



Behind the Taps - A case study of Thornbridge brewery

This case is written by Yazhou He, Doctoral Researcher from Warwick Business School in June 2015.

It is an unusual sunny day in the middle of a British summer. Sunlight breaks in well before the noisy birds and the smell of the first bake downstairs wake me up. Gathering all the essentials, I pick up the Good Beer Guide and leave to catch the train to a brewery in the heart of the Peak District, Thornbridge's Riverside Brewery.

Beer or ale is not an unfamiliar term. Every day, in every pub, the tap never seems to stop running. Beer, perhaps also as old as human civilization, came into existence when, in my imagination, a rich farmer curiously first tasted the sweet yet sensational liquid in the clay jar containing the old grains long forgotten at the corner of his storage. "God made yeast, as well as dough, and loves fermentation just as dearly as he loves vegetation"¹. Indeed, in almost every ancient civilization, beer enjoys an old and important position. History is full of poets, painters, musicians as well as drinkers.

Beer is perhaps one of the oldest and one of the most long-lasting human inventions. We still follow the old rules, with just malt, hops, yeast and temperature. As I read through the Good Beer Guide, modern beers have been divided into different types and the variety stuns me. A photocopy of the beer types is attached in Appendix 1.

Whenever I read the beer guide, there is always something new as if it were the first time. I came to England some time ago and purchased an early version of the beer guide in a local beer festival hosted by an organization called CAMRA (CAMpaign for Real Ale). I didn't realize that these small festivals happen almost every weekend across the country and I would appear in so many of them in later years, yet each time I never ran out of selections. A small booklet is offered in every festival with vivid and detailed "tasting notes" of each beer. I never imagined that I would stand in front of a supermarket beer shelf and being able to comment on the different beer tastes. It would also sound so unrealistic that I could even brew my own beer at home. But all of these happened. Britain has an ale culture and it is the passion for ales, the efforts from CAMRA and the emerging of hundreds of small breweries that pushes the old tradition forward. The latest news came in March that after ten years of campaigns, the amendment to the Small Business, Enterprise and Employment Bill became an Act of Parliament. The amendment allows "tied"²pubs to buy beers in the open market with a fair price instead of accepting the high price from the company that owns the pub.

¹ By Ralph Waldo Emerson.

² In the UK a tied house is a public house that is required to buy at least some of its beer from a particular brewery or pub company. This is in contrast to a free house, which is able to choose the beers it stocks freely. https://en.wikipedia.org/wiki/Tied_house

It is already mid-day when I arrive at the cute old town of Bakewell, famous for its puddings and tarts. Thornbridge's Riverside Brewery is located just outside Bakewell next to the river Wye. The office area, is attached to the brewery, which has an area similar to that of a standard warehouse, with a shop selling different souvenirs and beers. Above the big glass window is a giant logo. Next to the main building is the storage space of casks, kegs and bottled beers ready to be sent out.

I go into the main entrance and pick up a few leaflets. Thornbridge brewery was established in 2005, exact 10 years ago, by current CEO Jim Harrison and COO Simon Webster. A wall of beer badges and awards have already silently told the story of their success. I pick up a leaflet, and on the front, it says 'never ordinary'. I count roughly 34 beers, each with a unique description, including some famous name, "Halcyon", the world's best harvest ale in 2009, "Raven", the world's best black IPA in 2012, "Wild Raven", the world's best black IPA in 2013, "Tzara", the world's best Kolsch in 2014, and many more. The leaflet is attached in Appendix 2.

Jim shows me around the state-of-art new riverside brewery of Thornbridge they built six years ago. The old Thornbridge Hall has too small a capacity, but a lot of new beers are still created there. To my surprise, at the entrance of the brewery hall, on the first floor, there is a small lab



The modern lab and control room



The front of the brewery

with glasses, devices, bottles and some others, which I cannot name but look familiar as in science documentaries. Jim proudly tells me that such a lab is very rarely seen in other small breweries. Next to the lab is the control centre, where one brewer is monitoring the computer screens closely. Passing through a glass door, I am standing on a small platform with four giant tanks surrounding me. Two of them are doing the first stage of brewing: *mashing*, turning crushed malted barley (grist) into porridge (mash) with hot water (liquor), which extracts sugar to be digested by yeast to produce alcohol. There is a small window which I can see through when pressing a button to open the shield inside the glass. A brewer is also checking and monitoring the tanks. Another tank is the boiling tank, boiling the mash in hot water with hops. The so-called wort, after 90 minutes of boiling, will be sterilized and more digestible by the yeast. Adding the selected hops into the wort in different stages during the



Mashing

boiling, the brewer will set the unique “profile” of the beer. The use of malt influences the base taste of the beer and its colour. Choosing the right hops combination, the timing and amount of hops added is a “dark magic”.



Front: processing hops. Back: the fermentation tanks



Dry hops to be processed



Left: processing hops. Right: the boiler (copper)

The last tank processes the dry hops before they are used in the boiling, giving them the magic touch to extract and balance the aroma and bitterness out of this ancient plant. The tank is constantly in use and new hops are added to the old compound to keep the flavour rich. Many small breweries usually only purchase processed hop pellets to save costs and it is a convenient way, but Jim and his brewing team believe that by processing dry hops themselves, the exact flavor can be controlled in each brew, making Thornbridge’s products consistent in flavour and taste. Hops are magic, their aroma in the brewing hall makes the atmosphere refreshing and cheerful.



The device to remove impurities before bottling



Current bottling line



Bottling for kegs and casks



Barrel aged ale

At this height, I can also see the large two story-tall fermentation tanks lined up one next to the other. Cooled wort added with yeast is kept in these tall tanks. Fermentation takes weeks and is dependent on the beer type. Temperature is key to keeping the yeast happy. It is in these tanks that the ancient formula starts working to produce the beers. At the back of the fermentation tanks, there is the current bottling line. My favourite beer, Jaipur, is being bottled after a process to remove the hops and other impurities. In Thornbridge, beers are not pasteurized, just as the practice used to be hundreds of years ago. Brewers believe non-pasteurized beers have the most original flavour. Jim told me that, very soon, they would replace the bottling line with a more efficient and higher-capacity one to meet their ever-increasing demand. Next to the bottling line is the filling machine for kegs and casks. At the back storage room, various hops are kept in their favourite environment, waiting to be re-discovered. Apart from the traditional kegs and casks, Jim also introduced me to a new keg-shaped plastic container with a soft bag inside. When the soft bag is filled with a beer, it expands and will fill the space in the plastic container. After being sealed, the container, once squeezed, can pour out beer easily without letting any gas into the bag, contaminating and de-flavouring the beer inside. This new container is mainly used for exporting Thornbridge's beer abroad.



The new container

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Amazed by the modern brewery facilities and wide beer range, I ask Jim and Simon about their secrets to success. The story all began when the two saw an increase in craft beer consumption while the total beer consumption was continuously declining. They commented that, in the craft beer world, consumers always want something new and tasty but the supply was sparse and inconsistent, with very poor marketing. Just by pursuing the single purpose of producing new craft beers but with a traditional root, Jim and Simon, neither of whom had any experience in brewing, started off hiring two young men with knowledge and passion yet new in the brewing world to produce the beers that would amaze them and amaze the industry. Imported hops and newly developed varieties are always experimented with in Thornbridge. As Simon tells me, beer is an old product; any modern twist needs to find its root, yet just because of its history, beers have many roots to be re-discovered as well. The success of Tzara, for example, perfectly fits his philosophy. It is essentially a Kölsch, but Kölsch is typically brewed in Cologne, Germany with the protected geographical indication (PGI): it can only be called Kölsch if brewed within a 50km zone around Cologne. Tzara is developed and brewed in Thornbridge in England so they gave it a name Köln following the PGI rule. However, when they entered the competition with other Kölsch beers, their Tzara turned out to be the world winner, beating all the original Cologne Kölsch.

I ask them how many beer varieties Thornbridge has developed and I don't expect it to be a difficult question. "As many as over 300" in the last ten years is the rough estimate after a while of thinking. Beers are the artwork of both nature and human. In Thornbridge, beers are invented and developed not only to meet consumers' needs for different varieties of craft beer but also, more importantly, to lead and help consumers to recognize and rediscover what the "should-be"s are. With now a more experienced and diversified brewing team, Thornbridge's beers are widely found in pubs, supermarkets such as Waitrose and Marks and Spencer, free houses, specialized shops and online shops across the UK. 25% of sales come from abroad from agencies with experience and licenses in their home countries. Thornbridge also hosts a series of events throughout the year, including brewery tours, a summer bike challenge, beer vans, Peak District camping, homebrew competitions, and so on. As Jim says, these are the activities that they enjoy and they would like to share with others, together with the beers they produce.

With the pop music in the brewery hall fading away from far, I leave Bakewell with a few of the latest beers from Thornbridge in my bag. I will always remember what Simon says, "what we are, we are brewers."

Case questions

(1) Use the material as well as web resources to identify briefly the main customers and distribution channels of beers. Name one or two of your favourite real ales and discuss.

(2) Use the material as well as web resources to identify the macro factors facing the brewery industry in Britain and categorize them into four groups: political, economic, social and technological factors. Bullet-point out each factor in each category (for general classroom use, the students can be divided into groups and each group focuses on one factor only). Choose one group and discuss in detail the favourable and unfavourable factors and try to come up with a strategy to tackle the unfavourable factors.

(3) Use the material and online resources to identify the 5C elements of Thornbridge brewery apart from the climate (done in PEST) aspect: company, consumer, competitor and collaborator.

(4) Summarize the key strategies of Thornbridge and evaluate them. What do you think contributes to their rapid growth in the last ten years? Do you think they can sustain the growth, if so, why? If not, please explain and make suggestions.

(5) According to your understanding of Thornbridge, can you design a slogan for them if their products are to enter your home country? Please translate it into English and explain.

(6) (For executive education only) Choose one of the angles and discuss:

a. Suppose you are the head of a large international beer producer and you hear the stories of Thornbridge. What would you do next?

b. Suppose you are the head of Thornbridge and a large international beer producer comes to you, seeking cooperation and asking for takeover. What would you do?