time, engineering support can help to complete rework as fast as possible.

Values / fears

- Primary values: Good UI, fast communication, short lead time, production quality, reliability, cost effectiveness
- Common objections during sales process: "It will take too long", "It
 won't be made how I want it to be made (made to specs)", "It is too
 expensive", "I won't get the support I need" "Rework will take too long if
 its outsourced online", "another vendor has a more compatible UI for
 me"

Timmy Schoolton Student

- About their company: Technical School (wpi/mit/georgia tech)
- · Role: Robotics Engineering

Demographics

- Age:Early 20's
- · Gender: Skews Male
- · Salary / household income: Minimum wage- \$20/hr
- Location: urban
- · Education: Currently Enrolled pursuing BS
- · Family: Mother and father
- Tags: "young engineer", "student", "inventor", "hobbyist", "wantrepreneur"

Goals and challenges

- · Primary Goal: Make parts for a robotics project
- Secondary goal: Become a better engineer
- How you help achieve these goals: Providing a platform to have the parts made, educational material to help make him a better engineer
- Primary challenge: Ensuring functional requirements and proper design tolerances
- Secondary challenge: Choosing classes that will count towards degree and make him a better engineer at the same time
- How you help solve these problems: Communication with engineering team to make sure the piece is designed correctly for its need, provide college level educational material for a low/stipended cost, access to a community of CNC enthusiasts

Values / fears

- Primary Values: education, good UI, scholarship/sponsorship opportunities,
- Common objections during sales process: "I can't afford this", "This
 won't make me a better engineer", "I can just take a class on CAD", "is
 this even valuable to me?"

Figure 3: Marketing Personas Pt. 1 (Lee 2015)

We titled our customer segments the young engineer, the engineering student, the inventor, and the engineering manager. Our personas allowed us to design product offers, copyright, and our advertisement campaign around their interests and demographics

Nick Telsa

High school teacher

- Key information about their company: Public regional school in rural town
- Role: Engineering teacher

Demographics

- Age: mid 20's-mid 30's
- Gender:Skews Male
- Salary / household income: \$57k
- Location: rural
- Education: Bachelor of science in Education, with a major in Technology Education
- Family: wife and child
- Tags: "inventor", "wantrepreneur", "hobbysist", "employee", "educator"

Goals and challenges

- Primary goal: Get his idea designed and machined into a physical product
- Secondary goal: Have parts made for his car/ motorcycle/ VW bus/ pontoon boat
- How you help achieve these goals: With engineering support we can take his design (bar napkin) and draft it in CAD software, we can also draft vehicle parts if the part type/number is available
- · Primary challenge: CAD drafting of product
- · Secondary challenge: Getting the right vehicle part made correctly
- How you help solve these problems: Engineering support can help draft the product design, access to CNC community can help figure out the vehicle parts

Values / fears

- Primary values: Engineering support for CAD/CAM drafting, assistance in design improvement, affordable prototyping, NDA's
- Common objections during sales process: "They will steal my idea",
 "My potential earnings could be cut by production costs", "This will take
 too long", "Once my product is made I cannot market it myself"

Donny Managiér

Engineering Manager

- · Key information about their company: Small-medium sized
- · Role: Manages the performance of design engineers

Demographics

- Age: late 30's-mid 40's
- Gender: Skews Male
- Salary / household income: \$100k
- Location: urban/suburban
- · Education: BS in Mechanical engineering, BS business admin
- · Family: wife and child
- Tags: "manager", "educator", "employee"

Goals and challenges

- Primary goal: Get cheaper, quicker, better prototypes
- · Secondary goal: Make his engineers better engineers
- How you help achieve these goals: Provide him and his team with material and webinars on design and machinability, provide them with engineering support asap if a part needs rework
- Primary challenge: Finding material that will make engineers better designers
- Secondary challenge: Where to get training that his subs will actively engage in
- How you help solve these problems: Having material and webinars geared toward the professional engineer, covering advanced topics on design, machinability, and cost reduction

Values / fears

- Primary values: Good UI, fast communication, trust, lead time, production quality, reliability, cost effectiveness, quality(informative and engaging) training material, near instant engineering support on parts that aren't machinable
- Common objections during sales process: "this won't make my
 engineers any better", "they won't even bother with the training", "we
 can just go to our normal shop", "production via the internet will take
 too long", "a weekly webinar will take too long so see improvement"

Figure 4: Marketing Personas Pt. 2 (Lee 2015)

4.2 Self Liquidating Sales Funnel

After the completion of Click Funnels training webinar, the team and sponsor were able to complete a final design for the sales. This section shows the concepts we made for each web page of our funnel.



Figure 5: Facebook Targeted Advertisement

The advertisements will be targeting specific Facebook users who have shown interest in CAM and CAD designing software. We chose to use a background picture clearly depicting CNC manufactured pieces to signal prospects with interest in the subject.

Manufacturing Design and Machinability Sales Funnel

Location: United States

Age: 17 - 45

Interests: Computer-aided manufacturing, 3D printing, Cars, 3D modeling, Metalworking, Engineering, Cloud computing, CAD MASTERS, cnc machining, Manufacturing, Computer-aided engineering, Mechanical engineering, CNC Machinist, Automotive design, Boats or Machine shop, Employers: Mechanical

People Who Match: engineering, Job title: Mechanical engineering, CAD Designer, CAD Designer

(Computer Aided Design Designer), Manufacturing Engineer, Autocad Designer, CAD Draftsman (Computer-Aided Design Draftsman), CAD Drafter (Computer Aided Design CAD Drafter), Manufacturer, Automotive Engineer or

Mechanical Design Engineer

Interests: SolidWorks, 3D modeling, Autodesk, AutoCAD, Computer-aided And Must Also Match:

design or Autodesk Revit

Interest expansion: 1 Off

Figure 6: Audience Interest Selection

The funnel was designed to provide educational information products on manufacturing design to prospective customers for the sponsor's CMfg service. The squeeze page offer was a free video on the topic of reducing the cost to produce machined parts. This video would be sent through email to customers, once they supplied us with their name, email address, and school or work organization.

Squeeze Page(Located on Sponsor Website):	
We help you improve your CAD modeling skills superior Superior parts!	to get you CHEAPER,
NAME:	
EMAIL ADDRESS:	The video is on us! Just fill out the
COMPANY/SCHOOL:	form!
Once you claim your video, you will be able to find Don't forget to check your spam fold	
CLAIM YOUR FREE VIDEO NO	<mark>W!</mark>

Figure 7: Squeeze Page

If they chose to fill out the prompts and click "CLAIM YOUR FREE VIDEO NOW!" they would be sent to the sale page. The sales page offer was for a full-length webinar class on "Manufacturing Machinability and Design" along with a designer's guide checklist, both provided by the sponsor. The value proposition this offer provided was a way for customers to increase wealth by means of cutting costs to part production and providing a less costly college education experience. The high prices associated with college education allowed us to price the webinar at a sub premium rate without appearing as unreasonable.

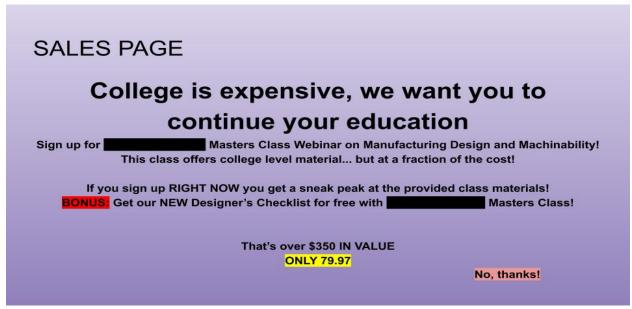


Figure 8: Sales Page

We chose to put a "No, thanks!" option to allow prospects to continue through the funnel without the need to make a purchase. This was to deter customers from exiting the funnel and company website.

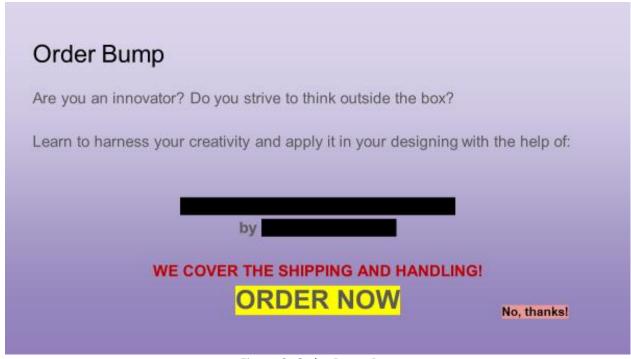


Figure 9: Order Bump Page

The order bump page was offering a book on design innovation. The sponsor was able to contact and partner with the book's publisher, who supplied the books at a discounted rate. The book was aimed towards the entrepreneurially inclined customers, and meant to provide them with inspiration to innovate using their mechanical design skills, in hopes that they would return to the sponsor for future production needs. We offered the book along with "free shipping", however, the cost of shipping was included in the \$30 price point. Again, we implemented the same option to progress through the funnel in attempt to prevent customers from leaving the website.



Figure 10: One Time Offer Page

Our One-Time-Offer page was the highest priced offer in the funnel we offered a 3D printer, which would be sourced from a direct to consumer Chinese product manufacturing company.

This offer was our method to provide customers with their own manufacturing capabilities, allowing them to produce designs on their own. We also believe that customers

would inevitably outgrow or surpass the production capabilities provided by the 3D printer, leading them to seek out the sponsor's CMfg services with the intent to make an order.

4.3 Financial Analysis

In order to quantify the potential results of our sales funnel we utilized the following NPV function:

NPV= (Today's value of estimated revenue)- (Today's Value of estimated costs)

Our financial analysis of the self-liquidating sales funnel was based on the use of a 6-month

Facebook Ads pay-per-click campaign. Time constraints placed on the project forced the team to estimate results based on the minimum number of daily links clicks our campaign would

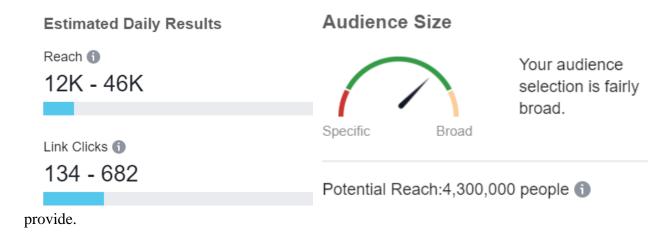


Figure 11: Outreach Potential for Facebook Ads Campaign

We made the following assumptions in order to estimate possible results for the selfliquidating sales funnel.

- The cost of Click Funnels Licensing was a onetime \$5,000 fee
- The campaign budget starts at \$1,000 per month
- Targeted ad was clicked the minimum expected number of times

- The conversion factor of every page was 10%
- Half of the net profits exceeding \$1,000 would be added to the ad campaign budget
- Ad campaign budget and reach remained constant for a period's entire duration

We neglected to include the time cost incurred by the sponsor to produce the products for the webinar offer, while their time is anything but worthless, we only wanted to implement monetary costs, like the Click Funnels software licensing fee.

In order to provide the offer with the largest profit margin the greatest visibility, the webinar and design guide offer was placed on the sales page so it would be seen by any prospect who accepted the squeeze page offer. As a digital information product, the webinar and design guide offer had no direct cost associated with its sales, leaving us more profit to invest in advertising.

Period		0	1	2	3	4	5	6	Tot	als
Minimum Ad Clicks		0	4020	6270	10230	17760	33000	54000		125280
Leads		0	402	627	1023	1776	3300	5400		12528
Number of Webinar Sales		0	40.2	62.7	102.3	177.6	330	540		1252.8
Number of Book sales		0	4.02	6.27	10.23	17.76	33	54		125.28
Number of 3D Printer Sales		0	0.402	0.627	1.023	1.776	3.3	5.4		12.528
Period		0	1	2	3	4	5	6	Tot	als
Webinar Sales Revenue	\$	-	\$ 3,214.79	\$ 5,014.12	\$ 8,180.93	\$ 14,202.67	\$ 26,390.10	\$ 43,183.80	\$	100,186.42
Book Sales Revenue	\$	-	\$ 120.60	\$ 188.10	\$ 306.90	\$ 532.80	\$ 990.00	\$ 1,620.00	\$	3,758.40
3D Printer Revenue	\$	-	\$ 100.50	\$ 156.75	\$ 255.75	\$ 444.00	\$ 825.00	\$ 1,350.00	\$	3,132.00
Total Revenue	\$	-	\$ 3,435.89	\$ 5,358.97	\$ 8,743.58	\$ 15,179.47	\$ 28,205.10	\$ 46,153.80	\$	107,076.82
Period		0	1	2	3	4	5	6	Tot	als
Click Funnels Licensing	\$(5,	,000.00)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$	(5,000)
ad campaign	\$	-	\$ (1,000)	\$ (1,657)	\$ (2,912)	\$ (5,172)	\$ (9,405)	\$ (17,802)	\$	(37,947)
Books	\$		\$ (48)	\$ (75)	\$ (123)	\$ (213)	\$ (396)	\$ (648)	\$	(1,503)
3D Printer	\$	-	\$ (74)	\$ (116)	\$ (189)	\$ (329)	\$ (611)	\$ (999)	\$	(2,318)
Total Costs	\$	(5,000)	\$ (1,123)	\$ (1,848)	\$ (3,224)	\$ (5,714)	\$ (10,411)	\$ (19,449)	\$	(46,768)

Figure 12:Estimated ad clicks, leads, revenues, and costs

The number of estimated advertisement clicks we could afford at the end of the analysis was over 13 times the number we started with. This model predicted an extraordinary rate of growth.

The estimated net present value of the funnel's profitability was positive at discounted rates of 8%, the sponsor's expected rate of return, 12% and 16%, double the sponsor's expected

rate of return. These results indicate that the implementation of the sales funnel could be profitable for the sponsor.

time periods(in months)		0	1	2	3	4	5	6
cashflows		\$ (5,000.00)	\$ 2,313.28	\$ 3,511.09	\$ 5,519.38	\$ 9,465.92	\$ 17,793.77	\$ 26,705.08
NPV(6 months @ 8%)	\$37,435.36							
NPV(6 months @ 12%)	\$29,852.75							
NPV(6 months @ 16%)	\$23,965.72							

Figure 13: Cash Flow NPV Calculations

Figure 14 displays the estimated cash flows from the sales funnel over the 6 month advertising campaign. The polynomial trend line curve helps us observe that as time moves on, the cash flow grows at an increasing rate. This type of patterned change in cash flow is known as a geometric gradient (Watts, Chapman 2015).

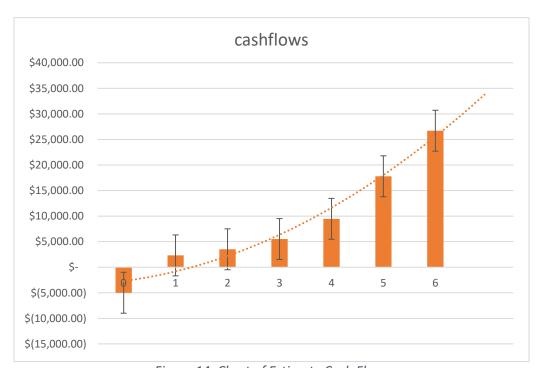


Figure 14: Chart of Estimate Cash Flows

Chapter 5- Conclusion

As internet usage becomes more integral for daily life and society, web-based technologies advance, and cost of advertising online continues to rise it is important for companies to continue adapting their business strategies in order to accommodate and utilize these trends. Recognizing changes in the digital landscape is vital for a business's marketing strategy to effectively sell products and services.

The team concludes that implementing the self-liquidating sales funnel could be beneficial for the CMfg sponsor, and other ecommerce markets could benefit from this strategy as well. The financial flow we observed from our pay-per-click advertising campaign analysis demonstrated the cost efficiency of selling information products. The low cost of development and lack of direct sales costs associated with information products makes them ideal for offsetting advertising expenditure during the lead generation process.

While self-liquidating sales funnels can cost effectively generate leads, they also have the potential to be significant sources of revenue. The geometric gradient we observed from our financial analysis portrayed revenue from the self-liquidating sales funnel was growing at an increasing rate. As we invested profits into expanding advertising reach, the rate at which revenue increased was greater than the rate at which costs increased.

The financial analysis of our self-liquidating sales funnel only provides an estimate of potential success. However, the over 200 existing members of Russell Brunson's 2 Comma Club, as well as Russell's own funnel driven \$360 million software company, provide real life examples of well-designed, profitable self-liquidating sales funnels exsist.

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