CALIFORNIA STATE UNIVERSITY SAN MARCOS

PROJECT SIGNATURE PAGE

PROJECT SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE

MASTER OF BUSINESS ADMINISTRATION

PROJECT TITLE: The Capital of Craft – Innovating New Ways to Promote the San Diego Craft Beer Industry

AUTHORS: Thomas Hatch, Kunal Mutha, Justin Smith

PRESENTATION DATE: 12/14/2016

THE PROJECT HAS BEEN ACCEPTED BY THE PROJECT COMMITTEE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION.

Name of Project Advisor

Todd Colburn
PROJECT ADVISOR SIGNATURE DATE

Name of Second Reader

Glen Brodowsky
PROJECT SECOND READER SIGNATURE DATE
The Capital of Craft
Innovating New Ways to Promote the San Diego Craft Beer Industry

Prepared for:
California State University San Marcos
San Diego Brewer’s Guild
San Diego Tourism Authority

Prepared by:
Thomas Hatch, Kunal Mutha, & Justin Smith
Students, California State University San Marcos
FEMBA Program

Todd Colburn
Project Advisor, Master’s Project
Higher Gravity Brand Advocates

December 8th, 2016
# Table of Contents

1 Executive Summary ................................................................................................ ii

2 Methodology ........................................................................................................... 1

3 San Diego County ................................................................................................... 3
  3.1 Population and Terrain ....................................................................................... 3

4 San Diego Craft Brewing History ........................................................................... 4
  4.1 First Steps .......................................................................................................... 4
  4.2 Collaboration ...................................................................................................... 6
  4.3 Craft Explosion ................................................................................................... 7
  4.4 Innovation ........................................................................................................... 8

5 Current Analysis ..................................................................................................... 9
  5.1 Factor Conditions ............................................................................................... 9
    5.1.1 Physical Resources ..................................................................................... 9
    5.1.2 Knowledge and Human Resources ............................................................ 10
  5.2 Related and Supporting Industries .................................................................... 14
    5.2.1 Raw Materials ............................................................................................ 14
    5.2.2 Equipment .................................................................................................. 16
    5.2.3 Craft Beer Distributors ................................................................................ 17
  5.3 Firm Strategy and Rivalry ............................................................................... 17
    5.3.1 Strategy ..................................................................................................... 17
    5.3.2 Rivalry ........................................................................................................ 22
  5.4 Demand Conditions ....................................................................................... 23
    5.4.1 “Feeling the Squeeze” ................................................................................ 23

6 Benchmark Study ................................................................................................. 25
  6.1 Denver, Colorado ............................................................................................. 25
  6.2 Portland, Oregon .............................................................................................. 25
  6.3 Tampa, Florida .................................................................................................. 26
  6.4 Ashville, North Carolina .................................................................................... 26
  6.5 Benchmark Recommendations ......................................................................... 26

7 Conclusion ............................................................................................................ 28

8 Recommendations ............................................................................................... 29
  8.1 Interactive Mapping .......................................................................................... 29
  8.2 Drink Like a Local ............................................................................................ 30
  8.3 Rebrand San Diego International Beer Festival ............................................... 30
  8.4 Work with Universities to Develop New Beer Specific Curricula ..................... 30
  8.5 Track Beer Metrics for San Diego “Capital of Craft” ....................................... 31
  8.6 Create a San Diego Craft Beer Loyalty Program ............................................. 31

9 Further Research .................................................................................................. 33

Appendix A: References ............................................................................................. 34

Appendix B: Figures and Tables ................................................................................ 37
1 Executive Summary

The birth of the craft beer community in San Diego is a study in comradery, collaboration, innovation, and personality. The facets of this tightly knit industry, from its chance beginnings to its remarkably powerful presence today, weave a unique thread that can be tied to its success. Success, however, is nothing without its challenges.

In 2015 the San Diego Craft Beer industry generated approximately $851M in gross annual sales, which was an increase of over $120M from the previous year. There were 114 operating breweries in 2015 yielding over 4,500 industry jobs. Over $198M were spent on beer with $117M of that being spent away from home (Appendix B, Figure 7) On average, each San Diego beer drinker spent $175 on beer in 2016 (Appendix B, Figure 11).¹

There are a total of 80 cities that comprise San Diego County with an average tax rate of 8.03%. California is the 23rd least expensive in beer excise tax at $0.20 per gallon. Excise tax is the tax paid by the manufacturer of the beer. In San Diego County, approximately $9M was collected in excise tax alone.¹

This report describes the past and current state of the growing craft beer industry in San Diego and dissects its successes and misses. The analysis addresses the fundamental nature of this success by utilizing business model tools (e.g. Porter’s Diamond Model and Five Forces of Competition) and community trends. This report lends its community information and perspective with interviews conducted with local beer professionals.

Conclusions will allow us to project the future state of this industry and recommend innovations that will further focus national attention on San Diego County. We describe San Diego as a well-supported beer county that has all the facets that the
industry needs, which explains why it can support the large number of breweries in the area. This analysis of the San Diego craft beer scene describes steps that can be taken to elevate the area’s notoriety beyond the realm of California.

The report recommends several ideas that should steer more attention to the craft beer industry in San Diego, one of which is that the area be viewed as less of a large expansive area of beer and more in terms of pockets or neighborhoods of beer. A visitor could consider this area like the London Pub Scene, where everyone has a local beer bar to gather at. This aim will allow someone to live like a local beer enthusiast no matter where they are from.

Beer is a beautiful thing alone but the industry is only as strong as its enthusiastic customers. The report analyzes every detail of the supporting industries in the county to make recommendations for this large enterprise. It is only when the environment is fully understood that the craft industry can explain why this industry is locally sustainable and how it can continue to prosper.
2 Methodology

Three FEMBA graduate students worked alongside their mentor (an industry expert) to explore and analyze the San Diego beer community with focus on innovation and collaboration.

Interviews with local craft beer pioneers were held in order to get a first-hand perspective of the industry was captured. These interviews also held to better understand historical context of this brewing county. This information was used to highlight strengths of San Diego’s historical decisions in this rapidly growing industry.

A current regional analysis was performed using Porter’s “Diamond of National Advantage”, assessing San Diego’s Basic Conditions and other Factor Conditions, Supporting and Related Industries, Firm Strategy, Structure, and Rivalry, along with the Demand Conditions of San Diego County. With this model, the goal was to address competitive strengths and expose competitive weaknesses within the region. Supporting information for this analysis was gathered from local articles, industry periodicals, supporting organizations’ data, and demographics.

A multi-city, national benchmarking paper, written concurrently, was added to the effort. The information used to compare each city was organized using a SWOT analysis and Porter’s Five Forces of Competition. This study identifies efforts both qualitatively and quantitatively employed by each city’s craft beer industry and their supporting industries. This is used to evaluate how each city has achieved recognition as a craft beer contender.

Combining these data, conclusions were drawn to make recommendations to appropriate agencies, industry or government, to help better shape the external
perception of San Diego as a craft beer champion and strengthen San Diego Brewer's Guild's label for San Diego as “The Capital of Craft.”\(^3\)
San Diego County is the southwestern most county in the United States. Here craft and locally made products have become popular with many of the locals. Individuality and good times are complemented and even differentiated by the geography and communities that have evolved here.

3.1 Population and Terrain

Over 3 million residents call San Diego County home. Specifically, San Diego City’s population in 2015 was 1.37 million people, with a county-wide population of just over 3.26 million as of 2016 with 50.24% of population is male and 49.76% of population is female. The average household income of San Diego County is $91,373 and per capita income is $32,454 as of 2016 (Appendix B, Figure 6).

The eastern portion of the land area features deserts and mountains, but San Diego is well known for its beautiful and expansive coastline. Overall, the County offers multiple deserts, temperate regions, grasslands, mountain ranges, pacific coastal beaches, and plenty of urban areas, as well. At the northern county line lies Camp Pendleton, a large land mass dedicated to military operations, which draws the line between San Diego County and Orange County. At the southern county line lies the international border between the U.S. and Mexico.

San Diego has internationally famous tourist spots such as The San Diego Zoo, Sea World, and its beaches. Intermingled with these are 130 breweries (Ref. Appendix B, Figure 1) and brewpubs (Ref. Appendix B, Figure 2) scattered throughout county. Neighborhoods like North Park, Mira Mesa, and North County, especially along State Highway 78, offer many craft beer tasting venues. Each of these micro-clusters also has a unique feel due to the surrounding communities and their local environs.
4 San Diego Craft Brewing History

4.1 First Steps

Craft beer began in San Diego when it had to begin; at a time when craft beer didn’t exist in San Diego. Usually to give birth to something, you need a mother and father. In the city of San Diego, it was born with an uncle and it was born in 1989 with the opening of Karl Strauss Brewing Company in Downtown San Diego. Chris Cramer & Matt Rattner approached “Uncle” Karl, who was actually Chris’s cousin, before opening Karl Strauss Brewing Company. In an interview with Karl Strauss co-founder Matt Rattner, he mentioned that Karl Strauss Brewing Company’s inspiration was Uncle Karl who moved from Germany to Milwaukee in 1939. Karl had a degree in science and was experienced in the art of brewing. He later received his Brewer Certification from the famous Weihenstephan School of Brewing.5

The craft beers they created laid the groundwork for brewers in San Diego. The establishment used personal recipes Karl Strauss developed on his own while he was working at Pabst for over 40 years. Chris and Matt had some experience as well. They both studied at Stanford within two years of each other, graduating with Master’s in Business Administration degrees.6 In 1989 Karl Strauss was the second craft brewery to open in San Diego County next to Bolt Brewing, which operated out of Fallbrook starting in 1987 only to shut down for the first time shortly after opening.7

At the time, there were no local brewing equipment companies or craft beer pubs. Jack White had been working at Karl Strauss in 1992 when he left to open Home Brew Mart with Yusef Cherney, which later blossomed into Ballast Point. San Diego City’s solitary brewing equipment store enabled more people to begin experimenting and
brewing beer that the industry was not. This store continues to supply everything a craft hobbyist needs from grain to steel kettles to beer recipes.8

Pizza Port opened in 1987 with brother and sister duo Vince and Gina Marsalgia. At the time, it was only a restaurant, but five years after they bought this property in Solana Beach they started brewing and serving their premier brew - Shark Attack. Jim O’Brien opened O’Brien’s Pub in 1994 and he bought Pizza Port’s first distributed keg. This Irish-themed pub in Kearny Mesa was San Diego’s first brew pub and is still in open today.9

Stone Brewing opened in 1996. They made a name for themselves with Stone’s Pale Ale and Arrogant Bastard Ale. Marketing for craft beer was limited so Greg Koch wrote lengthy, descriptive beer labels for their beers and was an early advocate for craft beer and against corporate “fizzy yellow” beer. Arrogant Bastard Ale challenged beer drinkers with the slogan “You’re not worthy.” Arrogant Bastard Ale, launched in 1997 (and now marketed as a separate brewery from Stone) has historically been a top-selling craft beer.10

The Stone team realized they knew that they needed to distribute their beers more broadly to succeed. At the time, there were not many alcohol distributors in San Diego (only 6 in 1997). And at this time, no one wanted to carry Stone’s beers, as there were considered radically bitter. [64] So they succeeded in creating their own distribution company. They bought a van and started distributing themselves. To boost the region as well as their distribution diversity, Stone began to distribute other local craft brews, as well as national and international brands. Now, Stone is responsible for distributing more than 40 craft beer brands.11

In 2002, Green Flash Brewing Company was founded. While Stone and Karl Strauss were already in the market with their own brand of IPA’s (a well-known bitterly
hopped style of beers), Green Flash took an extra step come up with something different to create its brand. At that time, there was a hop strain that was not used extensively yet called Simcoe hops. They used them innovatively, using a huge number of pounds per barrel to make. In an article by Keith Gribbins in Craft Brewing Business website mentioned that “This innovation helped solidify the ‘lupulin shift’ in beer while using a perfect balance of sweet crystal maltiness.” Today, Green Flash has remained influential with this trademarked brew, “West Coast IPA,” which can be found on its labels in proud letters.

As craft beer popularity continued to grow, the need for support was also growing. Greg Koch and Arlan Arnsten (Stone) tried something different to spread brand awareness by starting the Craft Beer Wholesalers Symposium (CBWS) in 2004, focusing solely on distribution. Because both Greg and Arlan attended the Craft Beer Conference (CBC), which focused on all things craft beer, they decided to host the CBWB in the same city (Ref. Appendix B, Figure 3).

4.2 Collaboration

Restaurants, pubs, and liquor stores have been the sales driving force behind the San Diego craft beer industry. Since most venues carried beers from out of the area, local brewers were motivated to create beers that would help them secure tap handles and shelf space. The competition was friendly amongst local brewers with the common goal of gaining tap handles over non-local beer and non-craft breweries. In other words, San Diego craft brewers were unified and fiercely collaborative against outsiders.

Back in these times San Diego brewers, drinkers, and sales folk were all in it together. They collaborated on tastes, criticizing and congratulating each other on their beers. Brewers were not trying to manufacture the beer America was used to. They were innovating and at the same time, brewing what they like - not what other people like.
Vinnie Cilurzo opened Blind Pig Brewing in Temecula and began to do just that and created one of his most popular beers - a namesake majorly hopped India Pale Ale (IPA) Blind Pig IPA. This style helped launch the signature flavor of the west coast style IPA, or as it is affectionately called by some “San Diego IPA.”

Groups formed that were aimed at making beer or promoting craft beer were QUAFF, a local home brewing club, and the San Diego Brewers Guild respectively. QUAFF, due to its popularity and the breweries that were spawned from its members was paramount in nurturing the budding industry as was the Guild. These groups allowed like-minded beer-centric people in the area to gather together and collaborate in ways that would shape this industry.

4.3 Craft Explosion

Today the San Diego Brewery Watch shows 130 breweries with 26 more breweries in planning. While these numbers constantly shift, there is still a positive trend in the growth of the industry. In 2012, 16 breweries opened, 25 in 2013 and 18 in 2015. So far, 15 breweries have opened in San Diego County this year. This rapid growth has changed the landscape in a diverging way. “Big beer” conglomerates and companies are buying craft beer breweries in San Diego - most notably the recent acquisition of Jack White’s Ballast Point for one billion dollars in late 2015. Due to this acquisition, Ballast Point no longer meets the Brewer’s Association’s definition of a craft brewery.

Since 2010 craft beer has exploded nationally. In 2010 there were just fewer than 11 million craft barrels produced nationally. Last year, the U.S. produced over 25 million barrels of craft beer, a 227% increase in five years. Market share of overall beer was under 5% in 2010 and at the end of 2015 it was more than double nationally at 12.2%. At the same time production, has grown from 12.1 billion barrels to 24.5 barrels.
is there an interest in producing beer but also in drinking it. Right now, craft brewery
tours can be taken in cars, buses, or even in limos! There are also craft steamship
cruises, craft beer breakfasts and dinners, and craft beer bicycle bars. Now, the county
also has prestige in national competitions and the city ranks among the best cities in
America for craft beer.

4.4 Innovation

Since San Diego was serving mainly imported or non-craft beer in the early
1990s, local breweries had to come up with innovative ways to market their craft beers
and reach out to customers. Michael Porter, in his paper on “The Diamond of National
Advantage” mentioned that any company can achieve competitive advantage through
acts of innovation.²

It seems Karl Strauss was not only being innovative with craft beer styles and
flavor profiles. Leading legacy brewery Karl Strauss created their first brewpub in 1989.
The brewpub gave the company a channel to sell craft beers directly to craft beer
drinkers.⁶

Innovation can also be achieved by approaching new market segments that
others have ignored. In an LA Times interview with Greg Koch and Steve Wagner, they
acknowledged that Stone produced bitter beer in 1997 and very few wanted to drink it.
Stone reported losses for first few quarters, but in 1998, Koch reminisced that, “March
1998 was our first profitable month.” Eventually, beer drinkers embraced Stone's strong,
bitter, full-bodied flavors. Stone produced over 325,000 barrels of beer in 2015.¹⁰
5 Current Analysis

Current Analysis of San Diego Craft beer industry involves evaluating the four attributes of Porter’s Diamond Model (Ref: Appendix B, Figure 5), which show different perspectives about San Diego’s regional competitiveness in the Craft Beer industry. These four attributes of Porter’s Diamond model are Factor Conditions, Related and Supporting Industry, Structure - Strategy - Rivalry, and Demand Conditions.²

5.1 Factor Conditions

Factor conditions identify human resources, physical resources, knowledge resources, capital resources and infrastructure that exist in San Diego and are available for the craft brewing industry. These include institutions that provide technical skills, and support brewer development as well as advanced analysis skills for troubleshooting process related flaws. Factor conditions also describe physical resources and current infrastructure that exists in San Diego, where natural recourses like water become a focal point in our arid region.

5.1.1 Physical Resources

5.1.1.1 Climate and Culture

San Diego’s climate and culture are basic factor conditions that allow for many social avenues of the craft beer industry to thrive. San Diego’s culture has many types of craft, where artisanal beer, coffee, wine, and food are commonly enjoyed. These delectable edibles are even more highlighted under the sun. San Diego’s 146 average sunny days and less than 12 inches of rain annually allow for outdoor events that are held almost every weekend of the year with little chance of being rained out.¹⁹
5.1.1.2 Water

San Diego has an abundance of physical resources available to meet production needs with one exception; water. Water is used not only as an ingredient; it is also required to clean the process equipment, and cleaning is a huge part of a brewer’s job. For this reason, water can be considered both a raw material and a physical resource.

Water restrictions are in effect across the California due to an ongoing drought in the southwest United States. In April of 2015, Governor Jerry Brown issued an executive order to cut water usage in the entire state to deal with the effects of water shortage. These restrictions were based on 2013 water usage by district.\textsuperscript{20} San Diego breweries have continued to focus their efforts on recycling waste water as well as being more conservative with their usage. Stone Brewing, for example, has a system that recycles 75,000 gallons of water a day, instead of sending it to wastewater caches.\textsuperscript{11} This cutback calls for more collaboration between the water utility companies and their downstream breweries.

5.1.2 Knowledge and Human Resources

San Diego County has many homebrew clubs, professional certificate brewing programs, and beer competitions. These help San Diego brewers hone their skills while molding the next generation of brewers. While these resources sharpen the already proclaimed brewers, they also serve to draw in more talent from other parts of the world. The participants, whether they’re locals or transients, now have a physical forum for beer discussion and experimentation.

5.1.2.1 Homebrew Clubs

Homebrew clubs are groups of like-minded beer-centric folks who enjoy expanding their knowledge of crafting homemade beer. Some notable local clubs are:
QUAFF, Mash Heads, Society of Barley Engineers, Barley Literates, and North County Homebrewers Association. These clubs often host monthly meetings along with regular events also focused on promoting the craft beer culture. Stone Brewing also hosts a rally for the American Homebrewing Association in San Diego annually, a national homebrewing club that is based in Colorado.

The success of home brew clubs can be seen in how many competitions members win nationally and how many “National Homebrew Club of the Year” awards are brought home from the National Homebrewer’s Conference. Their success can also be seen by how many of its members have gone forth to succeed on a professional stage. For example, QUAFF, which stands for Quality Ale and Fermentation Fraternity, was established in 1989 and has since budded over many breweries in San Diego in last 10 years. The following list is not all-inclusive, but all of the following San Diego breweries were founded by previous members of QUAFF:  

- 32 North Brewing Co.  
- AleSmith Brewing Company  
- Alpine Beer Company  
- Mission Brewery  
- Oceanside Ale Works  
- Rip Current Brewing  
- San Diego Brewing Company  
- Societe Brewing Company  
- Stumblefoot Brewing Company
5.1.2.2 Beer Competitions

One does not need to be in a homebrew club to compete. The number of competitions varies from year to year, but some annually held competitions are San Diego International Beer Competition and America’s Finest City Homebrew Competition. Stone Brewing Co. also hosts an annual homebrew competition with one special caveat; the winners get to brew their recipes in Stone’s brew house. This kind of competition not only encourages participants to showcase their creativity but also gives a channel to make and distribute at a larger scale level. A recent example was Chris Banker, who won the Stone competition with his Xocoveza Mocha Stout, which was available for a limited time on draft and in 22-ounce bottles. Kelsey McNair won Stone’s contest in 2010 for creating session IPA, and that was then distributed to 26 states in U.S. He ended up coming up with a business plan and opened North Park Beer Company after three years of hard work in 2016.47

5.1.2.3 Homebrew Shops

Since it was made federally legal again in 1979 by President Carter, home-brewing has been the foundation for innovative brewing techniques and recipes alike. Kitchens, garages and patios have been converted to laboratories, where real science has been applied to increase brewing quality in a home setting. More so than ever before, hobbyists and professionals play in their adult “sandboxes” creating delicious beer. In San Diego County, there are now 13 homebrewing supply shops (Appendix B, Figure 10) a substantial increase from having only two in 1992.21 These stores carry what a customer needs in terms of equipment and materials to attempt to create the beer they want to drink.
5.1.2.4 Formal Education

The University of California San Diego, through their Extended Studies program, offers an intensive certification program that covers a variety of subjects focused solely on brewing. The University has business oriented brewing classes as well as science and technology beer classes. It also has mandatory 120-hr internship program as part of certification program, which gives student hands on learning experience on how to brew beer under the guidance of an industry brew master or supervisor.22

San Diego State University recently developed The Professional Certificate in the Business of Craft Beer program, also through Extended Studies. It was kicked off in the fall of 2013, and it has since provided hands on training for beginners and craft beer professionals alike.23

5.1.2.5 San Diego Brewer’s Guild

Founded in 1997 by some of the key San Diego Craft Pioneers, the mission of the San Diego Brewer’s Guild is “to promote awareness and increase the visibility of fresh, locally brewed beer through education and participation in community events.”3 The board of directors is comprised of key members of San Diego’s craft breweries such as Aztec Brewing Company, Karl Strauss Brewing Company, Coronado Brewing Company, and Stone Brewing Company. Another key member of the board is a former Stone Senior Marketing Director and independent marketing consultant. The Guild’s leadership team includes representatives from other well-known SD craft breweries such as Benchmark Brewing Company, Mother Earth Brewing Company, Rip Current Brewing Company, and Pizza Port Brewing Company.3

The Guild succeeds at creating an open dialogue between local craft brewers and promoting the overall craft beer community. They also support the sharing of
knowledge amongst members including marketing techniques to help spread the “good word” to current and would be customers and maintaining the culture of craft.

Membership is open to almost anyone and its members are split into four categories. Categories of members include: Breweries, Allied, Affiliate, or Craft Coalition, where Allied is reserved for local pubs, bars, and restaurants that serve craft beer; “Affiliate” for supporting industries, and “Craft Coalition” for other craft beer enthusiasts. All of the members of The Guild work together to promote San Diego as the “Capital of Craft.”

5.2 Related and Supporting Industries

Competitive related and supporting industries of the San Diego craft brewing industry aid in cost saving and innovation. This effect is strengthened when these related or supporting industries are globally competitive. For San Diego craft brewers, raw materials, analytical methods, packaging and branding expertise, as well as process equipment manufacturers all enhance their industry competitiveness.

5.2.1 Raw Materials

Raw materials for brewing beer consist primarily of four ingredients: Malted Grains (Barley, Wheat), Hops, Yeast, and Water. Barley and other brewing grains are not sourced in San Diego due to climate restrictions. Hops are traditionally sourced outside of San Diego for the same reason. However, more hops growers have surfaced locally as of late. Of all raw materials used to make beer, yeast production has the biggest impact for San Diego craft brewers.

5.2.1.1 Hops

Hops are used in beer production to add flavor, aroma, and bitterness. Southern California is not ideal for growing hops due to its arid climate and temperature. As such,
hops in the U.S. are sourced mainly from Washington and Oregon. The Yakima Valley in
Washington has become synonymous with hops due to the Valley producing over 75%
of the nation’s hop supply.24

Less than ten years ago there were no hop farmers in San Diego. Now, there are
14 according to the San Diego Hop Growers Association.25 Having local hop growers
allows brewers access of fresh, whole hop flowers as opposed to only compressed
pellets. Whole cone hops can increase aroma and taste when used in the brewing
process. Tom Nickel, owner of Nickel Beer Co. in Julian said to NBC San Diego that “All
of the fresh hops are coming in and we finally have a hop industry in San Diego where
you can get freshly grown hops pretty much the same day they’re harvested and brew
with them right away.” 26

Another possible advantage of having hop growers local in San Diego is allowing
for wet process of beer, which has been gaining popularity in last decade. Wet-hopped
beer is made by brewing with whole, fresh, hop flowers. These beers are not cheap to
produce and therefore demand a higher price tag. This allows San Diego to create rare
labels and styles. Local wet-hopped beer using San Diego hops could easily be a rare
beer served at a special occasion much like a rare vintage of wine. This advantage is
another example of innovative minds creating opportunity where there was once none.26

5.2.1.2 Yeast

White Labs was founded in 1996 and has since become the world’s leader in
yeast production for fermented beverages. They produce various species and strains of
yeast useful for beers ranging from ales to lagers, Belgian-styles to German-styles, and
styles yet to come. White Labs has helped both small brewers who cannot afford proper
labs for yeast inventory management and for larger breweries that need a large yeast
slurry quickly. White Labs also provides analytical services for breweries who are in need of quality control.

5.2.2 Equipment

Beer, like any other manufactured good, relies heavily on the equipment that it is created with. Brewery equipment is comprised of mainly food grade, corrosion resistive stainless steel. Large vessels, piping, heat exchangers, and pumps are all part of a brewer’s arsenal of equipment used to concoct one of America’s favorite beverages. Beyond the manufacturing equipment, the industry relies on how this fine product is delivered to its customers.

5.2.2.1 Brew House and Cellaring Equipment Manufacturers

Premier Stainless Systems in Escondido is a global manufacturer of brewing equipment. Their customers include many San Diego breweries such as Ballast Point, Green Flash, Societe, Modern Times, Second Chance, and Iron Fist just to name a few. Their brew house and process expertise makes them a very useful partner to have when starting a new venture in town. Having a local systems company allows for collaboration and growth.

5.2.2.2 Packaging and Labeling Suppliers

“Where the peg…meets the keg!” is what Square Peg Packaging and Printing exclaims regarding their support of the brewing industry. Square peg is a veritable one stop shop for all things related to a brewery’s branding and supply chain needs. Square Peg helped Green Flash Brewing redefine their branding approach, where other packaging companies failed to. The company’s flexible assembly operation allowed them to provide pre-packed cases of four-pack carriers for Green Flash’s flagship brands. They also incorporated raised lettering and logos into Green Flash’s glass
bottles all aiding in the customer experience. From end-to-end Square Peg is very nimble and knowledgeable partner for San Diego craft brewers.\textsuperscript{30}

5.2.3 Craft Beer Distributors

For beer to travel from the brew house to a house, it needs some form of transportation. Unless a production brewery has the resources to deliver their own beer to retailers, they must rely on a local distributor. Fortunately for San Diego breweries, founders at Stone Brewing started Stone Distributing Company (Appendix B, Figure 4). Local breweries such as Port, AleSmith, Mother Earth, and Modern Times all have entrusted Stone Distribution to be their brand ambassadors and get their beers one step closer to their customers’ lips. This venture has quickly become successful now handling many national, and international craft brands, as well in addition to Stone distribution, there are close to 50 distributors who sells beers (Appendix B, Figure 8).\textsuperscript{31}

5.3 Firm Strategy and Rivalry

With its laid back, laissez faire attitude, San Diego culture can be perceived by outsiders and visitors as an easy-going paradise. This perception of relaxation may even extend to the reputation of local businesses, but this is not the case. As evidenced by the results of recent global and national beer competitions, craft beer in San Diego is very alert and competitive.

5.3.1 Strategy

San Diego craft brewers generally employ a differentiation focus, as opposed to a cost focused strategy, wherein firms try to out-compete base on price points. The County continues to be driven by uniqueness and innovation.
5.3.1.1 Inventory/Flagships

Every brewery in San Diego brews a similar line up of beers. Session beers and stouts, hefeweizens and blondes, ambers and porters are all offered by most breweries with few exceptions. However, one of these beers is always a west coast-style IPA. In some cases, there’s more than one. This selection is mandatory for survival in the San Diego market.

The nuances and varieties of all these styles being created locally are as innovative as ever. On the extreme end, some local breweries are carving out their own path with some groundbreaking ideas. Duck Foot Brewing is an all gluten free brewery to help alleviate the pains felt by those with celiac disease or those who enjoy a gluten free lifestyle. Hillcrest Brewing is the first all LGBTQ brewery in the world.

Stone Brewing started brewing Arrogant Bastard Ale in 1997. This American strong ale was big and pompous. The bottle itself told customers to stop drinking the beer that generations grew old drinking - “the fizzy yellow beer.” The label was meant to be polarizing and challenging to the consumer. The Sculpin IPA is one of the most popular beers brewed in San Diego. Todd Colburn, former Stone Sr. Marketing Director, theorizes that “Constellation bought Ballast Point primarily to leverage the popularity of the Sculpin brand nationally.”

5.3.1.2 Tasting Rooms

A brewery tasting room is where beer drinkers can try a brew before they buy a whole growler or six-pack. Even though this is a convenience for the consumer, the brewery sees this relationship with a different lens. Tap rooms are not only offered in San Diego (Ref. Appendix B, Figure 9) but they are a sign of the modern craft health. These rooms allow brewers to be creative, making small batch beers that customers might just be curious enough to taste. The limited products create demand with low
supply and exclusivity while it allows the company to test market new styles and flavors. It allows those same breweries to adopt new styles or take on collaborators with very low risk. From a producer’s view point, these tap rooms are workshops for collaboration and innovation.

The brewery does make better margins selling direct to customers without the distributor eating into their profits. However, the real value of the tasting room at a brewery is the relationships between the beer server and brewery patrons. During a casual interview at Amplified Ale Works, a patron claimed that he kept coming back for years because of the workers, the people who had been serving him for years.

The beer server, or “beertender,” serves as the liaison between the brewers and their drinkers. The beer tender has become, in many ways the face of the company or a brand ambassador. One of their key responsibilities, other than pouring beer, is conveying their company culture and educating their customer. Taken from an article in Sore Eye Suds, Shannon Rodgers of El Cajon’s Burning Beard Brewery had the following to say about the beer tender’s role: “Consumers wrought with options will go where the beer isn’t just good, but that they’re treated genuinely. 2016 will see the rise of the beertender. This isn’t just a stepping stone position anymore, it’s a weaponized one. Beer Education at every level will become increasingly pivotal to a business model and integral to its survival.”

5.3.1.3 Local to Regional Distribution

Getting beer to customers can be an arduous task for new breweries. As a small brewery looking for distribution channels, the issue is proof of concept. Most legitimate distributors look for an established sales record prior to taking on a new account. A new brewery with no real established history struggles with this. For this reason, many young
breweries in San Diego initially self-distribute their beer. Fortunately, this is legal in California.

For more established breweries already distributing locally and even regionally, growth can be challenging. Distribution companies can only serve specific markets based on distribution agreements and/or other factors. For this reason, an expanding brewery is left with the task of procuring more distributor relationships. The more territory a brewery wants to add to its customer base, the more distributors they must deal with.

5.3.1.4 Marketing

5.3.1.4.1 Social Media

Almost all the breweries in San Diego have a footprint on social media utilizing at least one of the following apps: Facebook, Instagram, Twitter, TapHunter, and Untapped. This marketing channel is a must for all business these days, as it provides a very cost effective, intelligent solution to targeting customers. (Ref. Appendix B, Table 1)

5.3.1.4.2 Beerfests

Hosting and or participating in beer festivals is a great way craft brewers reach out to beer geeks and new fans alike. Beer festivals bring everyone who enjoys beer and community together. They are a perfect venue to showcase their newly crafted and innovative beers. As an added benefit, customers only pay the entry fee, which allows them to try many samples at a reduced cost.

Beer festivals also serve to educate craft beer new-comers as to what differentiates craft beer from the mainstream drinks. With many brewery representatives in the local area, new craft beer consumers can learn much about craft beer and the industry. One of the best ways to learn is to compare side by side. Beer fests put many breweries together in one spot with easy-up tents and traveling bars. San Diego is home
to many beer festivals every year (Ref. Appendix B, Table 2) and San Diego Festival of Beer is the oldest, with 2016 marking its 22<sup>nd</sup> year.

But the biggest festival in San Diego is the San Diego International Beer Festival, which draws from more than 200 breweries around the world. Close to 10,000 people from 14 countries enjoy this event. It was founded in 2007, and 2016 etched its 10<sup>th</sup> annual event. This year, 1374 entries from 254 breweries from 28 US states and 14 countries participated.\(^36\)

5.3.1.4.3 National and World Competitions

The World Beer Cup is considered by many as “The Beer Olympics.” It is the global stage, where breweries of the world compete for glory. Breweries established as Weiheinstaphaner, the oldest operating brewery in existence, to the youngest baby of a brewery all enter their beers in hopes of winning global recognition and a nice trophy to boot.

Many San Diego breweries compete on this cherished stage. In 2016, Over 190 breweries from all over the world entered over 6,500 brews. Fewer than 300 medals were awarded, and San Diego breweries gloriously took home 14 of them in 2016.\(^37\) This was almost as much as the entire country of Germany, who only bested San Diego by a meager three awards. (Ref. Appendix B, Table 3)

Another widely popularized beer competition is held in another domestic craft beer giant’s home of Denver, Colorado. The Great American Beer Festival (GABF) is so popular that in the most recent year, over 60,000 people flocked to its gates. Over 1,700 breweries entered in 2016’s turnout with over 7,000 different beer entries. And San Diego was yet again victorious. 18 medals were awarded to San Diego’s breweries including a “Best Mid-Size Brewery” nod to Uncle Karl, Matt, and Chris at Karl Strauss
Brewing Company. San Diego impressively walked away with more awards than every state in the country with the exception of Colorado (38), Oregon (21), and its home state of California (68). Out of 96 categories, San Diego placed in nearly 19 percent. (Appendix B, Table 4) And lastly, San Diego’s oldest existing craft brewery gained some much overdue recognition. Karl Strauss won the GABF Mid-Size Brewing Company of the Year Award.38

5.3.2 Rivalry

In an interview with NBC San Diego Karl Strauss’s co-founder Chris Cramer said, “One of the reasons why San Diego has become such a mecca for craft beer is we started off with a group of individuals who were friends and collaborative rivals.”46 This is exactly what drives innovation and raises the bar in any industry. Tom Nickel of O’Brien’s Pub and Nickel Brewing would agree. Taken from a discussion with CSUSM’s FEMBA students, Tom said that in early years of San Diego Craft Beer industry, all brewers used to work together and collaborate. They did this to compete with craft beer from Northern California and the Pacific Northwest.9

There was and still is a pressure to innovate new styles of beer to compete. The fruit IPA is a great example of this. Ballast Point created a fruit version of their very-popular Sculpin IPA, Grapefruit Sculpin. This has forced many others to follow in their footsteps. Latitude 33 has answered Ballast Point with their Blood Orange IPA, a beer that is quickly laying siege to San Diego, as told by the notification from TapHunter which alerts the user every time this beer is placed on tap.

Sometimes rivalry means reinventing old and well-established brands anew. For example, Stone Brewing reinvented a couple of their long running recipes to be more aligned with consumer’s shifting preferences. So as not to lose the well-earned brand recognition, they simply stamped the new versions as Pale Ale 2.0.34
5.4 Demand Conditions

Demand conditions for craft beer in San Diego County can help breweries create a competitive advantage, when sophisticated San Diego buyers pressure breweries to innovate faster and to create more interesting beers than those of competitors. San Diego craft beer drinkers are amongst the most educated in the world. This can be seen from the variety of brands, events, and supporting industries that pervade the community. Just looking at the growing economic impact of local craft breweries, one can easily see that local demand is still very high. However, there are other factors to consider, such as consolidation and a saturated local supply.

5.4.1 “Feeling the Squeeze”

“Big beer” tends to have a negative connotation with craft beer consumers in San Diego. And the fact that big beer is not craft, however, has not stopped these corporations from seeping into the craft beer culture. In 2015 headlines were made when craft beer companies began selling ownership to national and international beer companies. As noted earlier, Ballast Point was the most significant of these craft beer buyouts.

Recently these buyouts have happened to breweries large and small. This eliminates the brewery as a “craft” brewery according to the guidelines of the Brewer’s Association. On one hand, big beer is heavily promoting the beer they acquired, on the other hand micro-breweries and local brewpubs have beer garnering a following due to their small, unique flavor. The term “hyper-localization” describes breweries and brewery clusters that are so small that on their own have very little effect on the local revenue, however combined they make up a large portion of the overall revenue. This puts pressure on medium sized breweries. Recently, Stone had a substantial layoff and
referenced this trend in a press release. Customers are gravitating towards the personal, local, non-national brands or buying the big well distributed craft beers.

The San Diego market is definitely a trend-setting one, as well. This fact alone can help battle “hyper-localization.” Beers like the original “Blind Pig IPA”, Ballast Point’s “Grapefruit Sculpin”, Stone’s “Stone IPA”, AleSmith’s “Speedway Stout”, and Mother Earth’s “Cali Creamin” have all been at the forefront of American Craft Beer trends. These locally developed and locally vetted styles have spread across the country with vigor. Although these all come from breweries that are “feeling the squeeze”, they have created demand in San Diego and nationally. A second-hand effect of this is the almost feverish curiosity for what’s coming next.
6 Benchmark Study

To support the objective of increasing notoriety for San Diego regarding craft beer and its supporting industries, a four-city benchmarking study was conducted by fellow CSUSM MBA students. The cities were analyzed in terms of their history, local beer legislation, economic impact, location, and city marketing efforts. The following cities were studied: Denver, Portland, Tampa, and Ashville.

6.1 Denver, Colorado

The “Mile High City” has approximately 70 breweries, which directly contribute to a $369M impact to Colorado’s economy. Key data points from this study are listed below:

- Hosts this country’s most popular beer festival, the Great American Beer Festival (GABF)
- Very low beer excise tax of $0.08 per gallon
- Maintains a strong craft beer presence at all three major sporting arenas

6.2 Portland, Oregon

The “City of Roses” boasts an impressive 105 breweries, which contribute to a total craft beer economic impact of $1.8B. Key data points from this study are listed below:

- The state of Oregon produces about 15% of U.S. hops
- Portland has the whole month of July dedicated to craft beer
- Has many movie theaters that allow beer consumption on premise
- Walk score of 100
6.3 **Tampa, Florida**

The Florida beer market is booming and this includes one of the state’s largest western cities, Tampa. Key data points from this study are listed below:

- Created a very successful marketing campaign with a net ROI of 64x
- New to the game without surrounding craft markets

6.4 **Ashville, North Carolina**

Ashville is a relatively late bloomer in the craft beer craze. Because of this, Ashville only boasts a modest 27 breweries. But with the recent expansion of Sierra Nevada’s brewing operations into this city, many more will follow. Key data points gleaned from this study are listed below:

- Most breweries per capita at 2.2
- Integrative approach marrying beer to many other activities
- Recently overturned legislation that prohibited the sale of beer with greater than 6% ABV

6.5 **Benchmark Recommendations**

Based on the city benchmarking along with SWOT and 5-Forces Analyses, the following recommendations were made to organizations in San Diego with the objective of increasing San Diego’s position on the top beer destinations in the U.S.

1. Develop a stronger relationship with the local tourism authority
2. Create an online marketing campaign with videos highlighting the breweries
3. Advertise how much local breweries give back to the community
4. Host a craft beer related convention/conference
5. Educate local universities about the potential of a degree in a craft beer related field
6. Encourage Qualcomm stadium and the Valley View Sports Arena to start serving craft beer, use Petco Park’s success as an example
7 Conclusion

In business, an entrant must continually innovate to survive; the Craft Brewing Industry is no different. This lesson can be seen in many of the craft breweries in San Diego. The county began innovating by resurrecting and then reinventing rejected old-world recipes, energizing creation. San Diego continues to do so by setting beer style trends that influence the rest of the country. Innovation can be witnessed many other ways, such as barrel aging, hybrid beer styles, nationally recognized supporting companies, new beer-centric events, and even strategic collaborations.

San Diego has a relatively large selection of resources which is needed to sustain and grow the local craft market. The rate at which new breweries are entering the local market adds to this demand and stress these resources, but this uneven growth is shown to be stabilizing. The recent emergence of hop farms in the area has created a small but promising advantage for the local brewers. Diversity in beer styles and ingredients spread out the demand.

All of these resources are needed to make sure this industry doesn’t plateau or wither. What the craft community needs now is support from the marketing firms such as The San Diego Tourism Authority. Support will allow the craft beer community to grow which will allow the supporting industries to expand creating a cycle of sustainable growth.

The industry hasn’t stopped expanding or changing since 1989 and now it needs more local support for its growth to continue. The power of national and international acclaim coupled with a proud history and capacity from supporting, innovative industries will allow this production to continue. This summation will allow San Diego to remain the Capital of Craft.
8 Recommendations

8.1 Interactive Mapping

The distance between one tourist spot to another can be significant especially if someone is short on time or needs to rely on public transportation. To maximize the potential of a better experience, San Diego tourism websites like the San Diego Brewers Guild and San Diego Tourism Authority can offer a guide on their website. For example, if visitors want to visit some of the more southern beaches, then cluster craft brewers and brewpubs in that region together, recommend routes, and show updated venue offerings. This map would be interactive and the tourism site could sell space to non-beer entities to make a little more money. These neighborhoods could have names like “Beera Mesa”, “The Hop Highway”, and “Imbeerial Beaches”.

Another advantage will be for possible new entrants to craft beer industry in San Diego. Using this information, they will be able to figure out where to open a brewery in San Diego County in order to have a realistic advantage. This tool can be used to have a larger consumer base to draw from. For example, Old Town is a tourist spot due to its history, but the number of breweries is limited.

San Diego has dense regions of breweries inside the county, some that are away from the popular coastline. For this reason, the report recommends adding an approachable interactive map to the main tourism page. By doing this this strategy will take away the overwhelming feeling of planning brewery visiting adventures across the county. This will cut down on the amount of transportation needed and would allow for stronger collaboration between beer locales.
8.2 Drink Like a Local

San Diego has large sprawling urban and suburban areas as opposed to the wide rural areas of Napa Valley. Instead, the recommendation will be to distinguish San Diego as its own community that has many tucked away breweries and small neighborhood brewpubs. London is well known for its pub scene – most everyone there has their own home pub that they frequent habitually. Although you can’t walk to many breweries in a row, you can visit the local brewery next to the Illumina building and feel like a local. Breweries that pop up in industrial parks in within financial districts, dotted throughout the county would not be possible without a heavily supportive infrastructure and passionate professionals. San Diego brewers have never been shy about doing what they want and their customers are not bashful about drinking the product.

8.3 Rebrand San Diego International Beer Festival

Currently, the San Diego International Beer Festival takes place during the San Diego County Festival at the Del Mar Fairgrounds. Many do not even know about this event unless they are already attending the fair. To strengthen the event’s presence in both the local community and abroad, efforts should be placed to divorce the event from the San Diego County Fair and hold it independently. This will renew focus on this event as San Diego’s nationally recognized beer festival on par with Denver’s GABF.

8.4 Work with Universities to Develop New Beer Specific Curricula

With the quickly growing demand for skilled brewers and experienced beer experts, talent pools are becoming thin. Recognition of this growing job market from our universities could foster the talent necessary to support the growth. More university level brewery-centric continuing education programs should be developed with focus not only on brewing skills but on beer business specific topics as well. Some examples could be
8.5 Track Beer Metrics for San Diego “Capital of Craft”

If the city truly desires a stronger Craft Beer Destination reputation, then it must invent ways to measure the success or failure of this effort. Key Performance Indicators (KPIs) or industry metrics should be established and tracked by the San Diego Brewer’s Guild to understand where the city measurably sits with respect to other craft beer cities like Denver and Portland. Some KPIs could be ones already loosely tracked such as ratio of Craft Beer Drinkers to Total Beer Drinkers and Average Brewery Wages along with some newly created metrics such as Industry Participation, where a tally can be made of how many SD brewers have published industry papers, seats on the Brewer’s Association Board, and even legislative support. Some of this data could be gathered quickly and easily using social media. The rest of the data can be amassed by a few people, paid by either breweries or the San Diego Tourism Authority. This is an opportunity to further connect and proclaim San Diego nationally.

8.6 Create a San Diego Craft Beer Loyalty Program

There are 130 breweries and rising. Finding time to visit them all is a challenge. But the more committed one is to this task, the more love is spread about this city’s treasures. Providing incentive to locals and visitors to visit a more breweries while in town could lead to more interest and a better feel for how dynamic this beer city is.

A Beer Loyalty program should be created to provide this incentive. The program could be hosted on San Diego’s tourism websites and have monthly prizes donated by breweries to high achievers. Patrons of the program can track their stops via a mobile app and unlock achievements based on factors like, Total number of breweries visited in
one month, on one street, in one neighborhood, etc. This could also open up yet another social media tool for breweries to use for their marketing efforts.
9 Further Research

After evaluating the past and present of this thriving industry and making recommendations for the future, there are still many topics or items that can be explored with more detail. They were not investigated due to time and resource constraints.

Social media impacts all industries today and craft beer could be highly reliant on its marketing power. San Diego consumers are frequent users of Social Media. More research should be done to uncover how San Diego usage relates to other major beer cities.

The history of San Diego is outstanding. Collaboration was a main theme that allowed the industry to move forward. These key collaborations are strong enough to be recognized. A “family tree” or genealogy type could possibly be constructed showing how brewers move from one brewery to another or how breweries influence others.

Craft beer can possibly fight “fire with fire” by making pacts or official collaborations with each other. They could rise together by sharing resources, and purchasing raw materials together, especially if hops or water turn out to be a bottleneck. A keen projection of the future of Brewery Ignitor could prove useful.

Marijuana legalization has brought up questions about the worth of real estate in the area. Since the legalization is impending, a live study of warehouse real estate allocation, zoning, and prices and how these affect the breweries and taprooms in the same space could help strengthen the craft future.
Appendix A: References


**Appendix B: Figures and Tables**

Table 1: San Diego Craft Brewery Social Media Activity

<table>
<thead>
<tr>
<th>Brewery</th>
<th>Facebook Likes</th>
<th>Instagram Followers</th>
<th>Twitter Followers</th>
<th>TapHunter Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone</td>
<td>310,425</td>
<td>271,000</td>
<td>251,000</td>
<td>Yes</td>
</tr>
<tr>
<td>Societe</td>
<td>15,274</td>
<td>33,700</td>
<td>16,400</td>
<td>Yes</td>
</tr>
<tr>
<td>Green Flash</td>
<td>100,337</td>
<td>96,800</td>
<td>84,000</td>
<td>Yes</td>
</tr>
<tr>
<td>Second Chance</td>
<td>3,273</td>
<td>2,396</td>
<td>359</td>
<td>Yes</td>
</tr>
<tr>
<td>Amplified</td>
<td>3,896</td>
<td>4,134</td>
<td>2,403</td>
<td>Yes</td>
</tr>
<tr>
<td>Duckfoot</td>
<td>4,137</td>
<td>5,036</td>
<td>1,419</td>
<td>Yes</td>
</tr>
<tr>
<td>Belching Beaver</td>
<td>16,287</td>
<td>24,200</td>
<td>6,894</td>
<td>Yes</td>
</tr>
<tr>
<td>Pizza Port</td>
<td>6,321</td>
<td>44,200</td>
<td>19,000</td>
<td>Yes</td>
</tr>
<tr>
<td>Karl Strauss</td>
<td>51,513</td>
<td>18,200</td>
<td>21,500</td>
<td>Yes</td>
</tr>
<tr>
<td>White Labs</td>
<td>15,004</td>
<td>16,008</td>
<td>20,800</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*These numbers were gathered from each social media source on November 18th, 2016.

Table 2: Popular San Diego Beer Events

<table>
<thead>
<tr>
<th>Festival Name</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Diego Brew Fest</td>
<td>January</td>
</tr>
<tr>
<td>Mission Valley Craft Beer Festival</td>
<td>April</td>
</tr>
<tr>
<td>San Diego International Beer Festival</td>
<td>June</td>
</tr>
<tr>
<td>San Diego Beer &amp; Music Festival</td>
<td>July</td>
</tr>
<tr>
<td>Stone’s Anniversary Festival</td>
<td>August</td>
</tr>
<tr>
<td>San Diego Festival of Beer</td>
<td>September</td>
</tr>
<tr>
<td>San Diego Brewers Guild Fest</td>
<td>November</td>
</tr>
<tr>
<td>San Diego Beer week</td>
<td>November</td>
</tr>
<tr>
<td>Del Mar Craft Beer &amp; Cider Fest</td>
<td>November</td>
</tr>
</tbody>
</table>
Table 1: San Diego County World Beer Cup Awards

<table>
<thead>
<tr>
<th>GOLD MEDALS (5 total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whammy Bar Wheat, Wheat Beer (Amplified Ale Works)</td>
</tr>
<tr>
<td>Rye Dawn, Rye Beer (Breakwater Brewing)</td>
</tr>
<tr>
<td>Bourbon Barrel Aged Jinx Remover, Wood-and-Barrel-Aged Strong Beer (Fall Ashes from the Grave, Smoked Beer (Monkey Paw Brewing))</td>
</tr>
<tr>
<td>Claritas, German-style Kölsch (Mike Hess Brewing)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SILVER MEDALS (4 total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>End of Summer Beer, Extra Special Bitter (Mother Earth Brew Co.)</td>
</tr>
<tr>
<td>Wee Heavy, Scotch Ale (AleSmith Brewing)</td>
</tr>
<tr>
<td>Piper Down, Irish-Style Red (Ballast Point Brewing)</td>
</tr>
<tr>
<td>December Nights, Imperial Red Ale (Thorn Street Brewery)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BRONZE MEDALS (5 total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>That Guava Beer, Fruit Beer (Legacy Brewing)</td>
</tr>
<tr>
<td>Pumpkin Down, Pumpkin Beer (Ballast Point Brewing)</td>
</tr>
<tr>
<td>Bramble on Rose, Wood-and-Barrel-Aged Sour Beer (Toolbox Brewing Co.)</td>
</tr>
<tr>
<td>Brewers Special Brown Ale, English-Style Brown Ale (New English Brewing)</td>
</tr>
<tr>
<td>Corvo Negro, British-Style Imperial Stout (NOVO Brazil Brewing Co.)</td>
</tr>
</tbody>
</table>

Table 4: San Diego County Great American Beer Fest Awards

<table>
<thead>
<tr>
<th>GOLD MEDALS (8 total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AleSmith Old Numbskull, Barley Wine-Style Ale (AleSmith Brewing Co.)</td>
</tr>
<tr>
<td>Queen of Tarts, American-Sour Ale (Karl Strauss Brewing Co.)</td>
</tr>
<tr>
<td>Windansea Wheat, South German-Style Hefeweizen (Karl Strauss Brewing Co.)</td>
</tr>
<tr>
<td>Tabula Rasa Toasted Porter, Robust Porter (Second Chance Beer Co.)</td>
</tr>
<tr>
<td>Breakline Bock, Bock (Rip Current Brewery)</td>
</tr>
<tr>
<td>Sweet Ride, Bohemian-Style Pilsner (Bagby Beer Co.)</td>
</tr>
<tr>
<td>Ole Prospector Red Ale, American-Style Amber/Red Ale (BNS Brewing &amp; Distilling)</td>
</tr>
<tr>
<td>Brown, American-Style Brown Ale (Culture Brewing Co.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SILVER MEDALS (3 total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Contender IPA with Fresh Chilis, Chili Beer (Duck Foot Brewing Co.)</td>
</tr>
<tr>
<td>Oatmeal Stout, Session Beer (Benchmark Brewing Co.)</td>
</tr>
<tr>
<td>Gatling Gun Imperial Stout, Imperial Stout (BNS Brewing &amp; Distilling Co.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BRONZE MEDALS (7 total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Volcanist, American-Style Stout (Societe Brewing Co.)</td>
</tr>
<tr>
<td>Roes Red, Belgian-Style Lambic (Pure Project)</td>
</tr>
<tr>
<td>Mosaic Session IPA, Session IPA (Karl Strauss Brewing Co.)</td>
</tr>
<tr>
<td>Zumbar Chocolate Coffee Imperial Stout, Coffee Beer (New English Brewing Co.)</td>
</tr>
<tr>
<td>HFS, American-Style Strong Pale Ale (Alpine Beer Co.)</td>
</tr>
<tr>
<td>Liquid AC, English-Style Summer Ale (Karl Strauss Brewing Co.)</td>
</tr>
<tr>
<td>Mother Earth ESB, Extra Special Bitter (Mother Earth Brew Co.)</td>
</tr>
</tbody>
</table>
Figure 1: Map of San Diego Breweries
Figure 2: San Diego Craft Pubs and Restaurants
Figure 3: San Diego Brewing Industry’s Timeline

*Created based on data from interviews with Todd Colburn, Matt Rattner, Arlan Amsten, and Tom Nickel

Figure 4: Stone Distribution Co. Regional Coverage

*Data for regional coverage is from Stone Distribution Co.*
Figure 5: Porter's Diamond for San Diego Craft Beer

Context for Firm Rivalry and Strategy

Factor Conditions
- Desirable quality of life
- Knowledge economy base
- Innovative culture
- Home brewing culture
- Early rise of many creative and talented breweries
- Water security and pricing
- Agricultural inputs may become scarce in drought

Demand Conditions
- Tectonic shift in the beer industry
- Strong local/ regional demand
- SD Brand is strong nationally
- Regional demand is fixed and may become saturated

Related and Supporting Industries
- One of the biggest yeast producers
- Strong ties to the tourism industry
- No local agricultural presence (barley, hop)
Figure 6: San Diego County Population and Income

- 2016 Total Population: 3,266,328
- 2016 Average Household Income: $91,373
- 2016 Per Capita Income: $32,454
- 2016 Male Population (%): 50.24%
- 2016 Female Population (%): 49.76%
Figure 7: San Diego County Alcohol Spending

- **County: San Diego County, CA**
- 2016 Total Population: 3,266,328
- Beer & Ale: $198,639,486
- Beer & Ale Away from Home: $117,918,627
- Beer at Full Service Restaurants: $99,626,848

Figure 8: Locations of Beer Distributors in San Diego
Figure 9: Locations of Beer Tasting Rooms in San Diego
Figure 10: Locations of Homebrewer Supplies Stores
Figure 11: Average Beer Spending of San Diego County

- 2016 Total Population: 3,266,328
- Beer & Ale (Avg): $175.88
- Beer & Ale Away from Home (Avg): $104.41
- Beer at Full Service Restaurants (Avg): $88.21