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Microbrewing in the US

An Overview of the Microbrewery Industry and a Business Plan
for Future Success

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Objectives & Significance:

There are still opportunities for new entries into the crowded craft brewing field, as long as the founders of these new breweries have an understanding of how to make quality beer and how to create a successful business model. While these two criteria are easy to consider, they are hard to master, especially for one person to gain the knowledge of both. However, when a close friend announced they would be using their chemistry undergraduate degree to pursue a master's degree in brewing this spring, I saw one half of those requirements close to being satisfied. However, I knew that if she truly wanted to create a brewery with sustainable success, she would need to develop a strong strategic business plan. The most successful craft breweries are the ones who set themselves up for sustained success by differentiating their product one way or another, whether it's through their ingredients, distribution channels, or marketing channels. This has led to a number of different breweries with a wide range of business models all successful in different ways.

This project will provide a realistic way to start a new brewery in the local area. Combined with technical knowledge from an experienced brewer this plan will present a practical way to run a business. Developing a best practice plan like this will be a phenomenal lesson for me as it is a skill that will aid me in the future. It will also be a resource for students looking to develop a business plan or start their own businesses.

This project will also be an exciting way to develop a number of different interpersonal skills as well as researching skills. Spending a significant amount of time in the field will help me establish better interviewing skills in addition to better preparation skills. I will need to be ready for each individual interview with both broad and specific questions that allow me to gather all of the information I will need. This will also enhance my researching skills, as I will

need to develop strong analysis skills to develop common threads from a number of different media. The meetings with local brewery officials will also provide a further benefit if we choose to put the plan into action as we will have a stronger network of support on which to lean on for continued advice.

Due to the high number of viable options to running a brewery, it becomes complicated to determine which would fit best where and in which location. I want to discover the most effective strategic business plan for a brewery in a Dover, NH location. To do this I hope to accomplish the following goals:

- Provide a brief overview of the craft brewing industry
- Identify craft brewery industry trends
- Analyze different business models employed by local breweries
- Recognize and address key strategic issues to new brewery
- Determine which methods are most effective for starting a new brewery in Dover, NH

Methods:

In order to gather information for an overview of the industry I will have to rely on books and other records describing both the history of the industry and its current state. I will be able to find a majority of these books in the University Library and others that I may find during the duration of the project. I have already performed some fundamental research into some of my objectives and in order to expand upon them I will need more analysis of the aforementioned sources.

However, I feel the strongest source for this project will be to go into the field and see how local breweries are operating first hand. There I will be able to gain a stronger understanding of the equipment and processes required to successfully operate a brewery. My

time in the field will also include a number of interviews with the people who work in the industry, gathering as much insight as possible. I will be gathering a large amount of qualitative data to eventually develop a number of best practices that are most effective for Dover, NH.

I have worked with several different business models, ranging from both smaller breweries, like Throwback Brewery in Hampton, NH to larger regional breweries like Smuttynose Brewery in Portsmouth, NH. By combining their experiences with my earlier research I will be able to see where the market is going and how to position a brewery for future success. To see where the craft brewery market is going, however, we must have an understanding of how it is has become what it is now.

History & Overview of Craft Brewing Industry

In the early 20th century, there were many local breweries since many towns only got their beer from the local taverns. Though some larger breweries had begun to distribute their beer by this time, most sold their product on site in saloon like settings ("A Concise History"). In order to crackdown on excessive drinking, and the problems it caused, the U.S. went into prohibition in 1920. All breweries, large and small, had to make a decision on how long they expected the Prohibition would last and what they would do in the meantime. Many of the smaller breweries could not afford to retain their brewing equipment and sold their facilities at massive losses. However, the larger breweries were able to make "near beer", or beer with alcohol under one percent at volumes that kept them solvent ("A Concise History"). When the country came out thirteen years later, the government placed restrictive laws to limit the saloon like atmosphere from before. As breweries were unable to sell on-site as easily, the larger breweries that had maintained and developed their distribution lines, capitalized on the opportunity ("A Concise History").

During the 1950's and 1960's the brewing industry experienced dramatic consolidation as the major breweries dominated the market. The number of U.S. breweries hit a low point in 1983 when 51 brewing companies operated only 80 breweries in the entire nation. By the early 1980's the six largest breweries (Anheuser-Busch, Miller, Heileman, Stroh, Coors, and Pabst) controlled 92% of the entire brewing market ("History of American Beer"). These large beer makers were able to build larger breweries, with more automated processes. This led them to create more automation throughout the business and more consistent quality controls. What this did was give these larger breweries key success factors in that they could create a consistent quality beer, cheaply. Smaller brewers were unable to produce high quantities of beer with consistent flavor, leading to a loss of market share. Adding to larger breweries' dominance was that by brewing more beer they were able to begin operating at larger economies of scale. These "macrobreweries" no longer needed to sell their beer at high prices to turn a profit as their volume grew. They were then able to enter into price wars with other breweries, knocking out smaller ones and sustaining their growth.

This consolidation had caused the beer market to become overwhelmed with largely undifferentiated product: cheap, low flavor, low alcohol lagers. This trend brought the U.S. brewing industry further and further away from the variety of beers found across the Atlantic. These larger breweries operated with a broad, low-cost provider strategy, flooding the market with similar products. They were able to reach people of all demographics as they had the resources to reach national markets and expand beyond the local store. The beers became so similar that consumers began not caring about flavor, as much as the lowest price. The consolidation caused the beer drinking market to grow as the number of barrels brewed in the U.S. grew from 55 million barrels in 1940 to 188.4 million barrels in 1980 ("A Concise

History”). Each U.S. beer barrel holds 31 gallons; therefore the large increase in barrel production signified substantial growth. This progression showed a reflection of the growth that fueled itself, as the larger volume produced allowed the brewers to reach new markets and sell more beer. The beer consumed per capita in the U.S. doubled over this time period from 12.5 gallons per person to 23.1 (“A Concise History”). The consolidation was not met with any kind of resistance from consumers as they began drinking more of the non-differentiated products.

However, a few years earlier many changes were coming into place that would alter the industry and send it in a new direction. The microbrewery movement began on the west coast in the late 1970’s, (though Fritz Maytag opened Anchor Brewing Company, now considered the first craft brewery in the U.S. in 1965, it was a distinct anomaly for the time). In 1978, a year after the first craft brewery opened, home brewing was legalized by the federal government for the first time since the Prohibition (“History of American Beer”). This created a revitalized interest in developing new beers with stronger flavors, and different varieties beyond the American light lager.

Many homebrewers looked for ways in which they could brew high quality beer and share or sell it to larger markets than just their friends. Led by entrepreneurs with an interest in craft beer like Ken Grossman, the founder of Sierra Nevada, the West coast began to see a growth in craft breweries. These breweries were dedicated to exploring more full bodied brews and more varieties. The pioneers founding these initial microbreweries worked with little more than their ingenuity to create all of the necessary equipment needed for production. They realized quickly that brewing mass quantities was much more difficult than the small portions they had been brewing in their kitchens. They could no longer brew in a simple barrel or two; they needed larger equipment to allow them to keep up with their larger new markets. To do this

the original craft brewers used whatever they could find, searching dairy farms and scrap yards for tanks and pipes that they could weld together to create the brewing setup they required (Ogle 303). They also used older equipment that they could find from older closed breweries that had shut down during the consolidation after the prohibition ended through the 1970's.

The larger production batches created more than just machinery problems; the brewers found that it was much more difficult to make consistent high quality ales. The successful breweries quickly realized that this was usually fixed by an increased dedication to cleanliness and by making adjustments to their recipes. The recipes they used for home brewing needed to be tweaked to allow for the flavors to come through uniformly in the larger brews. Craft brewers made a point to get away from the lagers that dominated the beer market and began to brew ales instead. As they sought to bring back the integrity and purity many used just four ingredients: malt, hops, yeast, and water (Ogle 304). More challenges sprung up in regards to their new niche industry, as distributors often disregarded them or charged exorbitant sums to ship their beer. The distributors were used to the larger breweries paying high prices for their truck space and were not going to lose some of that business to take a chance on the new craft brewers who had yet to prove they had a substantial market. The new brewers would often take the distribution dilemma into their own hands and distribute their own beer. Like the original brewers of the United States, they would have to rely on both their ability to brew good ale, and their ability to sell it. This led to many of the craft breweries then and now being forced into local distribution areas, limiting their reach and influence.

Michael Laybourn and Norman Franks, two young Bay Area home brewers found a different way to solve the distribution problem. They knew that selling beer was just as important as making a consistent high quality beer. To ensure at least a portion of sales, they

decided to take advantage of a new state law that made it legal again for brewers to retail their beer on site (Ogle 306). This gave birth to the Hopland (now Mendocino) Brewery, the first modern brewpub in the United States, reminiscent of the saloons, taverns and beer gardens that made most of the beer centuries ago. The brewpub provided craft brewers a new way to differentiate their business. By selling on their own premises they gained a key success factor by not having to invest as heavily into distribution. This allowed them to spend more of their capital on the brewing itself. The pub aspect gave them another advantage as it offered their patrons more of a connected feel to the company, essentially putting a real face to their product. However, not every brewery was able to duplicate their success. For every successful new craft brewery in the late 1970's and early 80's, many more failed. Yet, despite these challenges, the shift back to craft beer had begun and it was only building momentum.

At this point the new industry was predominantly led by West coast brewers, but by the mid 1980's it was starting to find its way into the east coast, led by a man descended from many generations of brewers, Jim Koch. Koch was a successful business consultant, with business and law degrees from Harvard, who was looking for something more from his life. When he discovered the new craft brewery movement he quickly realized that most of the beers he was trying weren't good beers at all. He was disappointed by the fact that so many of the new craft breweries were passing off poor quality beer to a public that simply didn't know any better. He resolved to start his own company, the Boston Beer Company, the parent of current companies like Samuel Adams. Unlike the new breweries on the other side of the country Koch decided to brew a full flavored lager. Lagers had been avoided by most craft brewers at this point, most likely due to their connection with the large breweries, but Koch knew he could show that lagers were a fine flavor if done right. He also made many other radical changes: rather than purchase

or build his own brewery to make his beer, Koch brewed on contract with a regional brewer who was brewing under capacity. This move, though highly criticized by other craft beer pioneers, solved the expensive startup costs of a brewery, and helped him avoid the traps of bad equipment and operating at under capacity (Ogle 312). The other craft brewers claimed that since Koch wasn't personally brewing his beer, he was not a true craft brewer, but Koch knew to trust in an already experienced brew master, and instead focused more resources on his marketing. He had brought the craft beer industry to the forefront on the East coast in a decidedly unconventional way.

Like most of the craft breweries that grew beyond microbrewery status, the Boston Beer Company was not afraid to take non-traditionalist routes to growing its business. Since then many more microbreweries have taken the steps to expand by analyzing what is the most efficient ways of turning a profit, rather than make decisions that would maintain the craft brewers' vision for their product. Over the past few decades, smaller breweries have agreed to allow the larger breweries like Anheuser-Busch and Miller to purchase minority stakes to allow for greater distribution. This has allowed these smaller breweries to protect themselves from the bargaining power of their suppliers and avoid having to pay high margins to independent shipping companies.

Other microbreweries have completely embraced contract brewing to provide for more growth opportunities than their own facilities. However, unlike other industries that get dominated by large corporations, the craft brewing industry has always allowed for even smaller breweries to become modestly successful even on a local level. This has been due to the fact that the consumers of the craft brewing industry are typically people who care about where their food and drinks are coming from and will pay a little extra to find out. That is why there was such a

large explosion of breweries from the 1980's through the early 2000's, with a staggering number of roughly 1,400 breweries, and sales were climbing at an average rate of 40% a year (Ogle 317). However, the market seems to have reached a level of steady growth rate more similar to the 1980's than the boom of the 1990's over the last several years, with a more sustainable growth rate (Brewers Association). Due to the nature and competition of the market, many new breweries fail relatively quickly without high quality or a proper business model. But with every failed microbrewery comes another entrepreneurial homebrewer to take their shot at trying to get the dream right.

Analysis of current Craft Brewing Industry & Effects of Macroeconomic Environment

Economy & Industry Trends

The recession's effect on the microbrewery industry was much less noticeable than on the rest of the nation's economy. In fact, year after year, the industry has continued to grow in both volume of beer sold and total dollars. Their growth slowed down during the period, but due to the nature of the still maturing market, it remained constant. The market is not recession proof, but it is noticeably recession resistant. In fact the market is already successfully rebounding, posting growth from 2009 to 2010, when the craft beer market saw their sales in volume increase by 11% and an increase of retail value by 12% (Brewers Association). This can be surprising for those who view the craft brewing industry as luxury goods compared to the cheap lagers provided by the large breweries. However, despite the higher cost, it is clear that many consumers don't consider them perfect substitutes. Craft brews now have such a strong fan base that they are no longer easily swayed by differentiations in the overall market.

The craft brewery market is growing stronger despite an overall decline in the overall profitability of the beer industry. With the increased awareness of good beer led by beer writer Michael Jackson and others starting in the late 1970's, more people are appreciating higher quality beer. As this consumer education continues, the market will likely reflect even stronger growth in the craft beer sector against the larger breweries. Though the net growth of the number of new breweries has begun to level off over the last few years, this is more due to relatively similar number of breweries closing as opening. However, next year the Brewer's Association predicts to have twice as many craft breweries open as the year before, putting an added strain on the market (Brewers Association). This has the potential of cutting profits for craft breweries all over the market, both large and small, just like in the late 1990's.

The microbrewery market has been slowly evolving over the past decade following the market adjustment of the late 1990's. Following the craft beer boom of the 1980's and early 1990's, a number of new investors were trying to capitalize on the emerging market. This led to both a large number of homebrewers with no idea of how to run a business and a high number of entrepreneurs with no idea of how to brew a quality beer. Competition within the market eventually allowed for the same conclusion that Koch, Grossman, and others came to decades ago: Without a high quality, consistent beer and an idea on how to turn a profit, there was no way to establish a business model that allowed for sustainable success. Eventually the weaker companies were weeded out leading to a highly competitive but still expanding market.

The financing crunch has helped to avoid as large a shakeout as the one that occurred over a decade ago. Banks are more frugal with their loans and investing now, and new startups need to prove their business model before being able to raise money. During the last shakeout there were a number of breweries getting money without even having a market to sell to

(Smuttynose Interview). However, with all of the new breweries continuing to open, we are rapidly approaching a limit on the shelf space and draft lines available. The desire for growth is present, but it has not reached a point where “grocery stores are going to knock down their walls just to put in an expanded beer section” (Smuttynose Interview).

The irony comes from the fact that the encouragement to start all of the new breweries come from the trendiness that craft beer carries with it now. For example, Martha Stewart is now having shows explaining the proper supplies and etiquette for beer tasting parties, which introduces the product to an even broader audience (Smuttynose Interview). Craft beer has evolved out of the niche industry it once was, and with that comes challenges for craft breweries to maintain the high quality that made them successful. This growth will only continue as craft beer becomes just beer for the average consumer. As generations grow up not knowing a beer world without Sam Adams or Sierra Nevada, craft beer will become more commonplace (Smuttynose Interview).

Despite this growth many are predicting another contraction, even if it is not to the same size as the previous one. The contraction will be minimized as the awareness for the beer continues to grow and people don't make the same overambitious mistakes as in the past (Throwback Interview). As the new breweries enter the market they will have a better understanding of the realities that a crowded market will bring, tempering the unneeded risks that may have been take before. For breweries entering the market now, flexibility is crucial. The industry will be changing in the face of rising energy costs and competition and those ill prepared to make adjustments will be left behind (Smuttynose Interview). The importance of consistently producing high quality beer will only grow as the number of ways a brewery can differentiate itself from others decline (Throwback Interview). Vendors will be looking for the

best quality product to put on its limited shelf space, and the strongest and most popular beers will succeed.

As these breweries look for ways to differentiate themselves, there will always be a certain number of “innovators” looking to be the first to try the new craft beer on the shelf. However, if a company can’t figure out how to make a great tasting beer and still make a profit, they won’t last long enough for the followers to strengthen their consumer base. The most successful craft breweries are the ones who aren’t satisfied with maintaining the status quo. They are the ones who set themselves up for sustained success by one way or another, whether it’s through their ingredients, distribution channels, or marketing channels. Another key success factor for a strong brewery is the ability to constantly innovate and reinvent their products. As the market begins to become saturated by common beer styles, the avid beer connoisseur will begin to search for new brews. This innovation includes exploring rare and novel styles of beer in order to connect with new markets.

Craft beer is an industry that lends itself to crazy ideas and experimentation leading to this kind of innovation, but this is an industry of trends (Smuttynose Interview). A decade ago, double IPAs were a radical idea, but now most breweries have tried their hand at making their own variation. To be entirely unique in this market is incredibly difficult, no matter what a brewery is using for ingredients. Even the most out-of-the-box ideas will tend to be released only in big beer series or limited releases, never getting the opportunity to make a real impact on the bottom line (Smuttynose Interview). Without being able to get the large scale needed to make a difference, innovative beers serve their purpose of allowing an outlet for creativity, but are often a struggle for breweries to find sustained success with; Dogfish Head Brewery a notable exception.

Instead the industry is headed towards more specialization as opposed to constant innovation (Smuttynose Interview). As more and more breweries enter the market looking for their niche we will begin to see these breweries focusing on a specific style of beer or a limited number as opposed to breweries trying to appeal to everyone. As unique ideas become rarer, limited releases will always have their place, but to remain successful breweries will be forced to focus on the styles and beers they do best (Smuttynose Interview). There is empirical evidence all over the country that breweries have already been specializing and are continuing to. The importance of flagship beers like Smuttynose's and Redhook's IPAs or Sierra Nevada's Pale Ale will become paramount for success. This successful beer will allow for the breweries to take risks in other markets as they have a stable revenue source keeping their company profitable.

Another trend aiding the differentiation of the craft brewery industry is the movement towards becoming green and sustainable. Throwback Brewery and other breweries have based their entire business model off of this concept and it has become a trend on the rise. As sustainability, eating local, and caring about food ways have increased in importance in our society we have seen that cross over to our beer. Consumers like the idea of having beer brewed using ingredients from down the street, and now larger breweries are looking into ways to capitalize upon this as well. Many of these breweries already have different programs in place to donate used grains to local farms and to participate in recycling programs, and their contributions to the environment will only grow.

This concern for the local agriculture, combined with the lack of jobs affecting our country has placed an emphasis on assisting the local farming culture. Farms are now starting to work with breweries of all sizes to grow the necessary ingredients to make a high quality beer. Though the demand and supply are relatively small, this market is definitely growing. A few

years ago there was a hop shortage as brewers demand grew much faster than the supply and it brought many consequences with it to the industry. One of the most important was the need for breweries to create contracts with their farmers, not so much to lock in a price, but instead to lock in a committed demand (Smuttynose Interview). After years of having unstable markets for their hops and other products, many farmers chose to leave the industry or even sold their farms. With the advent of the regular use of these contracts, many farmers are being attracted back into the market. With these kind of commitments farmers feel more comfortable investing in the required infrastructure and land required to grow the hops and barley (Smuttynose Interview).

As this dependence has caused more stability within the industry, the potential for larger breweries to utilize locally grown ingredients has increased. However, there are still many obstacles to this, as the sheer production of local hops is still down for a number of reasons. The largest being the cost of the necessary machinery needed to pick and shake the hops (Smuttynose Interview). Many farmers struggle to come up with the resources needed for the machines, even with the commitments from local breweries. To combat this, states and private farms have begun setting up co-ops for hop processors, allowing for a number of farmers to split the cost and utility of these machines (Smuttynose Interview). While it is still an imperfect method, as the access to these machines grow so too does the supply. For regional craft breweries the amount needed per batch still does not make sense enough to make the switch, but with every year that passes the industry is brought closer to a more sustainable market as it all gets back to buying and supporting local (Throwback Interview).

Coming off of one of their largest jumps in years, the craft brewery market has gone from 1% to making up nearly 6% percent of the total beer market in the last fifteen years (“Top 50 Breweries”). Despite this, even the most optimistic craft brew fans realize that it will most likely

not become the majority of beer consumed. Instead, a common realistic goal is to eventually reach ten percent of the total market. This was a notion that was laughed at just a few years ago, but as the financial market is slowly coming back, new breweries open up, and others become more established the goal is moving closer to being a reality (Smuttynose Interview). Between the movement towards meaningful food ways and local sustainability, the craft beer market will continue to grow and reach more consumers. Some brewers, including JT Thompson of Smuttynose, believe that craft beer will reach a state where it's no longer considered craft beer, but just beer (Smuttynose Interview).

“(O)ne of the best litmus tests is going to be when you go into an Applebee’s or other corporate chain and instead of having Miller, Coors, and Bud, they will have only one or two and they will have a selection of craft beers on tap. They will have a light beer, because there will always be light beers, because there is a place for that. But you’ll have an IPA, and you’ll have a porter and a stout, and you’ll have a Guinness.” (Smuttynose Interview).

By opening up the commercial world to craft beer, there would be an opportunity for growth that may even be able to sustain all of the smaller breweries entering the market. One of the largest challenges facing the industry now, is one that faces many niche industries finding success. The breweries must guard themselves from buying into the concept that commercial success means “selling out” (Smuttynose Interview). As our society embraces craft beer, and the industry continues to succeed in reaching new customers, continued stable growth for the craft breweries is becoming a reality.

Community Presence

Community Involvement is not a requirement for a successful brewery but it is an effective way of marketing and can make the difference between a startup failure and success. It holds different value for each brewery, but it is still a worthwhile endeavor that can prove a

company's worth to their community and foster a strong reputation. Sponsorships are one of the easiest ways to make a direct impact locally. Breweries are constantly asked to donate beer or money to all kinds of different organizations, and must determine which ones are worth the investment.

For a smaller brewery like Throwback, who gets at least one request a week, they must be careful. If they agreed to every request they would soon be giving away all of the beer they produce (Throwback Interview). Instead they take choosing the right organizations to sponsor very seriously and make sure that their priorities are aligned. They make sure to sponsor local sustainable organizations like Seacoast Local, contributing to publications and helping out in other local arenas (Throwback Interview). These sponsorships are effective for Throwback as they allow their brewery to become visible to a demographic that would be very interested in their model, even if they're not necessarily beer drinkers. Many breweries are involved in fundraisers that pair themselves and their product with local restaurants and their dining. These events are a great way to show casual diners how great an effective great beer pairing can make a meal. This encourages customers to buy their beer not only when they're out for meals, but also for dining at home.

Many smaller breweries struggle to come up with the capacity to even participate in other events. However, the biggest breweries like Redhook Brewery can afford to not only support local organizations, but also put on their own events for these groups. Their Woodinville, WA and Portsmouth, NH locations have many events every year, enticing locals and out-of-staters alike to come and celebrate and enjoy their beer (Redhook Brewery). As an added publicity bonus, a number of these events are charities, allowing for Redhook to look even more favorable

in their local areas. These events, ranging from concerts and tastings to road races, allow Redhook to reach out to their local community and make a real impact.

Larger breweries also see the value in sponsorships and have a little more leeway in the programs they support. With higher production, they can entertain more requests for their beer. Smuttynose sponsors a number of non-profits and charity events, as well as groups like local softball teams (Smuttynose Interview). Unlike a smaller more discerning brewery, they lack a coordinated plan as to what types of groups to work with. Without such a plan it is harder for the public to see all of the good that Smuttynose and other larger uncoordinated breweries do for the local scene. However, most of these breweries recognize the value of helping out non-profits despite the lack of publicity. They feel that every time they give beer they are doing direct advertising to a particular target group and gaining long term customers (Smuttynose Interview). Smuttynose makes sure to thank their local community and in tandem with their sister brewery, the Portsmouth Brewery, they sponsor events like the Telluride by the Sea and the Music Hall (Smuttynose Interview). They make a point to ensure that they are involved in their community.

However, these larger breweries have a longer reach, meaning that they can also have a presence in communities hundreds of miles from their facilities. Smuttynose helps events up and down the Eastern coast and give their sales team flexibility to help out in all regions. This makes for keeping track of their numerous charitable efforts and sponsorships nearly impossible to measure. However, the need to give back in all of the areas they sell is important as a way to say thanks and to put their name out for consumers who may not have heard of them (Smuttynose Interview).

Beer weeks are another great way for breweries to reach out to local consumers and get involved. Since most of these festivals don't pay for the beer served, restrictions are once again

placed upon smaller breweries who would otherwise like to get involved. As the breweries grow and they can afford the time and extra beer, these festivals are phenomenal marketing events. They provide breweries of all sizes to get their product out to their target demographics and really increase their visibility. In addition to being a great way to move product, they also provides the brewers with a way to get direct feedback from their customers (Calagione 48). It can be difficult to determine what everyone likes based off of objective sales, but at these events the breweries can get direct subjective feedback from their consumers. This is an invaluable resource for breweries of all sizes. These beer weeks and festivals are growing and entering new markets every year. Not only is this creating more awareness for specific breweries, but a general craft beer culture that had a much smaller presence only five years ago (Smuttynose Interview).

For breweries like Throwback that work closely with local farmers, their community involvement is much more direct than just donating beer and money. By working with the local farmers and communities they are helping to grow the local economy in substantial ways, specifically in agriculture. Through their increased demand for the ingredients they need for brewing, they are giving the local farmers another option to use their land to maximize their profits. This money is cycled through the economy creating further growth for these farmers as well as the brewery. They extend this involvement beyond just the farming industry, making an attempt to utilize local skills whenever possible. Throwback's growlers are screened by a company in New Hampshire, and all of the artwork done for the brewery is done by a local artist (Throwback Interview). Being involved locally for a brewery does not end at handing out beer.

Competition

In a broad sense, most of the competition for these smaller brewers comes from outside of the craft brewing industry. One of the most obvious direct competitors to the craft brewing industry is the larger non-craft brewers. Companies like Miller and Anheuser-Busch produce beers at volumes that dwarf even the largest craft breweries like Redhook and the Craft Beer Alliance, flooding the market with their low cost light lagers. These beers are considered better everyday options for a vast majority of the beer consumer market due to their lower prices and often lower calories. These large breweries have even begun to enter the craft beer industry by throwing their considerable resources into developing more than just their usual lagers and marketing as them as products similar to craft breweries' beers. Their size allows them to market these beers at lower price points than companies even as large as Redhook. Beyond beer, different products like wine and scotch can also take away from the craft beer market. These are beverages similar to craft beer in that they have value as a celebratory or special occasion type drink, as opposed to the cheaper options mentioned above.

However, despite the external pressure, competition plays a different role within the craft brewery market than it does in most other industries. In fact, most brewers are quick to dismiss the term "competitor" for other craft breweries. This is not to say that these companies are hoping all accounts buy equally from each brewery, they still want to sell more than others. However, these breweries aren't going after each other trying to take down their neighbors, engaging in marketing wars similar to that which Anheuser-Busch, Miller, and Coors may go through (Smuttynose Interview). Instead, as Annette Lee from Throwback says, "(the) brewing community is collaborative and supportive" (Throwback Interview). Rather than blocking out all newcomers, other craft breweries recognize the importance of fostering a strong brewing community.

When Throwback Brewery was opening, the advice from other brewers was crucial for the founders in deciding on which size to open with and with what kind of equipment (Throwback Interview). Everyone they called were as helpful as possible, giving them legitimate assistance, none withheld advice that would have helped them. Beyond their opening, the brewing community remains a constant resource for Throwback as they continue to go through their growing pains. They have received advice on where to get and how to clean kegs, what the different protocols for the state are, best way to hire help, and help on overcoming many other challenges (Throwback Interview). For established breweries and particularly recent startups, the brewery industry is also an outstanding sounding board for advice on the beer that they brew. Many startups are led by homebrewers who have only catered to their friends and family who will always tell them that their brews are the best. However, with experienced brewers trying their beers, they can receive legitimate feedback that can help these startups improve their processes and recipes to a point that allows for true success (Throwback Interview). Beyond the constructive feedback, simple compliments from competitors can supply the confidence a new brewer needs to go forth with a project that size.

Nanobreweries are more highly impacted by the increasing number of breweries starting up than established regional craft breweries, but even they make a point to embrace other local breweries. They acknowledge the fact that there is no perfect world where they will be the only one in the area, so they do their best to accommodate other breweries and offer the same kind of assistance they received as startups (Throwback Interview). Most of the smaller breweries will be able to last for a short period of time based upon their novelty, but unless they rely on the brewing community for some help at times, they may not be able to stay around for long.

This collaboration creates a local community that benefits all of the breweries involved, a community that some feel is a little late compared to the global market. Other regions of the country and Europe have already begun to develop this kind of culture of beer advocates and “geeks” and now New Hampshire is starting to follow into the trend (Smuttynose Interview). Consumers in the state are starting to ask for a wider variety in the styles and brands that they find. As they see states like Massachusetts with different options they want to be able to try that too. To match this demand, vendors and bars need to pull in some diversity from out of state, but it also creates a stronger demand for beers all over the state rather than just what they can find in a nearby town. This competition for draft lines and shelf space can be a challenge for the state breweries, but it also creates more of a demand from the customer to see all that is out there (Smuttynose Interview). As they discover what other flavors exist, they are more likely to explore and find the other breweries in the state.

To better represent the local brewery community in the state, a number of breweries are attempting to create a guild. The group is still in its infancy and is running into issues with many of the breweries being too understaffed to become as involved as they would like. However, the communication and collaboration that exists between all of them is crucial in getting this idea moving and off of the ground. Though some are hesitant to overextend themselves, most of the breweries in the state embrace the idea of the guild and the benefits it could bring them (Smuttynose Interview). A New Hampshire Brewery Guild would provide a number of advantages for those involved, including a stronger voice when the state determines new legislature. Beer distributors have a very strong lobbying presence and they work hard to keep the laws that were born out of the end of the prohibition intact. With little to no voice for the microbreweries in the state, they have little chance of changing these laws that are so prohibitive

(Smuttynose Interview). By making the guild these breweries will be able to speak as one, making them more capable of raising awareness for their side of the argument. Through this and other lobbying efforts they can work with the distributors to create more constructive laws within the state that are conducive to growth. As one of the only industries growing in the country, and one that employs a significant number of people in the state, their influence could be considerable if they were combined. New Hampshire is beginning to recognize the value of supporting this movement and in the true nature of the industry has been very collaborative.

The guild will also provide a unified marketing voice for all of the breweries, ensuring up to date information. They will be able to put out publications that reflect the entire state and not just information gathered from the brewery closest to the state capitol (Smuttynose Interview). The guild will also allow for easier access to the breweries from groups like the state and interest groups. Beyond publication, they will be able to strengthen state-wide events like a New Hampshire craft beer week that is debuting this year. All of these endeavors can help every brewery, regardless of size. The fact that it is the individual breweries trying to get this together and not a lobbying group from D.C. speaks to the collaboration found between what outsiders would call “competitors”.

Importance of Pricing

“(Pricing) has to be important, especially in a brewery where you do have a fairly wide reach. Its importance will continue to grow as ingredients and resources become scarcer. Whether that’s fresh water or right quality of malt and barley, due to climate change. We’re starting to see these growing areas move north, especially for barley. Pricing will have to matter.” JT Thompson (Smuttynose Interview).

Despite the impression that craft beer is still a completely niche industry that is price resistant there are limits to how far companies can stretch their prices. As JT says, the changing

environment will only continue to make pricing more important in the industry as breweries must find a way to balance the growing costs of ingredients with making their beer affordable to everyone. It is a constant challenge to make sure that a brewery doesn't price itself out of the market (Smuttnose Interview). The beer produced by the major breweries is no longer the only brews considered commoditized, as craft beers are becoming that now as well. Even with the hop challenges of a few years ago, there was no radical price swing to adjust, breweries had to find internal methods to handle the change instead (Smuttnose Interview). Certain breweries like Sam Adams are industry leaders that have the power to make a price change that others will follow, but if other craft breweries make changes you will see little effect other than a dip in their profits.

The balance to find the right price is crucial for breweries from nanobreweries on up. Everyone believes that beer should be accessible, but it also shouldn't be underpriced (Throwback Interview). Breweries have to find what it costs them to make their beers, compare their costs to relative price points for other breweries and determine which beers are worth producing and at what retail price. Consumers pay many bills beyond their beer tabs, and brewers are aware of this when making sure that their prices are in reach (Smuttnose Brewery). If a brewery rises their price too high, consumers will look elsewhere, causing that brewery's volume to drop which causes their per unit costs to rise, creating a downward spiral for the brewery.

Niche breweries have some flexibility in their price as there will always be a limited number of consumers to buy that product. However, as a niche brewery they will never be able to expand to a wider consumer base without lowering prices and forfeiting what they were. Larger breweries will do limited releases and big beer batches that they promote with higher

quality packaging and ingredients that can demand a higher price, but those offerings are merely serving another niche market (Smuttynose Interview). These beers are unsustainable for a large brewery if that is all they make. Pricing in this industry is a factor that matters to the people who make it and the people who drink it and finding the necessary balance is critical.

Successful Differentiation Strategies in the Industry

Nanobreweries & “Green Breweries”

Nanobreweries are microbreweries that produce less than 125 gallons per batch. These breweries are predictably cheaper to start than larger ones and allow passionate homebrewers to share their own recipes with the public. There are a number of different ways that breweries this small have found to differentiate themselves enough to stay profitable and are a successful option for many new startups.

A local example of this model is Throwback Brewery of Hampton, NH, which has found a way to stand out and at the same time make a true difference on a local level. Annette Lee and Nicole Carrier believe that beer is an important part of the slow food movement, which encourages transparency in the origin and conscientious production of food. Their determination in keeping with this idea has been a huge driving force towards making it a solid advantage. It is ingrained in the way that they do their brewing so much that they would rather close their doors than do it any another way. This commitment is very important in helping a smaller brewery stay true to their main differentiator in the face of more obvious expenses.

They are making a strong commitment to making sure all of their ingredients are grown locally in New England to create a truly homegrown local brew. They believe in making sure their beer has “terroir”, which is the idea of a sense of place. To put it in context, it is the same concept as wines being known by their location of origin because they incorporate the local

environment and climate (Throwback Brewery). Throwback Brewery makes a point of not sourcing hops and malts from across the country or Europe but instead from more local sources. As Lee says, “We’re not just saying we’re local because we make beer around here, we’re actually working with local farmers. And I think people respond to that” (Throwback Interview). They are not claiming that they’re a local beer just because their brewery happens to be nearby. As supporters of the local farmer markets for many years, they have established many agricultural connections in the area. As the farmers discovered that there were aspiring brewers in their midst, the Throwback founders jumped on the opportunity to expand upon these relationships. They are now getting the wheat and barley from some of the same farmers that they have been getting their groceries from for years.

This has allowed them to make their beer truly local and cultivating a terroir by sourcing most of their malts and hops from farms within 200 miles (Throwback Interview). However, with this identity also come unexpected consequences. As Throwback has committed to the local sources, they have also had to commit to the seasonality of New England farming. Each season brings its own unique flavors and offerings, something that comes through in Throwback’s beer. They have used local ingredients ranging from squash to maple syrup to add unique tastes representing the local environment. The consumers have embraced these unusual flavors and ideas and have encouraged the Throwback team to keep experimenting. A critical key success factor has been created for Throwback as they are able to connect with a consumer base that tends to look for more local flavors. “When people see love of product in craft, they want to support that,” says Lee. Throwback’s use of local product has not only added to their sustainability ideals, but has created an environment where consumers notice the genuine enthusiasm for the brewing of their products. Another important aspect of Throwback’s local

growing is that they significantly cut costs on shipping, not a small consideration for a successful nanobrewery. Beyond the financial savings is another common concern of the slow food market; the environmental impact of the product, specifically the “carbon footprint.” By avoiding shipping in the hops from the fertile west coast, Throwback can cut down on fuel and other costs that put stresses on the Earth.

Throwback cleverly markets their beer as a locally made beer for the local crowd. Nanobreweries can’t sustain large distribution channels anyways, so by giving their relatively small reach a reason of going green and community pride they set themselves up to be a favorite of the local market. They truly set themselves apart from other microbreweries looking to grow and reach as large a market as possible. This provides members of the New England community and supporters of the “green” movement extra incentive to go out of their way to try a Throwback brew.

Nano Advantages

Starting at such a small size poses many advantages in addition to the challenges that these brewers face. The biggest advantage is arguably the low cost of startup and the subsequent ability to start a business without any third party assistance. That doesn’t mean that one can start a brewery for cheap, but it is much more feasible to start a brewery using smaller tanks that are purchased secondhand. That is exactly how Throwback started as they lacked the startup funds to afford a complete brewhouse from a professional stainless steel fabricator (Throwback Interview). Not many nanobreweries have the means to make such an investment in equipment, because if they had the capital they would be more likely to purchase a larger brewhouse instead. Throwback found tanks locally from many different farms and places and worked with local welders to put all of the pieces together to make a “Frankenbrewery” (Throwback Interview). This system may not look perfect and requires much more technical knowhow which can come

at an additional cost, but it allows nanobreweries like Throwback to start up without having to make an impractical initial investment.

Starting a nanobrewery without third party financing allows these brewers freedoms that they would not be able to enjoy otherwise. They are not beholden to silent partners, so they can feel free to pursue immediate reinvestment into their brewery rather than having to make sure that they are reaching goals that are set beyond their control. Once Throwback grows to a certain size and they have established an identity and proven track record they may look into one of these silent investors; however it is too soon for them to sell away that freedom (Throwback Interview). Instead they know they can continue to tinker with their local flavors just the way they want.

Combining this freedom and Throwback's commitment to utilizing whatever flavors the local market produces, their brewery has a natural tendency towards innovation. When Annette Lee started the brewery and was determining what styles to brew she was told repeatedly to stick to one or two brews, the idea being that it is a struggle for breweries to be everything to everyone. However, she knew that with so many interesting ingredients on hand in addition to the styles she had enjoyed as a homebrewer she couldn't limit herself to just one or two styles (Throwback Interview). She looked to see where there were holes in the market, whether through variations on established styles or unique styles themselves. While this makes it difficult to meet the demand of consumers who want the brewery to have some of every style, it allows them to reach new markets without narrowing themselves to one or two styles.

Throwback and other nanobreweries look at things like limited releases differently than a regional craft brewery would, as their normal batch produces an even smaller amount of beer. Because of this Throwback has to let some trends pass them by, which is made up for by their

unique flavors. Other breweries may have big beers that are released with alcohol contents of nearly double digits or higher. However, when Throwback makes one of these bigger beers they are only able to get half of the volume as a normal batch, exacerbating their demand issues even further (Throwback Interview). Luckily for Throwback, not too many other breweries are using fresh squash in their beers, so just by staying true to their values they can come up with unique enough flavors to attract the niche markets looking for intriguing flavors. Yet despite the importance of innovation, people will always go back to familiar styles brewed the way they like. This makes a strong selection of quality of beers more critical than a brewery's ability to come up with something new.

Nano Challenges

While their commitment to sourcing locally gives Throwback their defining differentiation, it also comes with significant costs for their brewery. It is much more difficult to source all of these ingredients locally despite their strong local relationships, especially hops. While more local farmers are beginning to plant hops annually, it is still difficult to acquire the amount required for their beers (Throwback Interview). Malts are also relatively limited in New England, though finding the necessary wheat and barley is much easier than with the hops. Due to their relative scarcity compared to just ordering through a large distributor, Throwback has to pay higher prices for these goods. It's worth the extra time and money as it allows them to stay organic and local, but it still presents significant additional expenses for a brewery still facing startup costs.

Starting on such a small level severely restricts a brewery's ability to maintain a successful and effective operation. Most nanobreweries are in the same situation as Throwback in that there is a lot of work to be done and very few people to do it, making the management of the whole process very daunting. On top having to bottle, keg, and clean, all of which is done

manually, Lee also has to do her own distributing. This all adds up and allows her to only be able to brew two to three times a week, making it difficult to even keep up with the demand for their beers (Throwback Interview). With so many things to do, she has to make sure she is still staying diligent on her brewing and her product's quality. She understands that without good beer, it won't matter what your key success factors are, you will lose customers quickly. The tradeoff for this consistent quality is the inability to meet her already growing demand. Making it even more challenging is the self-distribution that they do to minimize their retail costs.

Due to archaic laws still in place in New Hampshire from the time of prohibition, brewers are unable to break any contracts with a third party distributor once a deal is made. The laws establish a three-tiered system that was implemented to protect distributors, but now forces new breweries to forego all bargaining power as soon as they sign their first distributing contract (Throwback interview). Some breweries have forced themselves to go out of business just to be able to break the contract. This has led many nanobreweries to accept the time constraints and self-distribute for themselves as long as they can to ensure their full revenue and save their negotiating power for when they grow to a larger size. States like Massachusetts and Maine require beer vendors to use a third party distributor, but New Hampshire allows any beverage manufacturer to distribute up to 6,000 barrels on their own if they make less than 15,000 barrels a year. This is a huge quantity for a nanobrewery and far off from Throwback's current capacity of roughly 200 barrels a year, which offers them some flexibility (Throwback Interview). This allowance in the New Hampshire law allows Throwback to expand with their own power until they are ready and willing to go the bargaining table with a distributor.

However, even once they do finally agree with a vendor, Throwback will be faced by a challenge that is placed upon all microbreweries, but especially nanobreweries. That is the fact

that many of these distributors are usually working with one of the larger breweries like Anheuser-Busch or Coors, so it is actually against the distributors best interest to go out of their way to push their product (Throwback Interview). This means once a brewery agrees to a deal, not only do they sign away bargaining power, but they have no control over how their product will be treated in the warehouses, whether it is chilled properly or handled with much care. Especially for a small brewery that needs to make every beer count, turning off potential customers due to bad transportation can be devastating.

Future of Nanobreweries & Throwback

Through Throwback we can see how the nanobrewery industry will evolve over the next few decades. Easing Throwback's growth is that as they continue to grow, the local farms that supply them do as well. As these farmers see the increase in demand for beer ingredients, they are starting to switch to these crops. There are already farmers with acres of land they don't want to put into vegetables, but will now put into grain (Throwback Interview). The challenges for these farmers, is the cost of the necessary equipment for these new crops. However, as the demand grows, so too does the willingness of farmers to work together and invest in the necessary combines. All of this growth will allow for Throwback to maintain their growth as they can have a steady supply line growing with them. This will also support Throwback's community relations as they will be helping to fund and expand the local economy.

The growth that Throwback is experiencing right now is just trying to keep stable, not only through ensuring steady ingredients supply, but through investing in the brewery itself. They are on pace to become profitable, but at the same time they are always trying to find bigger and better equipment (Throwback Interview). This is difficult to do when looking at the expensive price tags for upgraded equipment and taking into consideration that they are still trying to pay off startup costs. Lee acknowledges that loans will most likely be a constant, but

she wants to make sure she is not over-borrowing just for a superficial improvement (Throwback Interview). They are looking to improve and spend upon operations, to the point that it still makes sense, which as they grow should provide for itself.

Throwback wants to align their facilities with their ideals and move the brewery onto a farm one day. However, this move would bring concerns of how far people will travel out of their way to get their beer from the brewery. The farm would allow them to grow their own hops and grains, but they feel that taking on an extra endeavor like that is a long term goal at best, as it comes with too many variables for a startup still trying to reach their market's demand.

Throwback feels that the area can support a 15 barrel system from them, which is five times their current size, but the ever present demand may not be able to extend to the size of a larger craft brewery like Smuttynose, who use a 50 barrel system (Throwback Interview). They know they won't reach that size because their goal isn't to reach everyone in the country; it's to reach those in their community. Just as they want to source all of their ingredients within 200 miles, they want their distribution reach to be the same (Throwback Interview).

Another goal for Lee and many other brewers who start on the nanobrewery level is to never grow to the point where they are no longer involved with the operation. Whether or not that means moving to a farm a few miles out of town or just expanding into the next bay in their garage, the growth will never reach an uncontrollable rate. This is their project and they are not brewing just to create a small startup they can sell later. This brewery is an idea that they believe in and want to see through. Beyond their steady growth, Throwback Brewery doesn't see too many dramatic differences changing their current business model. However, they are open to one day seeing food being a part of their operation (Throwback Interview). This could either be in partnership with another restaurateur or in the form of serving cold cuts at their tasting hours.

By providing unique options and maintaining their high quality brewing even as they grow, Throwback is set up to retain their current customer base and see steady growth in that as well.

Regional Craft Breweries

Smuttynose Brewery based out of Portsmouth, NH, started in the early 1990s in northern New England and has attained success at the microbrewery level, growing into a regional craft brewery. Smuttynose was started by a veteran brewmaster who had been running brewpubs in the local area for a few years prior to the opening of the brewery, but with increased demand saw the need to open their own production breweries. Peter Egelston had opened the Portsmouth Brewery, a brewpub, in 1991 after operating and co-owning a brewery in Massachusetts with his sister since the 1980's. When a local microbrewery, the new Frank Jones Brewery failed, the previous owners put the brewery up at auction. He attended the auction more to see who the new competition might be, but decided to put in a lowball offer while there. To his happy surprise he was able to gain the equipment and facilities for a relative bargain in 1994, and this was to be the start of the Smuttynose brewery ("Smuttynose Tour"). His new brewery, Smuttynose, would be a microbrewery in its simplest form as just a production facility. This was a contrast to his previous breweries which were brewpubs, or microbreweries where they not only produced their beer on site, but also sold it there as well.

Starting up in the early 1990's and moving through the decade, Smuttynose was faced with the difficult challenges that face any new craft brewery. Fortunately for them they were in a unique position because their owner also owned a successful brewpub, the Portsmouth Brewery, something they credit for allowing them to succeed (Smuttynose Interview). The sister brewpub served many critical advantages, especially in that beginning, that helped them diversify away some of the problems that face a standalone brewery. The brewpub was a "successful restaurant

in its own right, which allowed Smuttynose to withstand a few losing years and eventually come out of the shakeout still standing” (Smuttynose Interview). With the brewpub’s support Smuttynose was able to take the startup costs as sunk costs and continue moving toward their current success.

Peter’s co-ownership of the brewpub allowed Smuttynose to push through a rocky start, but his determination not to take on third party investors may have played an even bigger role in Smuttynose’s success. While their growth was very gradual and they lacked the ability to buy new equipment, they felt the same freedom as nanobreweries like Throwback to make their own changes. A major contributor to the brewery shakeout were the high number of people getting large investments from third parties, but then didn’t know how to run a profitable brewery (Smuttynose Interview). Everyone wanted to be a part of the brewery craze, but not enough people knew exactly what it would take to be successful. As these new breweries struggled in becoming profitable, the impatient third party investors would quickly pull out, shutting down the operation.

Peter’s independent ownership allowed him to be patient and get past the growing pains to the profitable point where Smuttynose is now. His hands on approach and continued involvement on every level of the process has created an atmosphere where the employees all feel personally invested in seeing the company succeed. Even the bottlers and tour guides are privy to how the company is performing financially; there are no secrets (Smuttynose Interview). This atmosphere is felt through the entire company as employee satisfaction is high and everyone loves their job, increasing productivity. Buoyed by the release of their successful Smuttynose IPA in 2003 and following the hiring of Davey Arrington to run the brewing operations, Smuttynose poised itself for further success (Smuttynose Interview).

To differentiate themselves from other craft breweries Smuttynose acknowledges that production-wise there are only so many ways to brew beer, so they decided to take a different tactic to stand out. They still recognize the importance of brewing a quality beer, but in order to make consumers take their product off the shelves they've come up with very unique packaging. Their distinct labeling uses large photographs that aren't found on many other beers, if at all. The only other beverage company with similar labels is Jones soda who is trying to attract a different market (Smuttynose Interview). These labels allow Smuttynose bottles and cases to catch the eye of curious craft beer consumers as they look for something new to try.

Though most styles are similar, every brewery will have a different recipe, and according to JT, the Director of Propaganda at Smuttynose,

“It helps that we were sort of the first aggressively hoppy IPA in New England markets... I mean Harpoon was there, but our two IPAs are very different, Harpoon is more malty and balanced, ours is pretty dry and aggressive hop wise. I think that helped us a lot and got us positioned as one of the big IPAs across NE in terms of what consumers want from a consumer IPA as opposed to one formed 20 years ago” (Smuttynose Interview).

Not only were they able to use this new style to stand out a decade ago from other microbreweries, but it has become their flagship beer and now accounts for 42% of their total sales (“Smuttynose Tour”). By taking the chance on a new spin on an old style, Smuttynose took advantage of a hole in the local market that has had a real impact on their success and growth. Through subtle marketing advantages and risk taking beers, Smuttynose have found a consumer base that has allowed them to reach a level of sustainable profits.

Once Smuttynose reached 35,000 barrels a few years ago, they felt they had steady profits and were in the black. They are now doing 40,000 barrels and are looking to build upon this success. With a proven business model they are able to qualify for new loans and begin

bringing in new equipment. With each new investment, brings more advantages as their economies of scale shrink (Smuttynose Interview). As their costs per bottle go down, and their retail prices stay flat, they are able to bring in more revenue for further expansion.

Regional Craft & Sister Brewpub Advantages

Another advantage that the sister brewpub presents is the ability to have a strong distribution channel guaranteed. The Portsmouth Brewery was and remains one of the largest accounts for Smuttynose. When Portsmouth Brewery has open taps, which they typically have three of; it only makes sense to fill that with Smuttynose (Smuttynose Interview). It also makes a lot of sense from Smuttynose's point of view. Beyond being able to take advantage of a local market interested in trying brews made just a few miles away, it is also a great way to get different styles out to a broader market. The two breweries do not do any brewing for the other in each other's facilities, making sure that the two entities remain distinct. However, there is open dialogue between the brewmasters, allowing for easy information flow between both and respected soundboards for constructive feedback.

Distribution has now become a non-issue for Smuttynose as they have reached their current size and status. Smuttynose is so popular that there is a three week wait for their product with any distributor, so even with their new plans to move into a larger facility next year they don't plan on moving further west than Wisconsin, which is already their current distribution limit ("Smuttynose Tour"). Distribution has become easy for them so they prefer to focus more on their current customers and the existing demand than try to put their beer on every shelf from coast to coast. A lot of national distributors are looking for more brands on their books, so Smuttynose, must be selective (Smuttynose Interview). They want to honor their commitments to the accounts they have rather than overextend themselves. They recognize that entering new markets isn't the hard part; it's making sure that they are putting out the best product possible

where they already are. They are investing in infrastructure, because better package quality will bring better shelf life, and therefore better tasting beer in all of the states they ship to.

As an established brewery of considerable size, Smuttynose has also reached a size where finding and acquiring the necessary equipment is no longer a major task. They no longer have to scour farms and old breweries for “new-to-us” equipment (Smuttynose Interview). Over two and a half decades Smuttynose has been developing a strong relationship with JB Northwest, a company based in Oregon that makes fermenters and other tanks for them to their specifications. This does not mean that they can afford to upgrade every piece of machinery, but as they continue to reach financial stability they are able to invest in these brand new tanks. Having the new equipment all made to the right size and function has a major impact on their production and quality. Differences in fermenter shape and size influences how fermentation proceeds at large sizes, so the closer they are to getting equal sized tanks across the entire floor, the greater consistency there is in batch size and product, and clearer reasons for why certain pieces are located where. All of this consistency creates a more efficient and productive brew process.

Regional Craft & Sister Brewpub Challenges

When looking at how Throwback and other nanobreweries take advantage of local crops to create a distinct success factor, it is quickly evident that a company like Smuttynose cannot jump into this market. They acknowledge that the food and beverage environment has had a renewed importance placed upon food ways. Yet despite consumers’ desires to be connected to their beer by knowing where and how it is made, Smuttynose recognizes it is not something that makes sense for their company (Smuttynose Interview). Just because one idea works for one company doesn’t mean it works for all breweries and Smuttynose wants to ensure that they are doing whatever makes the most sense for their company. If they’re brewing and not making

profits, it won't matter how many people are pleased with the connection, the brewery won't be around long enough to satisfy all of the demands.

This does not mean that Smuttynose believes brewing with local ingredients is a bad idea; they have just reached a size where they are no longer able to make it work. Smuttynose has a 50 barrel system and is brewing 30 times a week, which is an exponentially higher volume than what a nanobrewery can produce (Smuttynose Interview). Smuttynose is having discussions on the best way to embrace sustainability in their practices, however there is not enough local malt currently being produced at any price that would enable Smuttynose to go completely local even if they tried.

Other issues that Smuttynose has run into have stemmed from their growth over the last decade. Though it has been in a steady 20-30% growth per year, much more manageable than the growth of other breweries, maintaining high quality has been a challenge (Smuttynose Interview). The growth can be overwhelming and one of the key drawbacks to such expansion is the ability to keep up with all of their accounts. The last thing Smuttynose wants to do is short a customer and have to pull out of a market. This kind of action would not only give them a poor reputation, but also stunt their growth in that area moving forward, making it harder to gain back the business even once the production catches up.

A lot of the struggles come from capacity issues, specifically on the packaging line (Smuttynose Interview). Smuttynose is now able to update some of their equipment, but they are still operating many used and old pieces of equipment that are comprised of many moving parts. Trying to maintain some of these machines can become a multiple person job, even if the actual process requires just one. Beyond that, the risk that the older machine may shut down and need extensive work to fix can have even greater ramifications than hiring an extra person to help

supervise. Thompson gives insight on what kind of impact such a failure would have if the bottling line goes down,

“If say the filler goes down, it’s the only one we have, there is no backup, and you’re not bottling beer. And if you’re not bottling beer, you’re not emptying a bright tank, and if you’re not emptying a bright tank you’re not moving beer out of your fermenters, which means you don’t have open fermenters, so the entire schedule shifts” Smuttynose Interview).

This is a problem even when you may have some slack demand as it can set you back a few days. However, with Smuttynose’s steady growth and strong demand, a delay like this could be catastrophic. Not only would it set them behind a few days, but once again it could lead to having to short sell to a number of different accounts. Despite Smuttynose’s many advantages in their current size, they still face many challenges that could force them to take a step back from their goals.

Another difficulty facing their continued progress towards updating their equipment to minimize the risk of faulty machinery is the financing capital market (Smuttynose Interview). The market is still tight following the recent recession, causing even the larger and stable microbreweries to struggle with getting the necessary funds they need to secure new infrastructure. It has caused them to delay opening up a new brewery for the better part of a decade. To compensate for having to wait to acquire the necessary aid to move the brewery to a larger facility, Smuttynose has been flexible in trying to increase production. They have eliminated their hospitality area and have literally raised the roof of the current facility in places to accommodate larger tanks. Despite these modifications it has still been a struggle making sure they were reaching all of their consumers’ demands and at the same time maintaining a high quality beer (Smuttynose Interview). Now that the market is starting to recover, the future looks a little more realistic for some of these expansion projects.

Smuttynose Future

Smuttynose has finally found and closed on a new location in Hampton, NH to move their facilities into a larger building on an old farm (Egelston). This facility will allow them to create an area tailored to these needs in terms of size and space, which will allow for many new improvements. They foresee the opportunity to upgrade a number of pieces of equipment, including both a new brewhouse and bottle filler. These upgrades will serve multiple purposes for the brewery. It will allow them to produce more beers and at the same time improve their package quality, meaning greater shelf stability (Smuttynose Interview). With the better shelf stability, they will be able to meet their demands in farther markets with top quality beers.

Another purpose these upgrades will serve is to reinforce the company's belief in reinvesting in their employees. One of the best ways that they feel they can provide this reinvestment is by improving their employees' jobs and quality of life. By improving the packaging line, there will be no more manual stampings on cases, as it will all be done automatically. Floor workers will no longer be expected to lift 30 pallets of 70 cases each every day to keep the line moving as they will be getting a new automatic palletizer (Smuttynose Interview). Changes like these make the process much more efficient and allow the employees to be safer, healthier, and happier.

These kinds of investments are a critical reason to Smuttynose's success in maintaining a low employee turnover rate. They feel that this low rate allows for all employees to continue getting better at their jobs and limits the time needed to explain the different processes (Smuttynose Interview). They also place an emphasis on promotion from within; making a commitment to their employees' long-term career goals and creating an atmosphere where they are likely to reciprocate the same. As Smuttynose moves forward they recognize the importance

and value of a stable workforce and are looking forward to maintaining the internal success they have had.

Smuttynose still recognizes the importance of not getting ahead of itself. They are cautious to not over reach and invest too much too fast. They have done well maintaining a balance with their steady growth and are intent on making sure they stay that way. While they are always trying to catch up to their demand and meet all of their accounts, they don't want to begin producing too much and end up with too much beer on their hands. Instead of continuing to just simply make more and more beer, they're production may eventually level off. This doesn't mean they will stop growing altogether, but instead they may look at new opportunities. There is a possibility that in a decade from now consumers may be able to buy Smuttynose cheese (Smuttynose Interview). Other ideas that are more in line with their current production might be opening a distillery. Smuttynose has worked hard to achieve a strong brand and they want to utilize that moving forward to expand their portfolio of products.

This does not mean that they are going to stop at the 40,000 barrel production level they were at this year. They predict that at the new facility they will be able to reach nearly 65,000 barrels a year, a substantial amount of growth (Smuttynose Interview). They seem comfortable with this ceiling, as they plan to expand in the other ways mentioned previously. They don't have any ambitions to grow to the size of a Sierra Nevada type craft brewery. As their owner is known to say, when people go to the west coast, they want to try west coast beer, not a Smuttynose or Harpoon (Smuttynose Interview). They will continue to strengthen the regions they already maintain a presence within, but feel no need to go national. It is a concept that links into the sustainable food movement with local food ways ties; a beer made in New Hampshire does not need to be on every shelf in Oregon.

Smuttynose will continue to explore different ways that they can embrace the sustainable movement and incorporate the ideals in their processes and brews as best as possible. They are discussing the idea of using organic malts every other load instead of their normal malt. While they would not be able to get their beers 100% certified as organic, they know there is more to the idea than being recognized for it. They are not looking to go green just to gain a few customers, they want to find a way to make a change for the sake of the environment and the multiple positive impacts it could have (Smuttynose Interview). As the local farming industry grows and beer crops gain more support, using local hops may become a reality, but for now Smuttynose is focused on staying grounded while investing in their brewery, their people, and their beer.

Redhook and Larger Craft Breweries

In contrast to the locally conceived and owned Smuttynose brewery, Redhook Brewery took a different path towards developing a northern New England brand. Redhook Brewery was one of the first craft breweries, founded thirty years ago in 1981 in Washington state. Two men, Gordon Bowker, a founder of Starbucks, and Paul Shipman, a man now renowned for his marketing acumen, started Redhook (Krebs 43). Like the other craft brewing pioneers of the time, they felt that there was an opportunity in the beer industry for high quality, full flavored ales after the consolidation of the 1970's. Working against the popular belief of the time that craft breweries simply couldn't last, Bowker and Shipman were at a further disadvantage in that neither of them had any idea how to brew their own beer. They found their first brewmaster, Charles McEveley, and offered their first beer to the public, styled to be a British Ale, in 1982.

Following many struggles that accompany startups, Redhook found success when they made a new pale ale that was very successful as both an individual brew but also for the

company's long term future. It was their first truly great beer that was well embraced by the public, crucial for growing their market share and staying relevant as they developed new recipes. By providing the beer aficionados in the area a local beer that they loved, they were able to create a market of faithful fans, setting them up with a stable consumer base for their future growth. Another key success factor they used early in their history was the manipulation of the hometown pull and strong marketing by labeling their beer, "Ballard Bitter" after the town their small brewery was in at the time (Krebs 130). This guaranteed local fans as people were excited to drink something from their local neighborhood.

From that point on Redhook continued to grow, leading other new craft breweries through the rapid growth of the 1980's and early 1990's (Krebs 188). They built new state of the art breweries in Washington State, allowing them to produce high quality ales using top of the line technology. By 1994 the national demand for their product had grown to be so great they built an identical brewery in Portsmouth, NH to aid in the production and distribution of their beers on the east coast. These were necessary moves at the time that allowed them to reach new markets in ways that many small craft breweries could only dream of. However, Redhook still needed a way to be able to distribute their brews more efficiently and effectively. This led them to what is still considered one of the more controversial moves in the early craft brewing industry; they partnered with Anheuser-Busch in 1995.

Redhook had always prided itself as a company that stayed true to the basics of brewing beer and being a craft brewer. They proudly advertise the fact that they are a brewery that only uses the four basic ingredients espoused by the *Reinheitsgebot* (German beer purity law); water, malted barley, hops and yeast ("Redhook Tour"). You won't find any orange zest in their beer as they only make beer according to these standards. In the past they have also been an open

critic of companies like the Boston Beer Company that contract out most of their brewing; believing that a brewery should make their own, or else they're just salesmen. All of this staunch support in the way to run a brewery in a "pure" form made it so surprising when they made their partnership with Anheuser-Busch. However, Redhook realized that reaching the levels they wanted to grow to would require an expansive and reliable distribution network. Anheuser-Busch has the strongest distribution system in the industry, and by putting their beers on those trucks meant Redhook could reach locations previously thought to be out of their reach (Krebs 175). This has provided Redhook with a true key success factor that differentiates them from their competitors by being able to efficiently reach more people beyond just their local market.

Despite what many expected or believe, the partnership did not signal an end to Redhook's craft brewing and a transfer into an Anheuser-Busch run operation. Anheuser-Busch holds a third of the company, but Redhook still controls their own operations, develops their own recipes, and controls all of the day in and day out decisions of the brewery (Krebs 181). Following the partnership Redhook went public to raise more capital to fund its expansion, one of the first craft breweries to do so. Once again their boldness helped them breakout in the pioneering craft brewing market, as they took advantage of what others were hesitant to do. Following their IPO, Redhook continued to excel for a time until the oversaturation of the market in the late 1990's caught up to them (Krebs 190). Redhook was forced to shut down their smaller brewery in Washington and ran their other two breweries well below production levels just to try to stay financially solvent.

The next decade was a slow one in which Redhook struggled to post an annual profit (Allison). However, by 2006 things were starting to come back around for the company as they

posted their first annual profit in years. The next year saw Redhook take another step towards becoming a premier player in the national craft brewery market as they purchased the Widmer Brothers brewery to become the Craft Brewers Alliance. Widmer Brothers was another large craft brewery, and combined they had three large breweries capable of producing 600,000 barrels a year. This partnership once again gave them an advantage over other craft breweries as the two breweries were known for different distinctive beers, like the Redhook ESB and the Widmer Hefeweizen. With a wide range of brews they combined to reach segments of the market that they could not reach alone. A few years later in 2010, they purchased another company with which they had had a long distribution partnership, Kona Brewing, adding them to the Alliance. Between the three companies they brewed 583,000 barrels, or more than 18 million gallons, at the time of the purchase (Oregonian). This placed them right near the top of the list of largest craft breweries in the United States.

However, the companies realized that size itself wasn't enough to be successful. They knew that their advantage over others came from their ability to combine their local craft brew feel with the benefits of a large distribution and marketing network. The most important advantage, as the man who became CEO after the first acquisition, Kurt Widmer says "(w)ho's biggest is really just extraneous noise. Craft Brewers Alliance is a partnership between two very long running and successful brewers, and we're combining on things like marketing and distribution where it makes sense to be big, but we're all interested in keeping our brands and beers distinct, and that'll be the case with Kona, too" (Oregonian).

Widmer recognizes that despite their rapid and successful growth, they are successful first and foremost because of their ability to make high quality beer that is popular both in their breweries' local regions as well as the country. With their ability to produce Widmer and even

Kona beers out of their Portsmouth, NH facility, all of the Craft Brewers Alliance beers became national. With the overall market continuing to grow at much more reasonable rates than a couple of decades ago, Redhook has moved with it, posting growth in sales of over 11% this past year, but is now finding itself at a crossroads (BusinessWire). They are even operating more efficiently than ever, cutting their cost of goods sold as a percentage of sales by 7.9% over the last year (BusinessWire). This is due to their ability to use more of their capacity and raise their beer prices to keep up with raw goods. However, they must now figure out how they can continue to outgrow the market without beginning to compromise some of their quality. At the same time they also struggle predicting how they can continue to reach the market as a craft brewer as they grow to an inflated size without alienating their consumer base.

Redhook and Larger Craft Breweries Advantages

As one of the largest craft breweries, Redhook has the advantage of being able to invest substantially in their marketing. They have in the past and continue to explore new media through which to portray their message, like a blog on their website (Redhook Website). They are a company that has many die-hard fans and uses their resources to solidify this base through effective marketing. Their reputation as a company that really appreciates and gives back to their consumer base entices other buyers to explore their beers; Redhook just needs to continue to get the message out successfully. The fact that they have breweries on both coasts gives them an advantage when trying to show that their beer is brewed close and fresh. Redhook has the capabilities to spread this message.

This marketing acumen and advantage that Redhook holds also led them to another of their key success factors, their Longhammer IPA. After simply renaming the beer from Redhook IPA to Longhammer IPA, it is now the bestselling IPA in the U.S. (Redhook Tour). Having a beer that brings stable revenues and success, like the Longhammer, in their portfolio is what

allows Redhook to maintain their strong brand recognition as they offer their other styles to the market. With such a strong flagship beer, they entice many new customers to try what other offerings they can find from Redhook.

As one of the larger breweries in the country, Redhook can take advantage of their much better economies of scale than many microbreweries, allowing them to be a pricing leader. The craft brewery market is not perfectly inelastic and if their prices become too high, consumers will begin to lean towards buying the beer produced locally or the newest on the market. Redhook's massive production capabilities and its connection with some of the larger breweries allow them to create beer at a level that minimizes their fixed costs, allowing for a higher profit margin. Also minimizing costs for the brewery is Redhook's top of the line brewing technology. They have automated brewing processes, using state of the art production facilities that are monitored by computers. This helps to ensure the highest quality at all times with the most efficient amount of resources used. Redhook also recognizes the value for this technology and has invested over \$4 million at the Portsmouth, NH location alone to increase their production (Ramsdell D10). This kind of dedication is a luxury Redhook can only afford because of their willingness to take on outside investors to raise the money needed to take over the industry.

Redhook and Larger Craft Breweries Challenges

Their growth and increased efficiency has led to continued success over the last few years, but has further deepened the impression that Redhook and the Craft Brewers Alliance isn't really a true craft brewery anymore. With so many other breweries carving out their own local niches, it makes it difficult for Redhook to become a market leader in any one specific location. Though in a position enviable for other craft brewers, Redhook is faced with a number of key issues that they will need to overcome to make profits in the short term and ensure that these profits are sustainable. One of their biggest issues moving forward is that many consumers no

longer consider them a local or community brewery. Like a vast majority of craft breweries, Redhook was founded upon the principle that they can provide a local beer with more flavor than national brands could offer. In the beginning, Bowker and Shipman believed that their most important key success factor was the freshness of their high quality beer. It allowed them to compete not just on flavor with the major lager producers, but also on their ability to get their beer to the local public in a fresher state than foreign imported beers.

However, by growing nationally and developing strong distribution advantages, consumers have started to perceive them as less of a true craft brewery and more as one of the big businesses in the market. This perception is not unfounded, CBA, of which Redhook is the largest brewery, now ranks as the ninth largest brewery in the nation ("Top 50 Breweries"). Despite its name the Craft Brewery Alliance doesn't even qualify for the craft brewery list as it is not considered one by the Brewers Association, the leading voice on craft breweries which define them as such:

“An American craft brewer is small, independent, and traditional. Small: Annual production of beer less than 6 million barrels. Beer production is attributed to a brewer according to the rules of alternating proprietorships. Flavored malt beverages are not considered beer for purposes of this definition. Independent: Less than 25% of the craft brewery is owned or controlled (or equivalent economic interest) by an alcoholic beverage industry member who is not themselves a craft brewer. Traditional: A brewer who has either an all malt flagship (the beer which represents the greatest volume among that brewer's brands) or has at least 50% of its volume in either all malt beers or in beers which use adjuncts to enhance rather than lighten flavor.” ("Top 50 Breweries")

By this definition, Redhook, and the CBA as a whole, qualify as small and traditional, but due to the 32% ownership that Anheuser-Busch possesses in their company, they exceed the limit stated by the independent standard. Even if they were considered for that list CBA would be ranked fourth, a position that hardly leads consumers to associate them with the local brewpub. Their

high quality and ability to put their product in shelves all over the nation will keep Redhook a relevant player, but if they don't begin making changes to meet the ideal values of their target market they may find their growth starting to stagnate.

The rising price of ingredients makes it even more difficult for Redhook to turn a profit margin (Nason). Redhook is so constrained by the *Reinheitsgebot* that they are forced to swallow any general price swing from their suppliers and cannot resort to using cheaper adjuncts. Though they develop their own yeast strains and have on-site water treatment plants, they rely on their suppliers for their hops and barley (Redhook Brewery). As more and more breweries enter the market the demand for grains and hops increase, causing the prices to increase as well, putting a pinch on established companies like Redhook. This should provide an incentive for Redhook to develop ways to become better partners with their suppliers and leverage their superior size to gain wholesale discounts over their smaller competitors.

Another key issue facing Redhook and the Craft Brewery Alliance is the difficulty of constant innovation in a maturing market. When Redhook started, craft brews in general were a novelty and an innovative product, with little for competition beyond imports. Over the last few decades the industry has seen many different beer styles brewed, from English ales to German lagers, stouts, porters and more. Nearly every brewery now has a comprehensive offering of beers, meaning just having an IPA no longer is enough for a brewery (Biewer). Redhook has done well staying ahead of the industry, consistently developing new recipes. They even acknowledge when others can make a style better than their own and try to capitalize on it, like their purchase of Widmer Brothers and their renowned Hefeweizen. With the market caught up, requiring a diverse line of beers, Redhook will need to find new ways to develop and market new beers to continue gaining national attention.

Redhook Future

One area where the market has not been saturated is the big beer and limited release segments, a place where Redhook can have great success and substantial profits. It is a segment with high profit margins as the beers themselves are costly to make and even more expensive to purchase, with consumers choosing these beers for celebrations and treats as opposed to everyday consumption. A “big beer” is a beer that has high alcohol content (8-10% or higher is generally accepted as an arbitrary minimum) with robust flavor. Redhook has begun to enter this market, but with their greater marketing teams and brewing teams than most of the others in the industry, they should be able to jump into the segment and be a presence.

Redhook’s own marketing department realizes how much of an opportunity it presents, “It’s a way to encourage (our) brewers’ talent and challenge them to bring new and innovative beers to the market” (Biewer). They recognize the chance to again be seen as an innovator in the industry and now have to be more aggressive to capitalize upon it. If they wait too long they’ll allow the larger craft breweries that have already entered, like Boston Beer Company, to corral the market before they can really begin to show what they can offer. As the market has become flush with high qualities of all styles, the experienced teams at Redhook and CBA now have the chance to show their creativity by developing new recipes that create noise and positive publicity. The crowded marketplace takes more to stand out, but with their superior financial and brewing talent Redhook can use this segment to show their ability to come up with new and delicious brews.

The next key issue for Redhook is their ability to compete with companies that have embraced the green movement and socially responsible companies. It is becoming critical for businesses in any industry to be aware of and commit to a triple bottom line business model to ensure long-term success. In a market as progressive as the craft brewing industry, the

consumers are much more likely to make decisions based off of which companies represent their ideal values over which ones offer the cheapest prices. Redhook has already demonstrated a number of different ways in which they display their dedication to the environment. Like other breweries they dispense their used grains left over after the brewing process to local farms in the regions around both of their breweries. Their Portsmouth, NH location alone donates over 150,000 pounds of used grains for feed to dairy farms all over New England (Cavan). Differentiating themselves from others who donate their grains, Redhook also includes their yeast after research found that the yeast had no impact on the cows, further minimizing the amount of waste they must send to landfills. In their on-site pubs they only use cups and to go containers that are made of compostable materials, typically corn. All of their plastic, glass, cardboard and other possible waste is recycled to be used in new products. Whenever possible they make an attempt to use locally grown products for their beer, benefitting their communities and environment (Redhook Brewery).

Despite all of the things Redhook has done so far to move in the right direction towards becoming a successful triple bottom line company, they continue to strive for excellence. Redhook now has plans to make a batch of beer using ingredients that are only grown locally, including some hops that they have begun to grow on site in Portsmouth (Ramsdell, D6). This will help to differentiate Redhook from their other larger competitors in a very positive way and it would help to solve one of Redhook's other key issues. By developing the farming regions around their breweries they would be investing in their communities. Not only does this look great for the company on a social level, but it will help re-immense Redhook into their local culture. People are going to drink the beer that is giving their neighbor a job, it's a real connection. It makes CBA look smaller than their production and distribution networks would

show. This effort will be difficult, but not impossible. Already many microbreweries are differentiating themselves with business strategies like this, such as Throwback Brewery. However, these breweries are producing on a much smaller scale and don't reach the same market that a company like Redhook can. With the larger markets come more production, and more costs associated with the additional resources required to brew their beer. By taking on these issues, Redhook can also fix another key issue of not being innovative enough. In this market the innovation for making new styles and types of beer has become relatively exhausted as every brewery large and small are trying to move with that direction. By showing new creative ways to solve their problems of profitably using locally grown products Redhook can show they area innovative in more ways than consumers thought possible.

Despite the value of embracing their local communities and the positive impact that could have on many levels, Redhook has begun to realize the importance of embracing its own identity. As a brewery that isn't nearly as large as Anheuser-Busch or Miller, but much larger than local microbreweries, Redhook is in an interesting middle ground. To make the best of this Redhook is now positioning itself as a crossover beer for beer drinkers making the switch from one the major light lager producers into the craft beer culture (Nason). To support this they have begun using their marketing resources to partner with productions like the Dan Patrick Show, a sports talk show. The show reaches tens of millions of viewers, including the target demographic of those who may be willing to try a beer with a little more flavor (Nason). As Redhook continues to establish a stronger local feel, they position themselves for success by continuing to utilize their largest advantages.

Differentiation Summary

As can be seen by the differentiation strategies listed above, there are a number of ways to create a successful brewery in the area. Pigeon holing a startup into one or more strategies will only serve to limit and restrict a new enterprise. Instead a successful brewer should look at what each model brings and capitalize upon the advantages they can, while minimizing the effects of the challenges they can't avoid.

Nanobreweries provide realistic opportunities for home brewers, and other brewers who are low on capital, to follow their dreams and open a legitimate brewery. These smaller breweries also offer the freedom to follow the business model that works best for them. As we see with Throwback Brewery where Lee and Carrier have completely bought into their using local ingredients, these smaller breweries have much more flexibility. They make the best of their limited production capabilities, by recognizing with lower volumes they can realistically reach their sustainable goals. They can also take the time to develop the brewery the way they want without having third party investors pressuring them to make immediate changes to make and sell more beer. Obviously these smaller breweries come with many disadvantages as well, mostly stemming from their lack of resources. Without the necessary funds to start up, it takes them longer to reach the volumes of production needed to create steady profits. With the lower funds also come smaller facilities, brewing equipment, and workforce. All of these combine to put severe restriction on the amount of beer that the brewery can produce. It also has many side effects like prohibiting the brewers from giving back as much as they would like to the community as they only have so much product to give. Despite the interest in new breweries from craft beer fans, finding new accounts can also be very difficult for a new brewery trying to gain exposure.

Another model that we briefly touched upon earlier, the brewpub, can help to ease the distribution challenge faced by new breweries. A brewpub is a microbrewery that sells more than 25% of their beer on site, allowing them to rely on a steady outlet for their production, relieving some of the pressure to find accounts immediately before establishing a brand (Market Segments). The brewing facilities of these brewpubs can range in size, but they typically face the same challenges and advantages as other nanobreweries and microbreweries. A key advantage over those beyond the easier distribution is that by having a physical space at the brewery gives consumers a place where they can put a memory and face to the beer. It allows patrons to congregate and feel a stronger connection to the brewery, making them more likely to grab the brewpub's beer off the shelf if they're at the store. Despite these other advantages, having a brewpub creates one sizeable challenge in that the new founders of the startup not only have to coordinate and learn how to operate a brewery, but a restaurant as well. These two facilities can often overwhelm inexperienced entrepreneurs and prove to be more troubling than worthwhile.

Another model that was not touched upon would be to start a microbrewery, or a craft brewery that produces less than 15,000 barrels of beer per year and sells more than 75% of its beer off-site (Market Segments). These microbreweries are often more expensive to start than a nanobrewery so they typically require heavier investment from outsiders, and/or a commitment from a larger group of entrepreneurial home brewers than just one or two. This leads to some loss of the freedom that the nanobreweries are able to take advantage of as their own bosses. Some microbreweries may have to work using stricter processes to create a profit quicker, even if it's not in line with the brewer's desired business model, in order to appease or payoff investors. Despite the chance for a loss of freedom these microbreweries offer not only the same

ability to connect with the community than a nanobrewery, but also allow for more time and production to be used to take advantage of local sponsorships and beer weeks. These microbreweries produce at a level that makes it easier and more realistic for the brewers to reach sustainable profits.

The next largest craft brewery segment are the regional craft breweries that we examined with Smuttynose Brewery. Regional craft breweries are breweries that produce between 15,000 and 6,000,000 barrels of beer, a huge range that incorporates many different sizes of operation (Market Segments). Startups rarely begin brewing at this size as it is difficult to come up with the required amount of seed money even with outside help. Like we saw with Smuttynose's IPA, breweries this size will typically have a flagship brew that they can rely on for steady sales as they experiment with other styles. This stability in sales also allows these breweries to establish a solid business model, with which they can raise more funds through loans or other outside investments. With the extra resources and steady revenue, these breweries can feel comfortable investing heavily into their facilities and future. With the better facilities comes higher quality beer in addition to further reach for their product, creating more profits and greater growth. As the craft brewery industry progresses, these breweries will be in position to capitalize upon the growth and their biggest challenge may be avoiding too much growth too fast. As they continue to reinvest, they run the risk of either creating too much product with no one to sell it to or too large of a distribution area, leading them to fail to meet all of their account's demands. Another difficulty with breweries this size are their incapability to embrace the local sustainable movement, as their volumes are too large and their resources too small to take advantage of local ingredients.

Very large breweries producing over 100,000 barrels a year, such as Redhook, may be producing at volumes that make brewing local cost prohibitive, but they have the resources necessary to absorb the expense. For breweries this size most of their major advantages come from their size of production and capital. They can afford to build their breweries using top notch equipment and technology, creating production facilities built specifically for their requirements. These facilities allow them to not only brew very high quality beer, but to brew it consistently, creating brews that consumers can rely on. Their larger production levels and quality equipment also allow most of these breweries to brew at a much cheaper rate due to economies of scale, as well as avoid the specialization of the market. This puts the breweries in a position to offer many styles of beer to appeal to every market. Similarly helping them to reach all of these markets is their ability to partner with the major breweries in the U.S., like Anheuser-Busch, to gain access to the strongest distribution systems with a national reach. All of these are advantages that smaller microbreweries can only hope to one day gain.

However, it is this inability to reach every market that endears local breweries to craft beer consumers, and poses the biggest challenge to the large craft brewers. Many consumers in the craft beer industry are looking for brews created by people with a real passion for beer and that they can connect to. They are often disenchanted by the huge facilities and large distribution contracts that the largest breweries can utilize. This disconnect is something that causes many consumers to look for a taste of something local or unique when trying something new, not what others might consider an established leader in the industry. Moving forward, many of the largest breweries have begun to address this problem and capitalize upon their brand recognition, by moving beyond the craft beer market and appeal to the market group making the cross-over from light lagers to craft beer.

Not one of these models is the correct way for every entrepreneurial brewer to start up with, and many are financially impossible for even the most ambitious. Instead of choosing only one model of how to run a new brewery, the brewers behind the business should look at what works best for them, their financial position, as well as the location of their brewery. They should pick and choose which pieces of the different models can fit in with what they are trying to accomplish. The most success for a new brewery will come from utilizing the best strategies, while at the same time taking advantage of the collaboration of all of the other breweries that are in the area.

In the next two sections the aforementioned business models and their respective strengths and weaknesses will be applied to the local seacoast area and for a potential brewery that would find success. By first examining the most important challenges that await a new brewery, I will then address them as a prospective brewery entrepreneur looking to start my own brewery, the Salmon Falls Brewery. As there is no perfect way to create one method that works for all breweries at any time and place, the model that will be decided upon is one that would have a high chance of succeeding in the local market, specifically Dover, NH.

Key Challenges Facing New Breweries

For someone looking to start a brewery in the Seacoast, NH area the biggest challenge will most likely be a lack of capital. Without acquiring a silent investment or other large third party backing, the amount of startup capital will be severely limited for most new breweries. This kind of restriction will create a number of different issues that will need to be addressed. With lower funds to begin with, the equipment used will need to be found and pieced together. New equipment built specifically for the brewery will require too large of an investment for the brewery's budget, leading to the necessity of a "Frankenbrewery," similar to the ones you can

find at many nanobreweries and microbreweries like Throwback. These tanks welded together may be found from a number of different places; from other local breweries who have outgrown the equipment to dairy farms looking to receive some return on the used barrels. While they may not look as good as new equipment, this used equipment does not pose any severe difficulties for a new brewery (Smuttynose Interview). That being said, as the new brewery continues to grow, there will be a need for constant reinvestment into the brewing facilities to provide for continued improvement in quality and production.

While the quality of the brew may not be severely affected by the smaller equipment, the amount that can be brewed per batch obviously will be. With the lower production and volumes brewed means that new smaller breweries will not have the same economy of scale benefits that the larger breweries can take advantage of. This means they face higher ingredients costs than their “competitors”, even as the prices across the industry continue to rise. The lower production capabilities will be exacerbated by smaller breweries’ inability to afford a large payroll, another drawback from the limited capital (Throwback Interview). With only a few people working many jobs, it makes it very difficult to produce more than a few batches per week, as other jobs like cleaning and distributing take up so much time. As can be seen by Throwback’s ability to only brew two or three batches a week on a small three barrel system, this limited production severely impacts the number of consumers that a new brewery can reach (Throwback Interview). With less beer being brewed, these breweries have less beer being sold, which leads to smaller revenue and profits than what is needed to properly reinvest and expand quickly.

The limited production also restricts the ability of the new brewery to go out and embrace their community. These smaller breweries have to be more judicious in deciding what causes to donate for and to whom to give their beer. Even small breweries will typically receive weekly

requests to sponsor different groups and events (Throwback Interview). If new breweries with limited production capabilities start participating in the increasing number of beer weeks or by sponsoring too many local organizations by supplying their beer, they will quickly find they no longer have any product to sell.

This inability to participate in as many events as they would like, forces these new breweries to miss out on their best chance on addressing another major challenge: lack of brand recognition. With a lack of employees and capital to perform the necessary marketing to spread the word of the new brewery it becomes very difficult for them to spread their name and announce their opening. They don't have the luxury to afford the time and money for an employee to capitalize on different media and advertisement opportunities. This is why the different sponsorships and events they receive requests for are so crucial to their early success. The beer weeks and other festivals provide an effective way to meet with craft beer consumers, create a real connection, and allow for these consumers to get a taste for their beer, which creates further demand and sales in the future. If the breweries are not careful they will quickly find that the lack of capital, workforce, and production can quickly lead to a model that does not allow for quick enough reinvestment to grow.

In order to break out of this cycle and begin to grow, these breweries need to find an effective way to differentiate themselves from the other breweries in the area and market. As the market becomes as overcrowded as it was over a decade ago, a contraction in the number of breweries can be expected. However, there are two key differences between then and now: 1) As the financial market has tightened, and the craft brewery market has learned from the previous mistakes there will be much less of a shakeout than before. With the limited amount of cash floating around and with more experienced brewers, the main mistakes from before won't be

made nearly as often (Throwback Interview). When the contraction happened previously it was mostly due to a lot of money being given to startups who either knew a lot about business, but little about brewing or vice versa. Today new breweries are forced to become more prepared with a blueprint for success before they begin, cutting down on the number of breweries that shut down too soon. 2) The craft beer market has emerged from its niche reputation and is beginning to enter the mainstream market, bringing with it tremendous potential for growth (Smuttynose Interview). As the industry continues to grow, so too will the amount of shelf space on which breweries can stock their product.

These changes from the previous shakeout may mean that breweries will be less likely to immediately shut down, but it also creates more of a premium on successful differentiation from other breweries. Since there are breweries already in the market with successful business models, entrepreneurial brewers must come up with new ways to stand out against already established breweries in their areas. Another aspect making it difficult to stand out is the fact that the quality of beer has continued to rise as most breweries have figured out the best ways to brew (Smuttynose Interview). This has also meant that as the quality and processes have advanced, there are not many ways to deviate from the traditional methods and still have a strong quality beer, making it more difficult to be unique.

Another major challenge for new brewers beyond limited resources and difficulty in differentiation is a new brewery's ability to distribute their beer. As discussed previously in this report there are still a number of archaic laws in New Hampshire that limit nanobreweries' and microbreweries' rights in contracts with distributors. The laws make it so that smaller breweries have to sign themselves into a contract, and then when they grow they have to keep the same disadvantaged terms or go out of business just to get a new deal (Throwback Interview). Not

only are the deals slanted in the distributors favor, but the distributors are often in partnership with or run by one of the major national breweries. This means it's actually often against the distributors' best interest to market the craft beer. Making the situation worse is that the microbreweries have no say on how the beer is treated in the distributors' warehouse, whether it is kept at the right temperature or handled carefully, which could impact the quality of the beer once it reaches consumers (Throwback Interview). For smaller breweries their only other option if they are small enough is to self-distribute which costs a lot of time and money, making it harder to find profitable success. Even if a new microbrewery wants to get a contract with a distributor it is often very difficult getting a new product into someone's portfolio. There is only so much shelf space in stores and tap lines in bars in New Hampshire, which means distributors are going to prefer the beer that they know will be bought by retailers, not the new brew in town.

Key Success Factors for Future Success

In order to differentiate the new brewery that we will start, the best opportunity for a new microbrewery is to capitalize on the industry trend of utilizing a local community pull. I will be developing a brewery concept that appeals to the local seacoast market, specifically Dover, NH. The brewery will be "crafting a true neighborhood brew." It will provide a local craft brewing option for local consumers using locally sourced resources whenever possible. However, it will also be distinct in the way that we establish ourselves as a part of our community. Our commitment to the community is unique in that other breweries in the seacoast aren't run by brewers who grew up in the area and don't often use goods produced locally. We will be more than just a purchaser; we'll develop meaningful relationships with our local suppliers and be a promoter.

We'll do this by going beyond just sourcing the ingredients needed for brewing; we will look to create even more partnerships with local farmers and businesses, sponsoring pairing days, highlighting local products that complement our beers. We will collaborate with area cheese makers and other local cottage industries to truly embrace the local economy. We will follow what Throwback has done and also employ local craftsmen and businesses whenever possible to establish even stronger connections with our community, while highlighting our products. While Throwback has set a successful model on sustainable brewing, they are a nanobrewery with only one full time employee, which strictly limits their ability to make a sizeable impression on the community. Salmon Falls Brewery will be a microbrewery with a larger workforce (most of which will be part time) that will allow it to not only brew sustainably, but also take advantage of their ability to integrate with the community.

Our limited startup resources, though a challenge as described in the section before can actually be utilized as a strength for us. One of our main competitive advantages as a startup is that being a local brewery will automatically give us an initial customer base beyond just craft beer aficionados, but also local of age Dover patrons. We can use the limitation placed upon us from the lack of resources to truly establish ourselves as a local player before starting to grow into new markets. Many breweries are able to enjoy at least fleeting success due to craft beer drinkers' persistent interest in trying the newest brew available. However, we will be able to sustain our competitive advantage because our key success factor will be held strong by our biggest consumers. By creating a community brewery that really promotes locals helping locals, we will create a fundamental consumer base strong enough to eventually reach new markets. As we continue to grow, there will always be a brewery-wide core value in consistently coming back to what we are doing at home. In addition to the special partnerships with other local

businesses we will look to become active sponsors and partners for local festivals. There are many fairs in the Dover area that are looking for sponsorship to grow, and with our help can do just that. This brewery will provide beer brewed by a neighbor and consumed by a neighbor.

One of the biggest reasons for choosing Dover as the city to start in is the fact that Dover is a growing city, posting 11.5% population growth over the last decade to just under 30,000 people (Dover Quickfacts). It is also a relatively affluent city with a median household income of \$57,083, nearly \$6,000 higher than the national average, which often leads to consumers who are more likely to purchase craft brews. Due to the number of breweries in Portsmouth, NH and the general craft brewing expansion over the last few decades, there are a growing number of beer aficionados in the Dover area. However, these new craft beer fans don't have a town brew of their own, and as data from Seacoast Local shows they would embrace the opportunity to have a local brewery downtown. Other beer drinkers who may not necessarily be from the area will also fall into our target consumer group if they are concerned with the environment and support what we are working towards as a community brewery. The brewery will be locally independent, allowing all of the revenue coming in to be to spread around in the local economy. The brewery will use locally grown products whenever available to ensure that we cut down on shipping costs, both financial and environmental. Through this sourcing of locally grown products, we can also help spur on the local farming industry. This combined with the programs presented before will help the brewery create a more sustainable local economy.

Compared to local competitors such as Smuttynose and the Portsmouth Brewery we will offer a more unique experience by offering a more available local presence that creates a greater sense of community. To capitalize on this, we want to provide a place where people can gather and embrace their community with a local brew. It won't necessarily be a large function hall,

but it will be a place where people can come in, see our facilities and enjoy a drink on our premises. This creates that strong connection that will make them come back and look for our beer elsewhere. To minimize the challenge of also having to know how to run a restaurant, we will only operate a limited kitchen. The kitchen can be focused on cold cuts and cheese plates that we acquire through local farms and businesses. The physical aspect of having a brewpub will be there allowing for a greater presence and solid distribution lines, but we will not have to struggle with making two different businesses profitable. To further differentiate ourselves from other brewpubs like the Portsmouth Brewery, we make an effort to get our product on shelves in local stores, increasing our visibility. As people come in and enjoy the atmosphere and beer, they will be more inclined to spread the word and look for it at their local stores. This interest will be part of our pull strategy as consumers ask stores for our beer; the retailers will come to us allowing for us to create demand and distribution lines, despite our recent opening. The Salmon Falls Brewery will be more than a restaurant that happens to brew its own beer. We will steadily grow beyond self-distribution and increase our range as we become more established.

One thing that becomes clear from speaking with local brewers is that if you can't brew high quality beer, it won't matter how successfully you differentiate yourself, you'll soon be going out of business. The seacoast is a veritable hub for brewing expertise and a good source of relatively inexpensive equipment and in order to ensure top quality we will need to take advantage of this. To save costs we most likely be relying on old equipment pieced together for a reasonably priced brewing facility and will need all of the used equipment we can find from other breweries that have outgrown it. We will also capitalize upon this resource to gain industry know-how for advice on how best to effectively operate the brewery and brew the best beer. Our head brewmaster will need to utilize the collaboration in the craft brewery industry to determine

the best recipes for our beer, as well as what styles to make. As a microbrewery with limited funds, the Salmon Falls Brewery will recognize the fact that we lack the necessary resources to support a full portfolio of beers. Instead we will have to follow with the trend of specialization and find a number of beers that work best for us and that we can use to propel our sales forward. By establishing a number of year round styles, that hopefully include a flagship beer, we can set ourselves up with a reliable range of styles that people can depend on and look to for high quality. Once this lineup has become established we can look to add seasonal selections that can reach niche consumers and develop their own new markets. We won't be able to craft a beer for every taste like the Craft Brewers Alliance, but we can stand behind our best flavors and create a brand that is known for top quality and full flavor.

The craft brewery market is a maturing industry, making entries to the market not impossible, but sustaining success very difficult. There are many companies that already have successful business models in place, making it imperative that as we start a new brewery we don't try to merely imitate their breweries, but instead find a balance that allows us to differentiate ourselves. The largest challenge is making certain that Salmon Falls Brewery is not just another brewery in the area but a unique local experience that people can really embrace. The craft brewing market has shown that if a brewery can produce high quality beer consistently there is an opportunity for success in even some of the most crowded markets. Therefore a large portion of our potential success comes from our ability to produce a good product and also new innovative styles that consumers have yet to try. However, our window of opportunity comes from the lack of a true community brewery in the area. It will be our ability to provide our consumers with the unique opportunity to come support their entire local community by enjoying our product. There will always be an increasing number of other breweries in the area on top of

the high number already existing, but none of them are taking advantage of the opportunity to embrace the area and immerse their business into the local economy like we will. With a unique mission to not only utilize the local community, but truly embrace it, the Salmon Falls Brewery can set itself up for sustainable profits and future success.

References

- "A Concise History of America's Brewing Industry." eh.net. Economic History Association, 1 Feb. 2010. Web. 1 Dec. 2011.
<<http://eh.net/encyclopedia/article/stack.brewing.industry.history.us>>.
- Allison, Melissa. "Redhook Buying Widmer Brothers, Changing Name | Seattle Times Newspaper." *www.seattletimes.nwsourc.com*. Seattle Times Newspaper, 13 Nov. 2007. Web. 1 Dec. 2011.
<http://seattletimes.nwsourc.com/html/business/2004011730_webredhook13.html>.
- Biewer, Mike. "Brief History of Redhook." Mike's Brew Review, 13 July 2010. Web. 30 Nov. 2011. <<http://mikesbrewreview.com/breif-history-of-redhook/>>.
- Brewers Association. Web. 21 Nov. 2011. <<http://www.brewersassociation.org/>>.
- BusinessWire. "Craft Brewers Alliance Reports Third Quarter 2011 Results." MarketWatch, 14 Nov. 2011. Web. 1 Dec. 2011. <<http://www.marketwatch.com/story/craft-brewers-alliance-reports-third-quarter-2011-results-2011-11-14>>.
- Calagione, Sam. *Brewing up a Business: Adventures in Entrepreneurship from the Founder of Dogfish Head Craft Brewery*. Hoboken, NJ: John Wiley, 2005.
- Cavan, Jim. "Red Hook Diverts 150,000 Lbs of Excess Grain a Week to Local Dairy Farm." Green Alliance, 10 Mar. 2011. Web. 28 Nov. 2011.
<<http://www.greenalliance.biz/blog/archives/201003/red-hook-diverts-150000-lbs-excess-grain-week-local-dairy-farm>>.
- "Dover (city) QuickFacts from the US Census Bureau." Census.gov. U.S. Census Bureau. Web. 10 Feb. 2012. <<http://quickfacts.census.gov/qfd/states/33/3318820.html>>.
- Egelston, Peter. "Smuttynose Brewing Builds Its Dream House." Web blog post. Smuttynose Brewery, 19 Feb. 2012. Web. 30 Apr. 2012. <<http://smuttynoseupdate.blogspot.com/>>.
- "History of American Beer." *BeerAdvocate*. BeerAdvocate. Web. 20 Nov. 2011.
<http://beeradvocate.com/beer/101/history_american_beer>.
- Krebs, Peter J. *Redhook: Beer Pioneer*. New York: Four Walls Eight Windows, 1998.
- Lee, Annette. "Throwback/Nanobrewery Interview." Personal interview. 23 Mar. 2012.
- "Market Segments." Brewers Association. 26 Mar. 2012. Web. 15 Apr. 2012.
<<http://www.brewersassociation.org/pages/business-tools/craft-brewing-statistics/market-segments>>.

Nason, Adam. "Craft Brewers Alliance: An In-depth Snapshot at the Company Now and a Peek into the Future." *Beerpulse.com*. 16 Nov. 2011. Web. 22 Mar. 2012.

<<http://www.beerpulse.com/2011/11/craft-brewers-alliance-an-in-depth-snapshot-at-the-company-now-and-a-peak-into-the-near-future/>>.

Ogle, Maureen. *Ambitious Brew: the Story of American Beer*. Orlando: Harcourt, 2006.

Oregonian. "Craft Brewers Alliance Inc. to Purchase Kona Brewing for \$13.9 Million." *Oregonlive.com*. OregonLive, 3 Aug. 2010. Web. 1 Dec. 2011.

<http://www.oregonlive.com/business/index.ssf/2010/08/craft_brewers_alliance_inc_pur.html>.

Ramsdell, Laurene. "Redhook Grows with Craft Beer Market: Portsmouth Brewery Modernized, Efficient." *Foster's Daily Democrat* 15 Apr. 2012: D10+. Print.

Redhook Brewing. Web. 28 Nov. 2011. <<http://www.redhook.com/>>.

"Redhook Tour." Personal Interview. 12 Nov. 2011.

Shipyard Brewing Company. Web. 21 Nov. 2011. <<http://www.shipyard.com/>>.

"Smuttynose Tour." Personal Interview. 18 Nov. 2011.

"The Boston Beer Company - Overview." The Boston Beer Company. Web. 20 Nov. 2011. <<http://www.bostonbeer.com/>>.

Thompson, JT. "Smuttynose/Regional Craft Brewery Interview." Personal interview. 6 Mar. 2012.

Throwback Brewery. Web. 21 Nov. 2011. <<http://throwbackbrewery.com/>>.

"Top 50 Breweries of 2011 and Top 50 Craft Breweries of 2011." *Beerpulse.com*, 17 Apr. 2012. Web. 20 Apr. 2012. <<http://www.beerpulse.com/2012/04/the-top-50-breweries-of-2011/>>.