

Engineering Management
Field Project

Service Feasibility Plan for Development Distillery

By

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Definitions

Development distillery – Subject of this market research effort. A distillery designed to produce spirits for individuals or other distilleries on a contract basis.

Contract distilling – A limited arrangement between an individual or distillery and the development distillery to produce a specific amount of spirit, according to a specified recipe.

Test batch – Similar to contract distilling, but referring to the product not the arrangement.

Rent-a-still – Colloquialism for the contract distilling arrangement. Refers to the still owned by the development distillery that will be used to produce the test batch.

Individual target customer – An individual consumer or corporation that may be interested in producing a test batch with the development distillery. Unlikely to own their own still, but some individuals may.

Start-up distillery target customer – A company that intends to produce or in the early stages of producing spirits. May be interested in producing a test batch with the development distillery.

Operating distillery target customer – A subset of the start-up distillery target customer, who currently produces spirits. May be interested in producing a test batch with the development distillery.

Proof gallon – A measure of volume that takes into account the ethanol composition of the subject spirit. Typically defined as one gallon at 100 proof (50 percent alcohol by volume). Used extensively as a measure of production in the spirit industry.

Executive Summary

Central Question: Is there a market for contract distilling at the craft scale?

The craft distilling market has experienced rapid growth in recent years. In many ways, this trend is expected to be similar to the explosion in the craft brewing market, which now holds approximately 10 percent market share. Should craft distilling gain the same market share as their brewing brethren, craft distilling will become a six billion dollar per year market (S&P 2009).

This feasibility study explores the opportunity of craft distillers outsourcing of the production of spirits. To focus on the emerging craft distilling market, the size of the contract distilling was scaled down. Start-up distilleries may elect to obtain assistance searching for spirits to add to their portfolio. These start-up distilleries may consider outsourcing the production of test batches of spirits to a development distillery. These test batches could then be tested internally or used as part of a market feasibility study to determine demand.

The target market was individuals and start-up distilleries. Large distilleries have the capability to develop their own new products and would require large volumes for market tests. The start-up distillery group was further sub divided into companies with current spirit production and those without, with the focus on distilleries already providing product to consumers.

The market research showed significant interest in pursuing teaming arrangements with a development distillery for the production of spirits (71 percent of respondents). However, the size of batch desired was lower than would be desired by a development distillery. Figure 1 shows a summary of the most important attributes of the teaming arrangement to target market, as found during the project research.

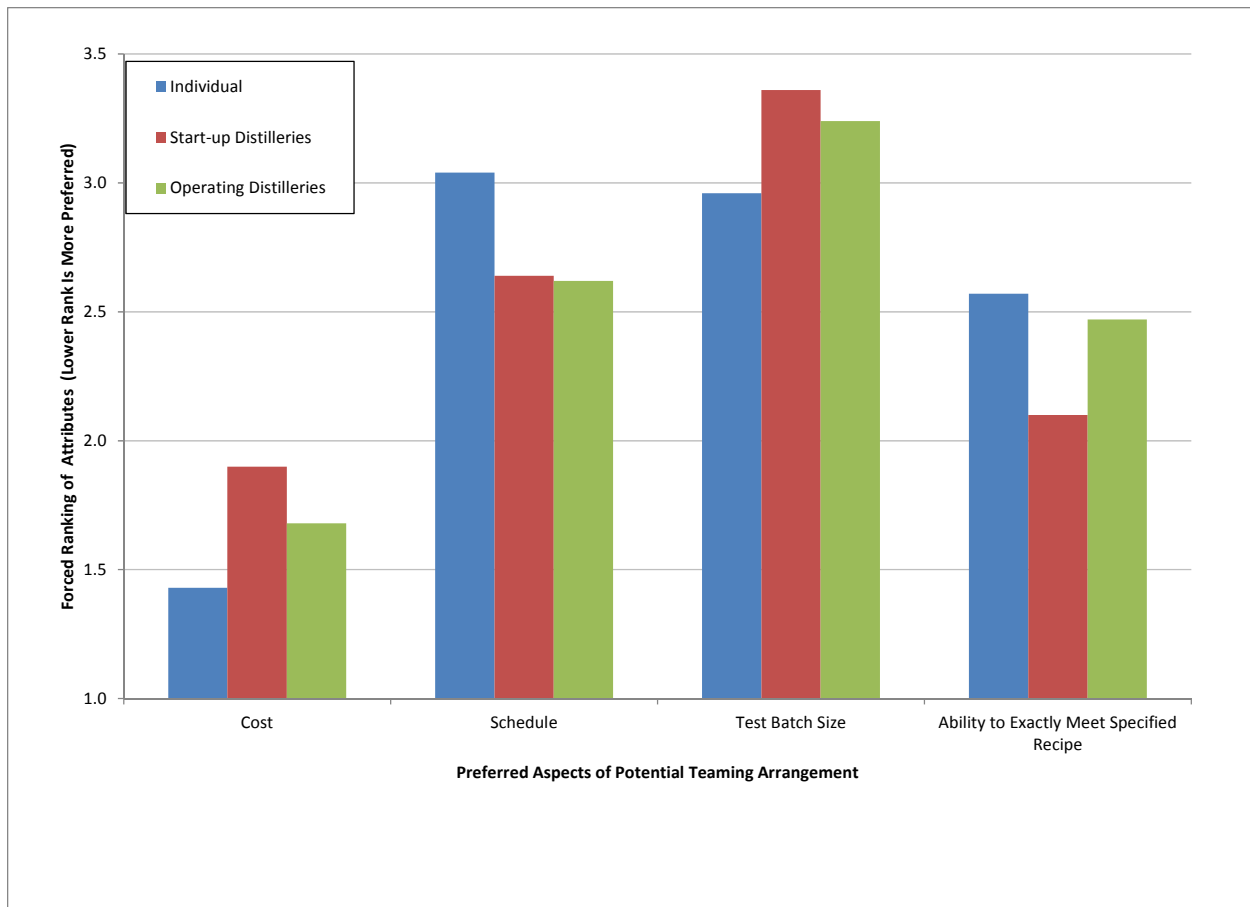


Figure 1: Ranking of Importance of Aspect of Development Distillery Teaming Arrangement (Lower Values Indicate Higher Importance)

The most important aspect of the teaming arrangement from the customer perspective is the cost of the distilled spirit product, with individuals strongly preferring low costs. Start-up distilleries are more likely to place increased importance on the ability to exactly meet a specified recipe than distilleries that are already producing product. Individuals placed minimal importance on schedule. Commercial distilleries did not place high importance on the size of test batch, with a majority preferring between two and 40 proof gallons. The importance on cost, and the relatively small volume preferred for test batches, makes contract distilling into the craft market unlikely to offer attractive profits.

In summary, the craft distilling market is expected to perform strongly, providing many opportunities for business providing services to that market. Craft distillers contracting the production of spirits seems to be an area of the market that is not well suited for a development

distillery to make a reasonable profit. However, the development distillery would still be a potentially useful branding, business development and customer relationship tool that could foster the generation of long-term profitable business as the craft distillery grows and requires traditional contract distilling arrangements.

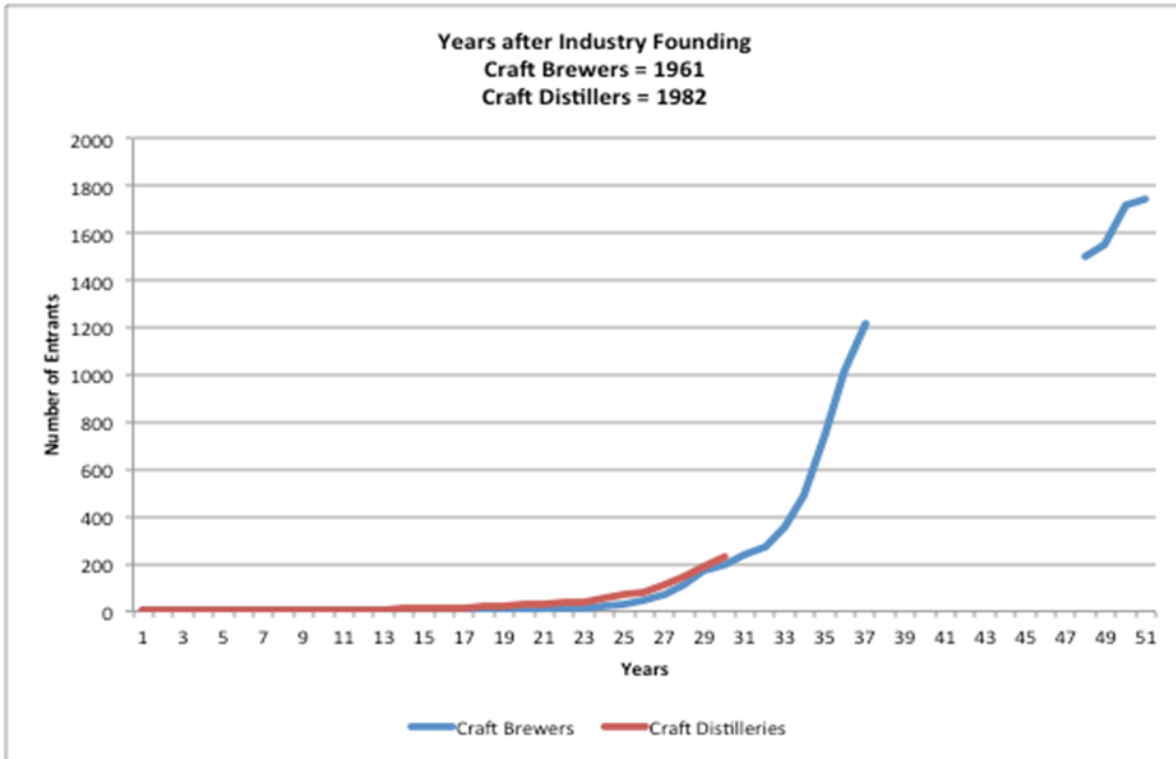
Introduction

The last five to ten years has seen explosive growth in the number of craft distilleries licensed in the United States. At the end of 2011 there were 314 unique entries in the American Distillers Institute directory, with an estimated 234 operating craft distilleries (Kinstlick). This is an increase of nearly 200 distilleries between the years of 2005 and 2011 (Kinstlick). Current estimates put the number of micro distilleries around 400. (Confidential Source 1).

The growth trend in craft distilling has strong parallels to the recent growth in craft brewing. Figure 2 shows the growth in the number of craft distilleries overlaid on a similar growth trend for craft brewers; the timeline for the craft brewers has been translated in time to allow direct comparison between the two trends (Kinstlick). This strong growth represents a significant opportunity for businesses offering products and services to craft distilleries. The craft brewing segment now accounts for approximately 10 percent of total beer sales. The total market for beer was 99.3 billion dollars (S&P 2009). The total spirit market was 61.1 billion dollars; if craft distilling continues to follow a similar trajectory to craft brewing, craft distilling market sales could reach 6.1 billion dollars in the next 10 to 20 years (S&P 2009).

Industry Growth Paths

Craft Distilleries vs. Craft Breweries



Data: ADI, Michael Kinstlick, Glenn Carroll, Anand Swaminathan

© Michael Kinstlick and Coppersea Distilling, LLC

Figure 2: Similar Trends in the Development of Craft Brewing and Craft Distilling (Kinstlick)

There are a few main differences between the craft brewing and craft distilling businesses. First, the capital required to start a brewery is significantly less than the capital requirement required to begin distilling. Distilleries produce “beer”, which is then distilled to create spirits. Therefore, distilleries must purchase their still in addition to the cost of fermentation equipment. The cost for a moderately sized still can be hundreds of thousands of dollars. Second, operating costs for distilleries are high, driven primarily by the energy costs of the process. Third, the regulatory environment for distilling is much more restrictive than that for brewing. Many of today’s successful microbrewers began as home brewers pursuing a hobby. Distillation is illegal without the appropriate federal and state permits, rendering home distilling nearly impossible. Finally, many spirits require aging, which delays return on investment in a distillery business.

The differences between brewing and distilling raise questions about the growth comparisons between the two. Despite the differences, the general trends driving the craft brewing segment are influences on the craft distilling model as well, since both are driven by similar consumer demands. Strong growth in craft distilling is expected. These market differences are mostly apparent as barriers to entry for craft distillers. There is a significant opportunity for established distillers to fill the market demand for craft distilling by augmenting their business model to meet the craft demand.

The subject of this research market plan is to explore the feasibility of a development distillery. This development distillery would work with other distilleries to produce new products. This arrangement would be on a contract basis for a specified spirit type and a smaller volume. This concept would function as a “rent-a-still” arrangement, allowing customers access to a still to produce a spirit of their design. In addition to the production of “test batches” of spirit, the development distillery could offer other business related services to further increase their influence.

The developmental distillery could be designed to operate as a stand-alone distillery, seeking to make a profit by producing spirits for other distilleries. It will be imperative for a development distillery designed to this model to select the correct capacity to serve a market with sufficient demand to support the business. A 100 liter still will not be able to provide capacity to serve more than a handful of individuals per year. However, an industrial sized still will not be able to produce batch sizes small enough to meet the needs of start-up distilleries. Finding the developmental distillery’s niche represents a significant challenge.

Strategic Objectives

The strategic objectives of this research are to determine the following:

- Demand for contract distilling services
- Size and characteristics of the target market
- Opportunistic ancillary services

In order for the development distillery to be profitable (or at least feasible as business development activity) there must be a suitably sized market to sell services to. The size of this

market and the size of the test batch desired by the target market are key components in the design of the development distillery. Defining the target market will also afford the opportunity to further understand the related support services that successful customers will progress through as they grow.

Target Customers

Four potential groups of customers were considered potential target customers for the development – “rent-a-still”- distillery concept. For the purpose of this analysis and market plan, these groups were broadly categorized as:

Individual – may or may not produce spirits, has no intent to resell product.

Start-up Distillery – may or may not currently produce spirits, intends to brand, market and resell the spirits produced by the development distillery.

Small Craft Distillery – Currently producing spirits with the intent to sell them commercially. May be looking to procure less expensive raw spirit or develop a new product.

Large Distillery – Currently producing large quantities of spirits and successfully selling their product into diverse markets. Potential to use the development distillery to run targeted marketing programs.

This project will not consider the Large Distillery customers. It was not feasible to contact and substantiate interest in the product for large producers.

Individual

For the scope of this project, the group “individual” encompasses a broad range of potential customers. At the small end of the spectrum, an individual could be interested in creating the own brand of their favorite spirit. They may desire to produce their own grain bill (the ingredients for their recipe), but the individual may not be sophisticated enough to desire that level of control. For example, an individual may desire a low cost mixer personalized for their 50th birthday party; a half of a case could be sufficient to meet their desires. Alternatively, a long-time home brewer may be interested in extending their skills to distilling. Due to legal

restrictions, their best opportunity might be afforded by teaming with a development distillery to produce a spirit to their specification.

An “individual” may also extend to an individual corporation. A company may choose to create a test batch for a potential private label. These users are not likely to be knowledgeable of the distilling process, and would be expected to treat the work with the development distillery as a project, not a hobby. It could be inferred that quality and cost would be the most important aspects of teaming with the development distillery, and the exact grain bill would be of less concern. This subset of customers is likely to desire larger volume test batches.

Start-up Distillery

Start-up distilleries are qualified as businesses that have incorporated with the intent to sell spirits. This group could be sub-classified by those that currently produce spirits, and those that do not. A fledgling distillery may look to procure a low cost product and re-brand it under their name. They may desire to produce high quality bourbon, but need to sell a clear spirit to maintain profitability in the short term. This type of distillery would be a potential customer for two types of product that could be produced by a development distillery. First, the low cost, neutral spirit could be provided to create the product to generate short term cash flow. This product would need to focus on maintaining low costs and working to meet the start-up distillery’s schedule. Second, the development distillery may want to purchase smaller quantities of “teaser” product that will be similar to the higher quality bourbon they intend to sell as the staple of their long term business strategy. A development distillery may pursue this opportunity by aging a volume of product produced years ago to meet this demand.

A start-up distillery that is already producing their product may elect to engage a development distillery to supplement their capacity in case of unexpected success. Furthermore, the development distillery may offer a set of skills and services that would be useful for the nascent distillery. The start-up distillery may be interested in advice and contacts for:

- Legal and regulatory advice
- Branding
- Bottling and labeling

Providing these types of ancillary services may provide opportunities to produce relatively large quantities for the start-up distillery.

Small Craft Distillery

Small Craft Distilleries are likely to have successfully navigated the perils of beginning a business. This customer would most likely be interested in purchasing relatively large volumes of spirit from a development distillery in order to decrease raw costs and increase profitability. This type of business arrangement is on the upper end of the capabilities of a development distillery, and is more likely to be the focus of an established lost-cost distilled spirits provider. However, the spirits provider may choose to pursue the development distillery model in order to develop relationships with distilleries transitioning into the “Small Craft Distillery” category.

Large Distillery

Large Distilleries are unlikely to have a need for the service of a development distillery. They are more apt to have their own in-house capabilities that will compete with the development distillery’s offerings. Furthermore, the large distilleries are unlikely to find this type of arrangement of sufficient production capacity to draw their attention.

Market Data & Analysis

The alcohol industry is a mature industry, existing in some form nearly as long as civilization itself. In fact, there is speculation that the motivation for transitioning from nomadic societies to agriculture based societies was to ensure the supply of grains for the production of alcohol. The distillation of alcohol is a relatively newer process (but still an ancient practice), first documented during the time of the ancient Greeks. Furthermore, the government has been involved in the taxation and regulation of the production of alcohol nearly since its inception; it is postulated that the laborers that build the pyramids were paid in government beer rations.

In contrast, the micro-distillery market is relatively novel, and arguably, undeveloped. The main reason on the small market penetration of micro distilleries is due to the aforementioned government regulation. During the U.S. prohibition, home and micro distillation developed a very poor reputation. In some cases, people died from consuming adulterated, home-produced spirit products. Due to economies of scale, the high up-front investment required for spirits production promotes consolidation. Larger distilleries can dilute the capital costs across a larger volume of production and have an improved projected timeline for reaching profitability.

Industry Analysis

The development distillery will produce services for the market of recreational drugs. The development distillery will only participate in the production of legal recreation drugs, and will follow all federal, state and local laws and regulations affecting its production, distribution and use. Tobacco and other alcohol products such as beer, wine, mead, hard cider and other fermented beverages are the other entities in the market. Sales in the alcohol and tobacco industry reached approximately \$263 billion in 2008, according to estimates from Standard and Poor's (S&P). Supplier sales of spirits were estimated at \$21.3 billion in 2012.

To a limited extent, alcoholic beverages are substitutes for each other, and are considered competitors. However, in general the market shares of beer, wine, spirits and other alcohol products have remained relatively constant over recent history. However, as shown in Figure 3, spirits have shown moderate gains in market share over the last decade (Distilled Spirits Council 2012).

Beverage Alcohol Market Share - Revenue Based							
Year	Supplier Gross Revenues (Billions)				Market Share		
	Beer	Spirits	Wine	Total	Beer	Spirits	Wine
1999	\$ 21.20	\$ 10.66	\$ 6.00	\$ 37.86	56.0%	28.2%	15.8%
2000	\$ 22.60	\$ 11.70	\$ 6.41	\$ 40.71	55.5%	28.7%	15.7%
2001	\$ 23.80	\$ 12.22	\$ 6.63	\$ 42.65	55.8%	28.7%	15.5%
2002	\$ 24.10	\$ 13.17	\$ 7.04	\$ 44.31	54.4%	29.7%	15.9%
2003	\$ 24.87	\$ 13.87	\$ 7.50	\$ 46.24	53.8%	30.0%	16.2%
2004	\$ 25.62	\$ 15.12	\$ 7.90	\$ 48.64	52.7%	31.1%	16.2%
2005	\$ 25.62	\$ 16.00	\$ 8.30	\$ 49.92	51.3%	32.1%	16.6%
2006	\$ 26.34	\$ 17.20	\$ 8.62	\$ 52.15	50.5%	33.0%	16.5%
2007	\$ 27.49	\$ 18.20	\$ 9.24	\$ 54.93	50.1%	33.1%	16.8%
2008	\$ 28.46	\$ 18.72	\$ 9.38	\$ 56.56	50.3%	33.1%	16.6%
2009	\$ 28.82	\$ 18.74	\$ 9.48	\$ 57.04	50.5%	32.9%	16.6%
2010	\$ 28.64	\$ 19.16	\$ 9.76	\$ 57.56	49.8%	33.3%	16.9%
2011	\$ 29.24	\$ 20.36	\$ 10.19	\$ 59.79	48.9%	34.1%	17.0%
2012	\$ 30.32	\$ 21.29	\$ 10.53	\$ 62.13	48.8%	34.3%	16.9%

Sources: 10k Reports, DISCUS Estimates & Adams/BIG Wine Handbook
Distilled Spirits Council, Economic & Strategic Analysis Dept.

Figure 3: Shift In Consumer Preference Toward Spirits

The spirit market segment is a relatively small portion of the alcohol market, with total sales of approximately 61.1 billion dollars in 2008 according to Standard & Poor’s (S&P 2009). Within the spirit market segment, there are relatively few large producers of product. Figure 4 shows the Market Hierarchy for the spirit industry.

Market Hierarchy

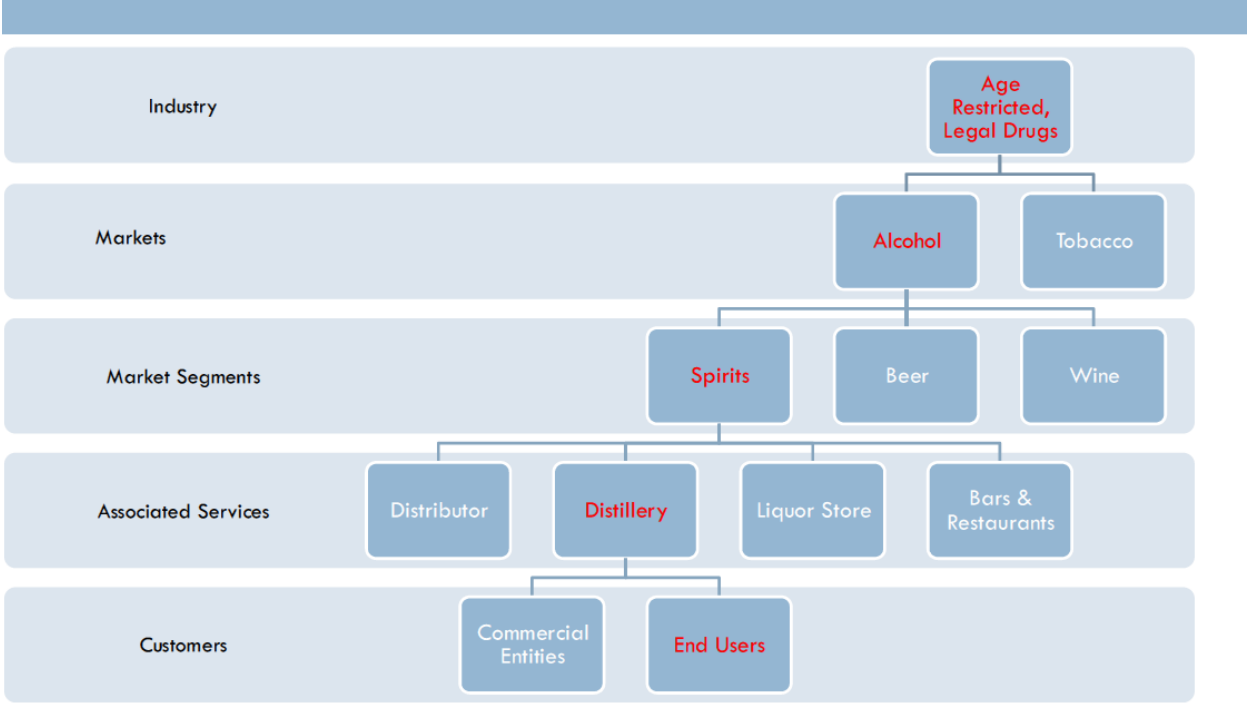


Figure 4: Market Hierarchy of Development Distillery

The spirit market is relatively concentrated with the top five producers accounting for nearly 60 percent of the total volume produced and the top ten producers accounting for nearly 80 percent of total volume (S&P 2008). Furthermore, the spirit market segment has seen additional consolidation with Diageo's purchase of Seagram in 2001 and Bacardi's purchase of Grey Goose in 2004. Additionally, J&M Beam Brands acquired 25 brands from Allied Domecq Spirits in 2005 and Pernod Richard acquired Absolut Vodka in 2007. Figure 5, shows the current market share of each of the top 20 distilled spirit brands as of 2008 (S&P 2008).

The consumer demand outlook for the spirit industry is extremely favorable. According to S&P:

“In recent years, there has been a resurgence in demand in the distilled spirits industry. There are several reasons for this resurgence, including changes in regulations (which have led to increased marketing activity and aggressive media campaigns), greater trading-up activity (where individuals switch from lower-end products to premium products), increase popularity with younger drinkers, and the burgeoning size of those aged 50 and older.”

Two main points from this outlook are encouraging for the fundamental business aspects for new craft distilleries. First, regulations on spirits show a decreasing trend. Second, consumers are demanding higher quality spirit products. The increase in the number of operating craft distilleries will increase the opportunities for the potential development distillery. Finally, demand for alcohol products is expected to increase as the population over the legal drinking age of 21 continues to increase, see Figure 6.

TOP 20 PREMIUM DISTILLED SPIRIT BRANDS			--- CASE SALES ---	
<i>(Ranked by 2008 sales, in thousands of nine-liter case sales)</i>				
BRAND	MARKETER	TYPE	2007	2008
1. <i>Smirnoff*</i>	Diageo	Vodka	9,015	9,375
2. <i>Bacardi**</i>	Bacardi USA	Rum	9,180	9,364
3. <i>Captain Morgan</i>	Diageo	Rum	5,246	5,453
4. <i>Absolut*</i>	Pernod Ricard USA	Vodka	5,013	4,746
5. <i>Jack Daniels</i>	Brown-Forman Beverages	Whiskey	4,679	4,725
6. <i>Crown Royal</i>	Diageo	Whiskey	3,794	3,961
7. <i>José Cuervo</i>	Diageo	Tequila	3,709	3,716
8. <i>Grey Goose</i>	Bacardi USA	Vodka	3,325	3,459
9. <i>Jim Beam</i>	Beam Global Spirits	Bourbon	3,264	3,194
10. <i>Jagermeister</i>	Sidney Frank Importing	Liqueur	2,850	2,950
11. <i>E&J</i>	E&J Gallo Winery	Brandy	2,740	2,865
12. <i>Seagram's Gin</i>	Pernod Ricard USA	Gin	2,901	2,786
13. <i>DeKuyper</i>	Beam Global Spirits	Cordial	2,839	2,722
14. <i>Skyy</i>	Skyy Spirits USA	Vodka	2,322	2,485
15. <i>7 Crown</i>	Diageo	Whiskey	2,431	2,480
16. <i>Hennessey</i>	Moët Hennessy USA	Cognac	2,298	2,247
17. <i>Svedka</i>	Constellation Spirits	Vodka	1,526	2,100
18. <i>Stolichnaya</i>	William Grant & Sons	Vodka	2,185	2,000
19. <i>Ketel One Vodka</i>	Nolet Spirits USA	Vodka	1,858	1,969
20. <i>Black Velvet</i>	Constellation Spirits	Whiskey	1,910	1,956

*Includes all flavors. **Includes full line.
Source: *Adams Handbook Advance*.

Figure 5: Top 20 Distilled Spirit Brands (2009 S&P Report)

US RESIDENT POPULATION PROJECTIONS					
<i>(In thousands)</i>					
AGE GROUP	2010	2015	2025	--- % CHANGE ---	
				2010-15	2010-25
Under 5 yrs.	21,100	22,076	23,484	4.6	11.3
% of total	6.8	6.8	6.6		
5 to 14 yrs.	41,281	43,365	47,225	5.0	14.4
% of total	13.3	13.3	13.2		
15 to 19 yrs.	21,770	21,209	23,545	(2.6)	8.2
% of total	7.0	6.5	6.6		
20 to 24 yrs.	21,779	22,342	23,168	2.6	6.4
% of total	7.0	6.9	6.5		
25 to 34 yrs.	41,818	44,499	46,116	6.4	10.3
% of total	13.5	13.7	12.9		
35 to 44 yrs.	41,277	41,301	46,496	0.1	12.6
% of total	13.3	12.7	13.0		
45 to 64 yrs.	80,980	83,911	83,510	3.6	3.1
% of total	26.1	25.8	23.4		
65 yrs. & over	40,229	46,837	63,907	16.4	58.9
% of total	13.0	14.4	17.9		
Total population	310,233	325,540	357,452	4.9	15.2

Figure 6: U.S. Population Projections (Source: 2009 S&P Report)

Macro-Economic

If distilled beverage consumers share characteristics with beer drinkers, the trail to success has already been blazed. The market is ripe for a craft distiller to come into the appropriate geographic market, offering super-premium products that larger distillers won't waste their time duplicating. There were beer drinkers that were not aware of the enormous variability available from their favorite beverage, drinking bud light or miller light at tailgate after tailgate. Many of today's would-be bud light consumers are now enjoying Boston Lager, or Sierra Nevada Pale Ale. Consumer preferences are also moving toward local production of goods and organic ingredients (Confidential Source 2). Craft distillers have a competitive advantage marketing to those customers.

The demand for spirits has proven to be inelastic over recent history. While the U.S. population used to consume hard alcohol at nearly twice the current rate, demand has been relatively stable or slightly increasing for the last five years (Figure 3). Furthermore, spirit sales are relatively insulated from swings in the economy. When the economy is down, the consumer stays home from the bars to imbibe; when times are good, disposable income abounds and premium goods and services benefit.

There is a recent trend in spirit consumption called "premiumisation". Premiumisation is the trend of spirit consumers to climb the ladder to more and more expensive and, potentially, higher quality products. Premiumisation is the trend of "trading up" (Ipsos) to higher and higher rungs on that ladder. Spirits offer affordable luxury (Ipsos) with evident differentiation across each of the spirit products. A premium spirit is typically defined as a bottle with a retail value above 20 dollars per bottle. Research into the premiumisation effect has shown that brands that exude certain qualities are considered premium. These broad categories are described as (Ipsos):

- Best Taste.
- Worth paying more for.
- Perfection in every detail.
- The brand is exciting.
- Makes the consumer look and feel their best.

The craft distillery movement is well positioned to take advantage of the wave of premiumisation. Due to their smaller size and geographically close location to the consumer, the craft distiller has an inherent competitive advantage over a bulk producer of high volume brands.

The trend toward premiumisation is a major driving force in the overseas consumption of spirits. Developing nations, such as the BRIC (Brazil, Russia, India and China) nations, have shown larger increases in premiumisation than first-world countries (Ipsos). Craft distillers will have limited opportunities to access these markets with their typical distribution channels. Larger distilleries will seek to capitalize on the premiumisation trend in these emerging markets. The potential role for the development distillery in these international markets is uncertain. However, the impact of premiumisation on the products requested by prospective customers of the development distillery will likely trend toward premium spirits.

Customer Analysis

A study of the market segmentation and customer demand characteristics is somewhat difficult for the micro-distillery business. Not only would the micro-distillery be a new venture, the entire marketplace is still in its infancy (if it is to be developed at all). However, there is reasonable encouragement for the prospect of a development distillery because there are micro-distilleries popping up here and there across the country. In fact, there is a small distillery opening in Lenexa called the Dark Horse Distillery.

End User Ultimate Market: Technically, anyone over the age of 21 can purchase and enjoy spirit products. In reality, according to statistics gathered by the National Institute on Alcohol Abuse and Alcoholism only 66 percent of the population consumes alcohol (NIAAA 2010). Although a much larger percentage of people between 18 and 34 consume alcohol (approximately 78 percent) (NIAAA 2010). The total ultimate market size (assuming 66 percent of adults consume alcohol) is approximately 150 million people (Census 2010). However, the business plan for the development distillery clearly does not involve such a large target audience.

The focus of this research is the subset of distilleries or individuals potentially interested in the “rent-a-still” concept, also referred to as the development distillery.

Target Ultimate Market: Interest in learning about distilling and contracting the production of spirits is not limited to people who consume spirits. Ultimately, development distillery would

accept orders from anywhere in the United States. The total ultimate market size is conceivably the entire adult population of the U.S, approximately 221 million people (Census 2010). However, the business plan for the development distillery clearly does not involve such a large target audience.

Target “Individual” Intermediate Market: For the purposes of this analysis it is assumed that the “individual” subset will consist of a small fraction of the population that cares to distill their own spirit. Let’s assume that only 0.01 percent of the ultimate market would consider the development distillery’s products. Furthermore, the further from the distillery, the less likely the consumer will be aware of the product. Considering these restraints, the intermediate market is approximately 20,000 people.

Target “Start-up Distillery” Intermediate Market: For the purposes of this analysis it is assumed that the “start-up distillery” subset will consist of small craft distilleries that have been in business less than 5 years. Between 2008 and 2011 approximately 35 craft distilleries opened per year (Kinstlick). The intermediate market for start-up distilleries can therefore be estimated at 175 distilleries. This calculation method is likely underestimating the actual number of new distilleries. Other calculation methods estimate the number of operating craft distilleries around 400 (Confidential Source 1).

Target Feasible Market: The main limitation for the customers that could be expected to purchase product the development distillery would be limited to those open to the idea of others producing product for them. From the (self-selected) responses to the two surveys issued it can be assumed that 71 percent of both interested individuals and prospective start-up distilleries would “consider using a development distillery”. An optimistic estimate for the feasible markets would therefore be about 7,000 individuals and 124 start-up distilleries. However, it is likely that most of those that claim interest would not actually choose to use the product. To set the lower bound of the target feasible market it could be assumed that 1 in 100 individuals and 1 in 50 start-up distilleries would actually use the development distillery to produce spirits. Therefore the lower bound on the target market would be 70 individuals and two to three start-up distilleries. Clearly the difference between those that would “consider” using a development distillery and those that actually would place orders makes a significant difference in the prospects for the potential development distillery.

Market Characteristics

The choice to contract the production of spirits is a natural one for any entity with a still. The capital and operating cost of a still is relatively high, creating a barrier for entry. Distilleries have already sunk the cost into the still and seek to recoup that investment by running the equipment at a high capacity factor. For distilleries not currently operating at maximum capacity, contract distilling seems to be a natural fit.

Why then, is it not more prevalent in the industry? First and foremost, these distilleries are interested in developing their own business and growing their own brands. Any time and effort spent contract distilling represents an opportunity cost for their own company. Secondly, depending on the state in which the contract distilling would take place; there can be some regulatory restrictions that make the arrangement less attractive for a potential contract distiller.

In fact, many distilleries are open to the production of spirits on contract. A brief search on artisan distiller websites (adiforums.com, homedistiller.org) shows that these types of contract requests are met with probing questions from potential distillers, but there is some level of interest from the would-be contract distillers (Confidential Source 1). These types of contract arrangements could be considered direct competitors to the development distillery that is the subject of this project. Therefore the development distillery would require differentiation, and would need to develop a competitive advantage in cost, schedule, specification and delivery.

Research Findings

Research into the viability of the development distillery was conducted through multiple channels. The first method of market research conducted was the interview of two officers representing a company with the wherewithal and knowledge to successfully execute a development distillery service within the scope of their existing company. This interview provided valuable insight on the primary economic factors and relationship drivers that would be the keys to success for a development distillery.

The second research avenue was the collection of data through a survey of target customers to gauge their interest and quantify market preferences. Due to the nature of the data collection, responses from large commercial entities were not viable. The focus of the market research focused on the smaller sub-segments of the target market, the individual and start-up distilleries.

The differences between the two surveyed subgroups can be extrapolated to characterize the desires of the larger volume spirit producer sub-segments that did not respond.

Interview with Industry Experts

A brief interview was held with two officers of a distilled spirits provider to characterize the opportunity for contract distilling at the craft scale. This discussion was particularly relevant to the subject material because the distilled spirits provider is a contract distiller on a much larger scale. The insight on the industry provided in the discussion was elucidating, but their comments were understandably based on their contracting experiences with much larger distilleries.

The comments during the interview made it distinctly clear that the production of spirits was much less expensive, on a cost per volume basis, for larger operations (Confidential Source 2). Increased economies of scale in the still and balance of plant equipment provide the ability to produce spirits at a much lower cost than a craft distiller producing volumes 10 to 100 times less than the industrial spirits provider. This price advantage represents a sustainable competitive advantage. The market surveys of both the individual and start-up craft distilleries segments placed a large importance on the cost of a contracted product (with 71 percent and 43 percent of respondents ranking the cost of the contracted distilled product the most important aspect of the potential contracting arrangement).

Another finding from the discussion was the relative lack of sophistication of start-up distilleries. They are often under-capitalized, which puts them at a distinct disadvantage in the craft distilling market. These start-up distilleries do not have the revenues from other established product lines to subsidize the development of their potential contracting business. Furthermore, the breadth of knowledge required by a contract distiller is larger than a distillery focusing on the production of their key products. The production of a distillery will depend on the available resources and staff; smaller distilleries have less staff. These smaller distilleries may be good at producing the products they have perfected and brought to market, but may be relatively unequipped to handle requests that are outside of their limited sphere of knowledge. This represents another sustainable advantage for a larger sized, more experienced contract distillery.

The quality of product that a contract distiller is able to produce is not directly related to the size of the distillery. There are clearly product consistency advantages for larger organizations which

are expected to invest in more sophisticated quality control measures. However, consistency of a contracted batch is of less importance than the overall quality due to the limited scope and duration of the test batch production.

Survey of Target Customers

In order to quantify the interest in contract distilling with a potential development distillery, a survey of potentially interested parties was conducted. There were two versions of the survey created, one tailored to individuals likely to express interest in distilling; another was designed to survey the “start-up” distillery market. The likelihood of reaching both small craft distilleries and large distilleries with an anonymous survey is remote, and these groups are assumed to be minimally represented (if at all) in the two surveys conducted. The two surveys are presented in Appendix A and Appendix C, for the individual and start-up distilleries, respectively. The results for the two surveys follow in Appendices B and D, respectively.

As discussed in the Target Customers section, the main focus of the market research conducted during this project focused on the individual and start-up distillery potential customers. The two main subcategories absent from this research are established craft distilleries and larger distilleries. While the analysis of the larger more established distilleries would allow an interesting juxtaposition between the large and small segments of the spirit market, the collection of data from these entities is infeasible due to lack of available contacts.

Setting the established craft distilleries and large distilleries aside, this research seeks to discover the similarities and difference between the individual and start-up distillery potential markets. To attempt to gain an understanding of each subgroup of potential development distillery customers, two separate surveys were issued. The individual segment results are based on 29 responses, which were solicited from online communities with interest in distilling and brewing. The survey of the start-up distillery market was conducted by issuing a questionnaire to 434 participants in the spirit marketplace (Confidential Source 3). Of the total 434 surveyed, 75 responded.

Individual Segment Preferences

For the individual segment, a survey was posted on two different internet forums dedicated to brewing and distilling advertising the opportunity to share individual’s thoughts and desires for a teaming relationship with a development distillery. Individuals are much less likely to

understand the technical details and business environment of distilling. Many of these respondents characterized themselves as home brewers (76 percent) with an interest in home distilling, if it were legal (62 percent). It is interesting to note that 24 percent of respondents noted that they were currently distilling with 57 percent of those respondents distilling between ten and 50 proof gallons per year. The spirits produced by these individuals was dominated by whisky, rum and unflavored vodka.

The most interesting result from the survey was the amount of product that the individual would like to team with the development distillery to produce. The most common amount of product desired was two proof gallons, by 54 percent of respondents. The survey directed respondents to assume a case of 12, 750 mL bottles at 90 proof should be considered two proof gallons. Eighteen percent of respondents expressed desire for a teaming arrangement producing between 10 and 40 proof gallons. No respondents expressed interest in more volume than 40 proof gallons.

Respondents were given the opportunity to specify what aspect of the teaming arrangement was most important for meeting their needs. The characteristics that were forced-ranked from most important (1) to least important (4) were:

1. Cost
2. Schedule
3. Test Batch Size
4. Ability to Exactly Meet Specified Recipe

Cost was selected as the most important aspect of the developmental distillery teaming arrangement by 71 percent of respondents. The ability to exactly meet the specified recipe was the second most important aspect of the arrangement with schedule and batch size both ranked a distant last. Table 1 shows a summary of the forced ranking preference responses.

Question: Please rank the most important aspects of the potential teaming arrangement		
Response	Most Important	Average Weight of Response
Cost	71.4%	1.43
Schedule	3.6%	3.04
Test Batch Size	7.1%	2.96
Ability to Exactly Meet Specified Recipe	17.9%	2.57

Table 1: Self-Reported Preferences of Individual Customers

In summary, catering to the individual as a development distillery does not appear to be an attractive business strategy based on the results of this research. The focus on cost as the attribute of primary importance, coupled with the desire for an extremely small batch size makes it highly unlikely to organize a profitable business plan relying on providing test batches to individuals.

Start-up Distilleries Segment Preferences

For the start-up distillery segment, a survey emailed to a targeted group of American companies that are involved in the distilling industry advertising the opportunity to share the organization’s thoughts and desires for a teaming relationship with a development distillery. These distilleries are much more likely to understand the technical details and business environment of distilling. A plurality of these respondents characterized themselves having been in business less than one year (37 percent). A strong majority of respondents indicated they had been in business less than five years (86 percent). Furthermore, 36 percent of respondents indicated they had no current production of spirits. These statistics indicated that there is a strong interest in distilling among the respondents, but there is still a significant chasm between those that are “doing”, and those that are “pursuing”.

In order to further understand the characteristics of the respondents that were actually producing spirits another data set was selected from the start-up respondents. This sub-group only included respondents that indicated they currently distill product. This group is referred to as “operating craft distillers”.

The operating craft distillers were less agreeable to potential teaming arrangements, with 65 percent of respondents indicating tentative interest in such contracts (compared with 71 percent of all start-up distillery respondents). This indicates that the more developed the distillery

business, the less open they are to third party production of their products. This data suggests that it may be important to develop potential contract distilling arrangements early in the life of a start-up distillery. As distilleries age and become savvier, they are less likely to desire to outsource their development process.

In the operating craft distiller group sub-category, the desired test batch sizes were still quite low volume. Of the operating group responses indicating interest in a teaming arrangement with a development distillery, the following statistics show the desired size of the contracted test batch (respondents were directed to assume the following; “each case of 12 bottles at 750 mL, at 90 proof contains approximately 2 proof gallons):

- Two proof gallons (PG) - 17 percent
- Between two and ten PG – 34 percent
- Between ten and 40 PG – 34 percent
- Between 40 and 100 PG – 7 percent
- Over 100 PG – 7 percent

Given that these responses were based on the hypothetical desire to consider a teaming arrangement, it is not likely that many of these respondents would actually place an order with a contract distiller. Therefore, the results of the survey shed a negative outlook on the total volume desired by the start-up distillery segment.

Respondents were given the opportunity to specify what aspect of the teaming arrangement was most important for meeting their needs. The characteristics that were forced-ranked from most important (1) to least important (4) were:

1. Cost
2. Schedule
3. Test Batch Size
4. Ability to Exactly Meet Specified Recipe

The results from the start-up distillers group are shown in Table 2. The ability to exactly meet the specified recipe was the most important aspect of the arrangement with 46 percent of respondents indicating it was their primary determining factor. However, on a weighted average

response basis, cost was the most important characteristic of the potential teaming arrangement. Cost was selected as the most important aspect of the developmental distillery teaming arrangement by 43 percent of respondents.

Question: Please rank the most important aspects of the potential teaming arrangement		
Response	Most Important	Average Weight of Response
Cost	43.1%	1.90
Schedule	8.6%	2.64
Test Batch Size	1.7%	3.36
Ability to Exactly Meet Specified Recipe	46.6%	2.10

Table 2: Self-Reported Preferences of Start-up Distillery Customers

The results from the operating craft distiller sub-group are even more telling. Cost was selected as the most important aspect of the developmental distillery teaming arrangement by 56 percent of respondents. The ability to exactly meet the specified recipe was the second most important aspect of the arrangement with 32 percent of respondents indicating it was held as their primary determining factor. Table 3 below shows a summary of the operating craft distillers teaming desire responses.

Question: Please rank the most important aspects of the potential teaming arrangement		
Response	Most Important	Average Weight of Response
Cost	55.9%	1.68
Schedule	11.8%	2.62
Test Batch Size	0.0%	3.24
Ability to Exactly Meet Specified Recipe	32.4%	2.47

Table 3: Self-Reported Preferences of Operating Distillery Customers

All respondents were asked to indicate their interest in participating in a master’s distilling class hosted by the development distillery. The results of that inquiry are summarized in Figure 7.

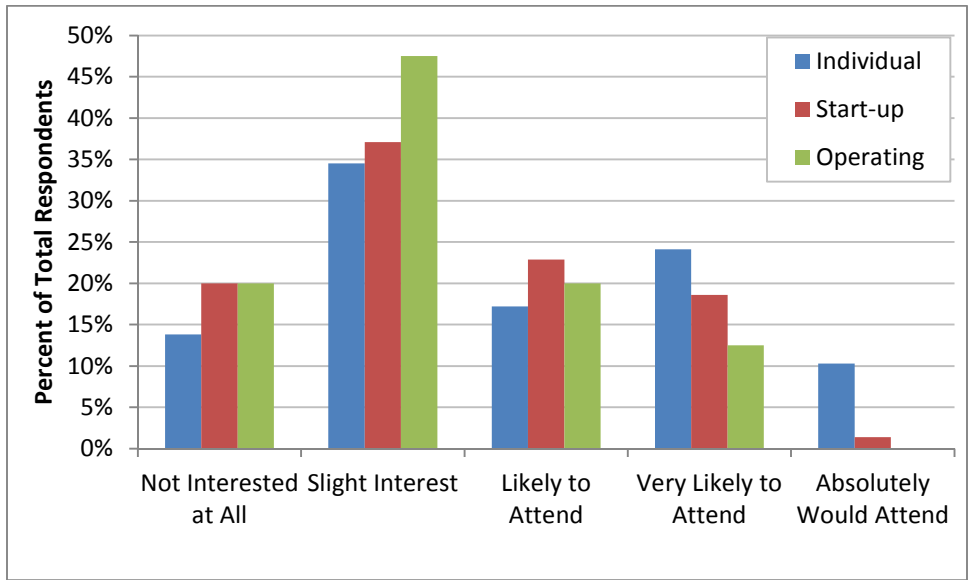


Figure 7: Interest in Attending a Master's Distilling Class Offered by Development Distillery

The interest in this type of class appears to be relatively low. The more experienced the distiller, the less likely they were to express interest in attending a class.

All respondents were asked to indicate which spirits they would consider producing in test batches with the development distillery. The results of that inquiry are shown in Figure 8.



Figure 8: Types of Spirits Interested in Teaming with the Development Distillery

The trends are relatively consistent across market segments, with all respondents preferring to team with a development distillery to produce whisky. Individuals are much less likely to be interested in teaming to produce gin, while distilleries were less likely to express interest in teaming to produce rum.

In summary, catering to the start-up and operating distilleries as a development distillery appears to be slightly more attractive than serving individuals. The focus on both cost and ability to meet specified recipes will be of primary importance. This gives existing distilled spirits providers a significant advantage in the development distillery business. These existing suppliers should have the knowledge and expertise to keep costs down and source the raw materials required to meet specific recipe desires. The small volumes desired suggest that the size of the development distillery must be carefully considered.

Competitive Review

Contract distilling is a specialty market. There is not a high demand for “rent-a-still” services. Many craft distillers focus on the production of their own products and are less interested in producing spirits for other commercial entities. Therefore, the actual competition in this market is minimal. There are few businesses that engage in these types of services, they are briefly reviewed in the competitor analysis section.

Because this is not a service that many customers will have an existing paradigm for, there are advantages and disadvantages of the development distillery business model. Due to the market’s relatively undefined expectations in the contract distilling arrangement, the desires are expected to vary widely. Meeting differing customer demands is not typical for most distillers, who desire to produce spirits with minimal input from end users. An existing spirit provider looking to expand into a development distillery role will have to adjust their client interaction expectations. Additional staff may be required to manage these relationships and interactions.

Opportunities & Threats

The most significant opportunity of the developmental distillery is to develop relationships with the multitude of craft distilleries that are starting up around the country. Some of these craft start-ups are likely to go on to success, with the increasing production that comes along with that success. A development distillery may choose to focus on providing test batches with the hope to move onto more substantial volume arrangements in the future.

An existing distillery has a sustainable competitive advantage as a developmental distillery due to the high cost of equipment and licensing associated with distilling. Existing distilleries that have spare capacity, and choose to produce spirits on contract, will out-compete new distilleries attempting to provide similar services.

The primary threat is that the craft distilling market has minimal desire to outsource the production of spirits. Furthermore, the results of the industry survey indicate that price is of primary importance to craft distillers contracting with a development distillery. This will put pricing pressure on the development distillery and is likely to reduce the profitability of the service.

Competitor Analysis

There are not many businesses that are designed to operate solely as contract distillers. The closest competitor to potential development distillery is Michigan State's Artisan Distilling Program. The MSU program has a 15-liter pot still that is used for demonstration and test batches and clearly advertises the opportunity to team with the university's program to take advantage of that equipment. MSU also advertises their "Artisan Distilling Workshop", which is a natural extension of the contract distilling services for "start-up" distilleries. Furthermore, the program has spawned multiple commercial distilling companies with varying affiliations with MSU's program and the program's director Kris Berglund. Berglund is well-known, well-respected, and well-connected in the spirits universe, and offers a strong competitive advantage to MSU's development distillery.

In addition to the education program at MSU that specifically functions as a development distillery, practically every operating still in the country has the opportunity to participate in contract distilling. A distillery has made a large, up-front, capital investment in a still and running that asset at a high capacity factor will increase profits and return on investment. These distilleries will place a primary importance on their own products. An individual or start-up distillery may be interested in using a distillery for a "one-off" production batch, but the distillery is not likely to be interested in long-term, high-volume contractual arrangements.

Conclusions

The craft distilling market is expected to experience rapid growth in the next 10 to 20 years, taking market share from the internationally known large distillers. In many ways, this trend is expected to be similar to the resurgence in the craft brewing market which now holds approximately 10 percent market share in aggregate. If craft distillers gain the same market share as their brewing brethren, craft distilling will be a six billion dollar per year industry.

There are multiple opportunities for business serving the growth industry of craft distilling. Many craft distillers experience challenges navigating the tax and regulatory requirements of the distilling industry. Distillers often purchase bottles and labels through third party companies. Some outsource their marketing to firms. There are a plethora of consultants offering services to distilleries that elect to focus on the production of their spirits while seeking assistance with the

ancillary activities that directly contribute to a distiller's success. Figure 9 shows a summary of the self-reported teaming desires of start-up distilleries.

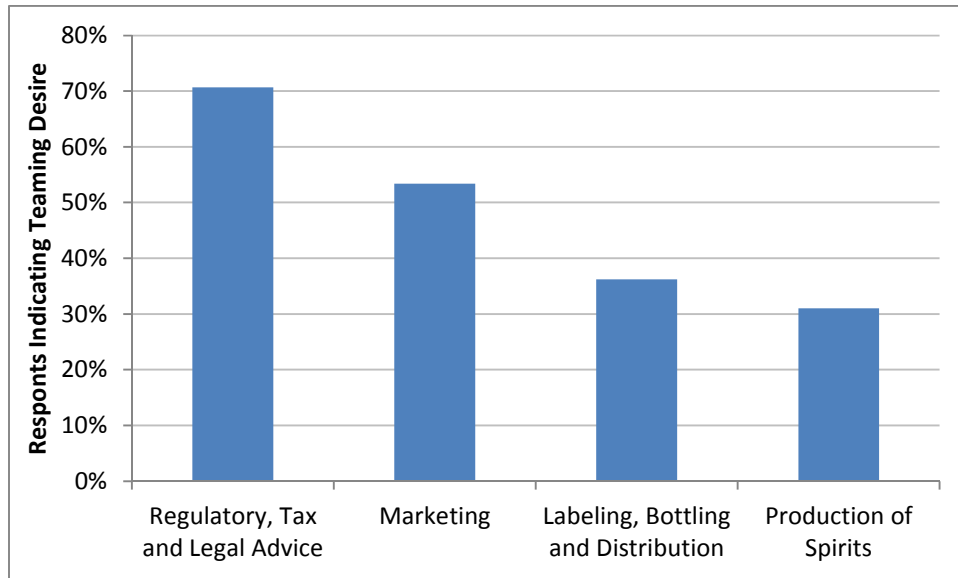


Figure 9: Consulting, Teaming and Outsourcing Preferences of Start-up Distilleries

A lesser explored opportunity in the craft distilling market place is the outsourcing of the production of spirits. This production can be split into two main scopes. Some contract distilling is done by large distilled spirits producers who distill the spirits and transport them to the customer's distillery where they are either redistilled or watered down for bottling and distribution. This arrangement is common with large producers of spirits and was not explored in this research.

The focus of this study is the consideration of contract distilling on a smaller scale. To focus on the emerging craft distilling market, the size of the contact distilling was scaled down.

Furthermore, start-up distilleries are less likely to have completely developed their product line, and may be actively searching for spirits to add to their portfolio. These start-up distilleries may consider outsourcing the production of test batches of spirits to a development distillery who will produce the spirit for them. This test batch could then be analyzed in house or used as part of a market feasibility study to determine demand.

Two main groups of potential development distillery customers were surveyed to determine market demand and desired aspects of the teaming arrangement. The target market consisted of

individuals and start-up distilleries. The start-up distillery group was further sub divided into companies with current spirit production and those without, with the focus on distilleries already providing product to consumers.

The market research showed significant interest in pursuing teaming arrangements with a development distillery for the production of spirits (71 percent of respondents). However, the size of batch desired was lower than would be desired by a development distillery. Furthermore, the cost of the test batch was shown to be the most important factor to the target market, indicating that demand was likely to be highly elastic. These findings should be carefully considered by entities considering providing contract distilling to start-up craft distilleries and individuals.

In summary, the craft distilling market is expected to perform strongly, providing many opportunities for businesses providing services to that market. However, the contract distilling of spirits seems to be an area of the market that is not well suited for a development distillery to make a reasonable profit. However, the development distillery would still be a potentially useful branding, business development and customer relationship tool that could foster the generation of long-term profitable business as the craft distillery grows and requires traditional contract distilling arrangements.

Recommendations for Future Research

The primary opportunity for further research would be extending this type of market analysis to larger distilleries. This type of research would need to be conducted on an individualized basis and would rely heavily on leveraging existing relationships to gain access to the decision makers at the large distilleries. It would be useful to interview those individuals and find trends in “what I wish I knew back then” responses. This information could be used to foster the image of the development distillery as a useful partner able to help craft distilleries meet their growth goals.

Further research is recommended into characterizing ancillary services that could be bundled with contract distilling to increase the profitability of the development distillery and foster long term customer relationships.

Further research is recommended to determine which spirits are most profitable from a contracting standpoint. This research established strong interest from start-up distilleries in producing test batches of whiskey. However, there is opportunity for additional research to focus on the type of arrangements that would make whiskey test batches attractive (i.e. Where is the product stored? Should the development distillery have whiskey inventory readily available for start-up distilleries?)

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Confidential Source 1

Confidential Source 2

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Appendices

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Appendix A – Individual Market Survey

1. Do you brew beer?
 - a. No.
 - b. Yes, I have in the past but I am not currently brewing.
 - c. Yes, I brew under 10 gallons per year.
 - d. Yes, I brew between 10 and 50 gallons per year.
 - e. Yes, I brew between 50 and 100 gallons per year.
 - f. Yes, I brew more than 500 gallons per year.
2. Do you distill spirits? [Assume a case of 12 bottles @750 mL at 90 proof contains approximately two (2) proof gallons (PG)]
 - a. No. I have no interest in distilling.
 - b. No. However, I would distill if it were legal.
 - c. Yes. I have in the past but I am no longer doing so.
 - d. Yes. I distill under two (2) proof gallons (PG) per year.
 - e. Yes. I distill between two (2) and ten PG per year.
 - f. Yes. I distill between ten and 50 PG per year.
 - g. Yes. I distill over 50 PG per year.
3. What type of spirits do you currently produce? (check all that apply)
 - a. None
 - b. Vodka
 - c. Vodka – flavored
 - d. Gin
 - e. Bourbon
 - f. Whisk(e)y
 - g. Rum
 - h. Other (please specify)
4. Would you consider using a development distillery to produce spirits for you?
 - a. Yes.
 - b. No.
5. If you were to use a development distillery, what would be the ideal batch size?
 - a. No teaming desire.
 - b. Under two (2) proof gallons PG.

- c. Between two (2) and ten (10) PG.
 - d. Between ten (10) and 40 PG.
 - e. Between 40 and 100 PG.
 - f. Greater than 100 PG.
 - g. Other (please specify)
6. What type of spirits would you consider producing through the development distillery?
- a. None
 - b. Vodka
 - c. Vodka – flavored
 - d. Gin
 - e. Bourbon
 - f. Whisk(e)y
 - g. Rum
 - h. Other (please specify)
7. Please rank the most important aspects of working with the development distillery. [With one (1) being the most important.]
- a. Cost
 - b. Schedule
 - c. Test Batch Size
 - d. Ability to Exactly Meet Specified Recipe
8. How interested are you in participating in an onsite master’s distilling class hosted by the development distillery?
- a. Not interested at all.
 - b. Slight interest.
 - c. Likely to attend.
 - d. Very likely to attend.
 - e. Absolutely would attend.

Appendix B – Individual Market Survey Results

Response Summary

Need more responses?
 Total Started Survey: 29
 Total Finished Survey: 29 (100%)

PAGE: TEST BATCH INTEREST

1. Do you brew beer?	Create Chart	Download
	Response Percent	Response Count
No.	17.2%	5
Yes, I have in the past, but I am not currently brewing.	6.9%	2
Yes, I brew under 10 gallons per year.	10.3%	3
Yes, I brew between 10 and 50 gallons per year.	34.5%	10
Yes, I brew between 50 and 100 gallons per year.	20.7%	6
Yes, I brew between 100 and 500 gallons per year.	10.3%	3
Yes, I brew more than 500 gallons per year.	0.0%	0
	answered question	29
	skipped question	0
2. Do you distill spirits? [Assume a case of 12 bottles @ 750 ML at 90 proof contains approximately two (2) proof gallons (PG).]	Create Chart	Download
	Response Percent	Response Count
No. I have no interest in distilling.	10.3%	3
No. However, I would distill if it were legal.	62.1%	18
	answered question	29
	skipped question	0

2. Do you distill spirits? [Assume a case of 12 bottles @ 750 ML at 90 proof contains approximately two (2) proof gallons (PG).] [Create Chart](#) [Download](#)

Yes. I have in the past but am no longer doing so.	3.4%	1
Yes. I distill under two (2) proof gallons (PG) per year.	0.0%	0
Yes. I distill between two (2) and ten PG per year.	6.9%	2
Yes. I distill between ten and 50 PG per year.	13.8%	4
Yes. I distill over 50 PG per year.	3.4%	1
answered question		29
skipped question		0

3. What type of spirits do you currently produce? (check all that apply) [Create Chart](#) [Download](#)

	Response Percent	Response Count
None	70.4%	19
Vodka	18.5%	5
Vodka - flavored	7.4%	2
Gin	3.7%	1
Bourbon	7.4%	2
Whisk(e)y	22.2%	6
Rum	22.2%	6
Other (please specify) Show Responses	3.7%	1
answered question		27
skipped question		2

4. Would you consider using a development distillery to produce spirits for you? [Create Chart](#) [Download](#)

	Response Percent	Response Count
Yes	71.4%	20
No	28.6%	8
answered question		28
skipped question		1

5. If you were to use a development distillery, what would be the ideal batch size? [Create Chart](#) [Download](#)
 [Again, assume a case of 12 bottles @ 750 ML at 90 proof contains approximately two (2) proof gallons (PG).]

	Response Percent	Response Count
No teaming desire.	10.7%	3
Two (2) proof gallons (PG).	53.6%	15
Between two (2) PG and ten (10) PG.	28.6%	8
Between ten (10) PG and 40 PG.	17.9%	5
Between 40 PG and 100 PG.	0.0%	0
Greater than 100 PG.	0.0%	0
Other (please specify)		0
answered question		28
skipped question		1

6. What type of spirits would you consider producing through the development distillery? [Create Chart](#) [Download](#)

	Response Percent	Response Count
Vodka	29.6%	8
Vodka - flavored	11.1%	3
Gin	29.6%	8
Bourbon	63.0%	17
Whisk(e)y	77.8%	21
Rum	74.1%	20
Other (please specify) Show Responses		2
answered question		27
skipped question		2

7. Please rank the most important aspects of working with the development distillery. [With one (1) being the most important. The survey will automatically order them top to bottom.] [Create Chart](#) [Download](#)

answered question **28**
skipped question **1**

7. Please rank the most important aspects of working with the development distillery. [With one (1) being the most important. The survey will automatically order them top to bottom.] [Create Chart](#) [Download](#)

	1	2	3	4	Rating Average	Rating Count
Cost	71.4% (20)	21.4% (6)	0.0% (0)	7.1% (2)	1.43	28
Schedule	3.6% (1)	17.9% (5)	50.0% (14)	28.6% (8)	3.04	28
Test Batch Size	7.1% (2)	25.0% (7)	32.1% (9)	35.7% (10)	2.96	28
Ability to Exactly Meet Specified Recipe	17.9% (5)	35.7% (10)	17.9% (5)	28.6% (8)	2.57	28
answered question						28
skipped question						1

8. How interested are you in participating in an onsite master's distilling class hosted by the development distillery? [Create Chart](#) [Download](#)

	Not Interested at All	Slight Interest	Likely to Attend	Very Likely to Attend	Absolutely Would Attend	Rating Average	Rating Count
	13.8% (4)	34.5% (10)	17.2% (5)	24.1% (7)	10.3% (3)	2.83	29
answered question						29	
skipped question						0	

Appendix C – Start-up Distillery Survey

1. Would you consider using a development distillery to produce spirits for you?
 - a. Yes.
 - b. No.
2. If you were to use a development distillery, what would be the ideal batch size?
 - a. No teaming desire.
 - b. Under two (2) proof gallons PG.
 - c. Between two (2) and ten (10) PG.
 - d. Between ten (10) and 40 PG.
 - e. Between 40 and 100 PG.
 - f. Greater than 100 PG.
 - g. Other (please specify)
3. What type of spirits would you consider producing through the development distillery?
 - a. None
 - b. Vodka
 - c. Vodka – flavored
 - d. Gin
 - e. Bourbon
 - f. Whisk(e)y
 - g. Rum
 - h. Other (please specify)
4. Please rank the most important aspects of working with the development distillery. [With one (1) being the most important.]
 - a. Cost
 - b. Schedule
 - c. Test Batch Size
 - d. Ability to Exactly Meet Specified Recipe
5. What aspects of your business would you consider consulting, teaming, or outsourcing? (check all that apply)
 - a. Regulatory, tax and legal advice
 - b. Marketing
 - c. Labeling, bottling and distribution

- d. Production of spirits
 - e. Other (please specify)
6. How interested are you in participating in an onsite master's distilling class hosted by the development distillery?
- a. Not interested at all.
 - b. Slight interest.
 - c. Likely to attend.
 - d. Very likely to attend.
 - e. Absolutely would attend.
7. (Optional Request) Please enter the name of your company in the box below.
8. What is the current annual capacity of your distilling operation?
- a. No current production.
 - b. Less than 1,000 proof gallons (PG) per year.
 - c. Between 1,000 PG and 5,000 PG per year.
 - d. Between 5,000 PG and 10,000 PG per year.
 - e. Between 10,000 PG and 520,000 PG per year.
 - f. Over 20,000 PG per year.
9. How long has your company been in business?
- a. Not yet an incorporated business.
 - b. Less than one (1) year.
 - c. Between one (1) and three (3) years.
 - d. Between three (3) and five (5) years.
 - e. Between five (5) and ten (10) years.
 - f. Between ten 10 and 20 years.
 - g. Over 20 years.
10. What type of spirits do you currently produce? (check all that apply)
- a. None
 - b. Vodka
 - c. Vodka – flavored
 - d. Gin
 - e. Bourbon
 - f. Whisk(e)y
 - g. Rum
 - h. Other (please specify)

Appendix D – Start-up Distillery Survey Results

Response Summary

Need more responses?
 Total Started Survey: 75
 Total Finished Survey: 69 (92%)

Show this Page Only

PAGE: TEST BATCH INTEREST

1. Would you consider assistance developing new spirit products with a development distillery? [Create Chart](#) [Download](#)

	Response Percent	Response Count
Yes	72.2%	52
No	27.8%	20
answered question		72
skipped question		3

2. If your company were to team with a development supplier to develop a new product, what would be the ideal test batch size? [Assume each case of 12 bottles @ 750 ML at 90 proof. Each case contains approximately two (2) proof gallons (PG).] [Create Chart](#) [Download](#)

	Response Percent	Response Count
No teaming desire.	20.0%	13
Two (2) proof gallons (PG).	12.3%	8
Between two (2) PG and ten (10) PG.	27.7%	18
Between ten (10) PG and 40 PG.	32.3%	21
Between 40 PG and 100 PG.	9.2%	6
answered question		65
skipped question		10

2. If your company were to team with a development supplier to develop a new product, what would be the ideal test batch size? [Assume each case of 12 bottles @ 750 ML at 90 proof. Each case contains approximately two (2) proof gallons (PG).] [Create Chart](#) [Download](#)

Response	Response Percent	Response Count
Greater than 100 PG.	6.2%	4
Other (please specify) Show Responses		3
answered question		65
skipped question		10

3. What type of spirits would you consider producing in test batch sizes? [Create Chart](#) [Download](#)

Response	Response Percent	Response Count
Vodka	29.8%	17
Vodka - flavored	31.6%	18
Gin	61.4%	35
Bourbon	63.2%	36
Whisk(e)y	75.4%	43
Rum	45.6%	26
Other (please specify) Show Responses		9
answered question		57
skipped question		18

4. Please rank the most important aspects of the potential teaming arrangement. (With one (1) being the most important. The survey will automatically order them top to bottom.) [Create Chart](#) [Download](#)

	1	2	3	4	Rating Average	Rating Count
Cost	41.0% (25)	39.3% (24)	8.2% (5)	11.5% (7)	1.90	61
Schedule	9.8% (6)	27.9% (17)	50.8% (31)	11.5% (7)	2.64	61
Test Batch Size	1.6% (1)	14.8% (9)	29.5% (18)	54.1% (33)	3.36	61
answered question						61
skipped question						14

4. Please rank the most important aspects of the potential teaming arrangement. [Create Chart](#) [Download](#)
 (With one (1) being the most important. The survey will automatically order them top to bottom.)

	47.5% (29)	18.0% (11)	11.5% (7)	23.0% (14)	2.10	61
Ability to Exactly Meet Specified Recipe						
						answered question 61
						skipped question 14

5. What aspects of your business would you consider consulting, teaming, or outsourcing? [Create Chart](#) [Download](#)

	Response Percent	Response Count
Regulatory, Tax and Legal Advice	70.5%	43
Marketing	52.5%	32
Labeling, Bottling and Distribution	36.1%	22
Production of Spirits	29.5%	18
Other (please specify) Show Responses	11.5%	7
		answered question 61
		skipped question 14

6. How interested is your company in participating in an onsite master's distilling class hosted by the development distillery? [Create Chart](#) [Download](#)

	Not Interested at All	Slight Interest	Likely to Attend	Very Likely to Attend	Absolutely Would Attend	Rating Average	Rating Count
	20.5% (15)	35.6% (26)	23.3% (17)	17.8% (13)	2.7% (2)	2.47	73
							answered question 73
							skipped question 2

8. What is the current annual capacity of your distilling operation?

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	Response Percent	Response Count
No current production.	36.9%	24
Less than 1,000 proof gallons (PG) per year.	12.3%	8
Between 1,000 PG and 5,000 PG per year.	29.2%	19
Between 5,000 PG and 10,000 PG per year.	10.8%	7
Between 10,000 PG and 20,000 PG per year.	3.1%	2
Over 20,000 PG per year.	7.7%	5
	answered question	65
	skipped question	10

9. How long has your company been in business?

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	Response Percent	Response Count
Not yet an incorporated business.	4.6%	3
Less than one (1) year.	36.9%	24
Between one (1) and three (3) years.	33.8%	22
Between three (3) and five (5) years.	15.4%	10
Between five (5) and ten (10) years.	6.2%	4
Between 10 and 20 years.	3.1%	2
Over 20 years.	0.0%	0
	answered question	65
	skipped question	10

10. What type of spirits do you currently produce? (check all that apply)

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	Response Percent	Response Count
Vodka	36.4%	20
Vodka - flavored	16.4%	9
Gin	36.4%	20
Bourbon	30.9%	17
Whisk(e)y	70.9%	39
Rum	30.9%	17
Other (please specify) Show Responses	43.6%	24

answered question 55

skipped question 20