



THATCHERS CIDER EXECUTING LONG-TERM ORIENTATION

DECEMBER 2018



THATCHERS CIDER EXECUTING LONG-TERM ORIENTATION



Prepared by:

Ajay Bhalla

Professor of Innovation and Family Business, Cass Business School

Joseph Lampel

Eddie Davis Chair Professor of Innovation, Alliance Manchester Business School

Aneesh Banerjee

Assistant Professor of Management, Cass Business School

DECEMBER 2018

Introduction

Having surveyed the investment programme that had thrust Thatchers Cider into being one of the most technologically advanced cider makers in England by end of 2018, Martin Thatcher walked into the company head office in Sandford, in north Somerset, where Martin's great-grandfather had laid the foundations of Thatchers in 1904. Martin glanced at his calendar for the day. A lunch board meeting to discuss the challenges facing the cider industry and the plan he and his executive team had prepared to move Thatchers into a new phase of growth. Later during the evening, he was scheduled to travel to London to attend the family business awards night, where Thatchers had won two awards in 2017.

In 2008, the family had set themselves the ambitious target of increasing their annual output from 10 million to 100 million litres of cider per year by 2021. In some respects, this was an emotional target date, tied to issues of legacy, as it coincided with the year that Martin's eldest child, Eleanor, would turn 21. Martin smiled as he remembered the response from his colleagues. *"Everybody thought I was completely barking mad..."* In the middle of a recession they had bucked conventional wisdom and invested in growth. They worked out a plan of what they needed – how much money, how many sales, how many people, how many apples – and then just got started. Martin's attitude was, *"Let's go and do it. If we get it wrong and the sales don't grow, well never mind we will have got better sales people, we will have at least moved forward, which we did and we grew."* So the next year they did the same thing again, and again the year after that...

By end of 2017, Thatchers was close to reaching the target it had set for 2021, and Martin had started planning again, this time with an eye on 2030. *"What I'm keen to do now is to map out*

what does the next 5, 10, 15, 20 years look like and then go back and do exactly what we did and say, 'right, if we want to go from there to there, what do we need to do?' and then damn well do it."

Once again, though, he was making plans in troubled times. Firstly, the cider industry was facing significant challenges and an uncertain future. Increased orchard acreage, improvements in farm productivity, and drinkers switching to sweeter, imported fruit ciders had led to a slowdown in UK cider sales. There was also increasing competition from a small number of multinational companies and the need to find new markets. Secondly, the issue of Brexit was looming over the economy. Martin's attitude, however, differed markedly from the conventional wisdom to wait and see. *"...this whole Brexit thing, everybody goes, 'oh my god it's Brexit', won't invest, won't make any decisions. Well how stupid is that? Doing nothing is the worst possible thing you could do. Make an educated guess, get on with it. If it's wrong, it's wrong. But if you do nothing you are bound to be wrong."*

Thatchers had been successful before and Martin was confident they would emerge stronger from both set of challenges. The investments Thatchers was making reflected this confidence. Having started work on Thatchers' production lines, Martin was aware of how tough a manual day's work was and he had set out to automate to a 'no hands' process, which involved significant investment.

The cider industry

Overview

Cider has been made in the UK for nearly a thousand years, with the first records dating to the time of the Norman Conquest in 1066. Originally a locally sourced and locally consumed product, cider was widely regarded for its health-giving properties and often formed part-payment for farmworkers and labourers. Even today, the tradition of wassailing is still carried out in mid-winter in orchards across

Somerset; revellers sing, make noise to scare away evil spirits, and toast the apple trees with cider to ensure a successful harvest in the coming season.

In 2018, the UK has approximately 500 cider makers, 80% of which are small or craft-based farmhouse manufacturers producing less than 70 hectolitres/12,000 pints a year. These smaller producers had traditionally been supported by a UK government exemption from excise duty on scrumpy and perry, a move the UK Treasury said, “helped create a diverse and vibrant market, improving consumer choice and creating jobs”. However, EU regulators were deliberating on imposing a levy all alcoholic drinks.

At the other end of the scale, the market had become dominated by a small number of multinational corporations (MNCs) such as Heineken and AB InBev, big brewers seeking to offset the decline in sales of their traditional brands (beer and lager). These MNCs have steadily bought up successful, medium-sized companies. The most recent independent producer to be acquired was Aspalls, founded in Suffolk in 1728, which was bought in early 2018 by US beer giant Molson Coors. The MNCs presented serious competition for the likes of Thatchers Cider, as they had significant marketing budgets and established relationships with large retailers.

The interest of the bigger brewers in the UK market is unsurprising. According to the National Association of Cider Makers (NACM), the UK produced 130m gallons of cider in 2015 and accounted for 39% of the world's cider market in 2016, with annual sales of £3.2bn. Nearly two-thirds of sales were in the off-trade sector, with the remainder from licensed premises. The industry grew steadily in the decade to 2013, stimulated by the successful repositioning of cider as a trendy ‘over ice’ drink by Irish giant Magners. Since 2013, however, sales have fallen by volume and are predicted to continue to fall until 2021, causing many of the big brewers to

retrench. There was some evidence that this slump has had less impact on premium production - the area in which Thatchers operated.

In this extremely competitive market place, brands are important, but so too is innovation. Companies vie to keep customers interested by offering new tastes, limited editions, and targeting premium products at a more mature demographic. Internationally the cider market is focused on the UK, with UK exports going mainly to North America and Europe. In response to the downturns in these markets the multi-nationals, spearheaded by Heineken, have turned their attention to central and eastern European nations. Traditionally, these regions have not been consumers of cider, but significant targeting by Heineken and its rivals, notably AB InBev, Carlsberg and Molson Coors, is opening up a new market in what is forecast to be the world's fastest growing region (in terms of volume sales) up to 2020.

Major MNC

In the wake of the upswing in cider sales attributed to the Magners craze, many of the big brewers entered the market and launched their own ciders, e.g. AB InBev's Stella Artois Cidre (2011); Somersby (2012) from Carlsberg; and Carling British Cider (2013) from Molson Coors. Most MNCs, other than Heineken and C&C Group were now retrenching in the face of significant falls in their apple portfolio.

Heineken: The world's leading cider maker, Heineken accounts for about one-fifth of global sales by volume, with a portfolio of global and local cider brands that sell in around 50 markets. Its flagship cider is Strongbow, the world's top cider brand, which it acquired when it bought Scottish & Newcastle in 2008. It also owns Bulmers (H.P. Bulmers), along with a number of more craft-type ciders. Recent innovations have seen Heineken introduce an artisanal, high-end cider brand, Stassen, to the UK; future plans

include fruit ciders from New Zealand. However, it has also been reacting to the slowdown in UK cider sales, with the Financial Times reporting in the first quarter of 2018 that Heineken is trying to buy out contracts with apple growers.

Somerset craft cider makers

Somerset, where Thatchers is located, is one of the UK's leading traditional cider making areas with a long history. Many of the smaller craft cider companies are family businesses that have run for generations, but newcomers are also picking up traditional methods to produce new ciders.

Sheppy's Cider described itself as "one of the oldest premium craft cider making families in the world". Currently owned and managed by the sixth generation, the family had been brewing cider for over 200 years. Like Thatchers, it prided itself on combining traditional skills with the very best modern technology to produce award winning ciders. Using its home-grown apples, it produced a range of dry, medium and sweet ciders, with two new canned products arriving on the shelves in Tesco in April 2018. The farm had a museum collection of old agricultural and cider making tools, offered guided tours and tasting, and had a restaurant and bar.

Orchard Pig was a newcomer that opened in the 2000s but was rooted in a long history of Somerset cider making. Recently it had been acquired by C&C. It produced bottled and canned ciders with names like The Hogfather and Navelgazer, and ciders that are "Gluten free and suitable for Vegetarians, Vegans and Fruitarians". The company had become a well-known brand and had made significant inroads in gaining shelf space in five major supermarkets, including Waitrose.

Somerset Cider Brandy Co had been pressing cider for over 200 years. In 1989, it was granted the UK's first ever full cider-distilling licence and started reviving the ancient art of

making Somerset Cider Brandy. Each bottle can be traced back to its source orchard. It also produced traditional farmhouse cider, bottle-fermented ciders, a perry and an ice cider, the majority made from its own apples, which include 40 varieties of vintage cider apples, such as Brown Snout, Stoke Red and Kingston Black. In 2003, the company became part of the Slow Food movement and operates to a range of environmentally friendly standards.

Thatchers as a business

In 1878, a small advertisement appeared in a Bristol newspaper, offering "Prime new cider at 30 shillings per hogshead". One hundred and forty years later, Thatchers Cider was one of the UK's best known and largest independent cider makers, supplying draught, bottled and canned cider. Its largest customers were supermarkets (off trade) but it also sold via pubs (on trade). It maintained a strong presence in international markets and was present in over 22 countries worldwide.

The Thatchers story really started in 1904 when newly married William John Thatcher (G1) and his wife Beatrice rented the 34-acre Myrtle Farm in Sandford, north Somerset, where the company headquarters remain to this day. The farm was well sited, on a spur connected to the London–Exeter railway line and close to Weston. As well as running the farm, William produced cider using a blend of old-fashioned Somerset cider apples. Farmhouse scrumpy was given to the workers, while a more sophisticated bottle-fermented champagne cider was served to family and friends. When William died, his son Stanley (G2) took over the farm, while his other surviving son, Reginald, developed a successful construction business. Stan did not have his brother's business acumen, but his wife, Molly, was a shrewd business woman who kept the farm finances in order and maintained discipline.

Stan produced an old-fashioned draught farmhouse cider; today, Thatchers Traditional was made to the same recipe. Making cider was a labour-intensive activity. Stan was able to get apples easily enough as every local farm had well-established orchards. However, output was limited by the physical constraints of the cider press and he could only process two tonnes of apples per day. Stan was not overly ambitious and was content to let the business grow slowly. In 1951, Stan acquired a hydraulic press, which raised the daily figure to six tonnes, a situation that persisted for the next 20 years until his son John (G3) took over the farm in 1970.

The Thatcher business took off under John's stewardship. The purchase of three hydraulic presses from another cider maker marked the beginning of a family trait to invest in machinery to fuel growth. John's initial investment allowed production to leap up to 40 tonnes of apples per day and Thatchers Cider was then sold in pubs, both locally and further afield. John was more of a business man than his father and took steps to move closer to his customers, buying a wholesale fruit and vegetable business that allowed him to establish the Thatchers brand. When Stan died in 1981, John slowly concluded that he should focus on cider and, in 1983, took a leap of faith, buying up a local cider business whose owner had decided to call it a day. This combined capacity allowed production to soar to 200,000 gallons per year; adding more sophisticated machinery removed the manual labour of pressing and bottling, simplifying operations and freeing up time to think. John had successfully turned a hobby into a medium-sized business.

John and his wife Ann had two sons. Robert took over their maternal grandfather's farm in Upton-upon-Severn, while Martin (G4) joined the family business when he left school at 18. He gained an all-round insight into different elements of the business, from cider making to delivering cider, orchard care to sales, before taking over as Managing Director in 1992. In 1993, Thatchers' first big break came when one of its experienced marketing managers obtained a meeting with a buyer at Tesco. The low-cost market was already well catered for, so the buyer was looking for something new. Thatchers took a chance and, at short notice, developed a new range of single variety ciders aimed at the discerning drinker, going into overdrive to achieve the required consistency/quality/output. This secured shelf space and began a relationship that was to launch a new chapter in the Thatchers story.

The new range did well, using attractively packaged drinks to tempt supermarket customers, while its competitors' more traditional, mainstream ciders struggled with falling sales and a lack of interest from the youth market. In 1994, production was 0.75 million gallons; two years later it had reached 1.75 million. In 1997, galled by the fact that the expensive presses were sitting empty for 9 months of the year, the company took a seemingly outrageous decision and decided to invest again, obtaining more presses and negotiating a long-term contract to press blackcurrants for Glaxo Smith Klein who owned Ribena. By 1998, Thatchers had one of the UK's most advanced fruit handling plants and was Britain's fifth biggest cider maker.

The Thatcher Family

- G1 William John Thatcher (1880–1937)
- G2 Stanley Thatcher (1910–1981) m. Christine (aka Molly) Burdge (1912–2007)
- G3 John Thatcher (b 1943) m. Ann 1966
- G4 Martin Thatcher (b. 1968)
- G5 Eleanor (b. 2000) and Peter (b. 2004)

The deliberate decision to move upmarket (in contrast to many of its competitors who opted to produce sweeter, cheaper cider to improve sales) allowed Thatchers to position its products as a very good, affordable premium that was a legitimate alternative to wine. It also introduced new lines, such as Thatchers Gold in 2003, a very successful draught cider with a softer mouth feel than traditional scrumpy. The marketing and sales strategy was a key element of their success, and an area in which Martin was interested and skilled. Products were beautifully packaged with colourful labels and elegant fonts, supported by a strong emphasis on Thatchers' 100-year history and traditions, high quality and consistency. For example, a 2017 TV advert showed Martin Thatcher testing the latest batch of cider and ends with the line, *"If it isn't perfect, it simply doesn't leave the farm."*

Throughout the 2000s Thatchers kept innovating, while remaining true to its values. It produced brewery-branded cider (e.g. Moles Black Rat); collaborated with others (e.g. Green Goblin); launched new products (e.g. Katy Rosé); and won contracts with pubs such as Wetherspoons. By 2006, Thatchers was a mid-sized company, locally managed and embedded in the community, from where most of its employees came.

By 2008 Thatchers' production was 8 million litres but needed to move up a gear if it was to become a serious business. Unusually and interestingly, it set their target in litres, not profit, as Martin explained. *"...in terms of textbook stuff, we should have said profit, but actually the point was, what we really needed was something that people could grab hold of."* In some ways the timing was fortuitous. 2007/2008 saw the financial crash when a lot of other companies were shedding executives, so Thatchers took advantage of this and snapped up some good people. Thatchers took this rare opportunity further and took advantage of spare capacity in manufacturing plant, enabling them to get secure

good deals and favourable credit terms. *"When everything around you is going badly, it is a fantastic time to invest ... do it when the economy is bad, spend the same amount of money and get more."*

Within one year, the company had started to see results. In 2010, the business bought another 180 acres of orchard to increase its apple supply for the increasing output. It also invested heavily in its automation project, opening a state-of-the-art packaging and warehouse facility, Jubilee Building, on the farm in 2014.

Thatchers as a family

Values, core principles and culture

The family values and culture were extremely important, with Martin keen to ensure these get passed on to the G5 members who he had been grooming to succeed him. Thatchers also worked hard at embedding the family culture amongst its staff. Every four to six weeks, Martin and his mother, Ann, ran a brand training day together, where new hires learn about the company, its history, and the family values and ethos that underpin it. *"... we physically make some cider, we go in the orchards, we talk about our marketing plan, we talk about the culture ..."* Martin believed that the role of the matriarch in a family business complimented that of her husband, John, who cultivated the apples; Ann looked after the people. In addition, Martin held lunch meetings with staff every two weeks or so, eating together around a family dining table.

These were casual yet essential events, where Martin tried to see every member of the workforce at least once, and provide an informal forum to discuss any issues arising. *"It's just part of the culture to keep in touch with all new members of staff."* He also operated an open-door policy

where “They [employees] don’t have to go through their line managers ... they can just agree a time to come in and I’ll talk to them.” Engendering a sense of ownership and responsibility in staff was important to Martin.

“I hope people around the business feel it’s their business, it’s not just mine, it’s everybody who works here’s business ... I think that’s the culture you need, where people take responsibility, see the bigger picture and won’t let something go wrong even though it’s not their responsibility. ‘Don’t let us down, this is ours as well, we’re all in it together.’”

The family valued its heritage, had a passion for quality and was proud of its traditions. However, the business was also innovative and forward looking, able to “marry traditional techniques with state-of-the-art technology”. Some of its cider was made in 150-year-old giant, oak vats, a precious asset that helped to give the ciders their distinctive character. Other products celebrate central figures in the family history, such as Martin’s grandfather Stan, with a range of Stan’s ciders. The business builds on a long heritage of expertise with apples, using this knowledge to produce an authentic product, full of flavour and had been rewarded with a slew of awards that support its belief that “... our cider makers are the best in the business”. For example, Thatchers Redstreak Cider was named the best sparkling cider in the world in the World Cider Awards 2017. The issue of quality drives the way Thatchers do business, with Martin reflecting:

“At the end of the day the customers have choice, they know what’s good, and they know what’s bad. If you don’t do a really good job, then they will go somewhere else ... So you come back to doing everything better. Better marketing, better quality, better customer service, all those things have to be done better than your competitors and when you do it better, then you have to go back and start again and make it better still. It’s the only way, because they [competitors] are doing exactly the same ...

So if you don’t keep running, they will just go past you eventually ... I think the other thing about culture is that we always want to make great products and people know that above all else ... It’s our name on it.”

Thatchers also took a long-term view, manifested in its embrace of sustainability as an element of the family culture. Efforts to minimise its environmental impact include bee-friendly practices, installing its own water bore hole, and using tree prunings in the farm’s biomass boiler to provide heating. Nothing was wasted from the cider making – even the apple pomace, the pulpy residue left when the juice has been extracted, was fed to cattle. In addition, the orchards were home to ongoing research and development activities.

Part of the family philosophy, described by Martin, was to continually invest back into the company and to leave a legacy, rather than simply focusing on making money.

“... the finances have not been the driving factor. The success, the quality of the business, the quality of the products, the quality of the people working here, the team and their feeling towards the business, for me is way more important than whether the business is worth a million or 10 million ... I want to hand on a successful business that everybody is proud of, not just me, but the people who work here. That’s the key element. If we do that, yes it will be worth some money and hopefully it will be making a profit and sustainable and all the rest of it, but if we do that, that’s my core mission.”

Role of the family in the business

Philosophy and governance

The family’s business philosophy had remained to keep the business simple, as Martin explained. “If it’s simple, everybody understands it,

can see what's going on. Simple goes wrong less often than complicated and things go wrong often enough as it is. You don't need to help them go wrong, so that's what I've done."

This was reflected in a relatively informal governance structure. The board consisted of a Managing Director (Martin), various other directors (e.g. Operations, Sales, Off Trade Sales) and three non-executive directors (NED). Twenty-five years ago, the family had appointed the first NED – a retired bank manager, and a friend of John Thatcher's, who had moved from financial advice to adviser and general sounding block. The current NEDs hail from other, sometimes similar, business backgrounds, providing "a bigger view. And they come in, they say, 'I know you're busy doing this but just step back and have a look at this over here because you need to consider this'." The board meet once a month, but regularly communicate between meetings. Of note is the company's decision making processes, which differed from those of many more formally organised companies.

"I think what makes us unique is our ability to make decisions and move quickly. So every Monday morning we have a meeting with the Directors round this table and decide what we're going to do and get on with it ... That's a bit of a culture shock because coming with that is responsibility. So if you make a decision and you get it wrong, which we do, the first thing you've got to do is recognise that you've got it wrong quickly, before it becomes a big mistake, and then put it right."

During their negotiations for the GSK contract to manufacture Ribena, the Thatchers' team had made decisions in the car or round the kitchen table. Thatchers often did things differently, such as making significant investments during economically tough times. "Everything around you is going badly, this is a fantastic time to invest... do it when the economy is bad, spend the same amount of money and get more."

Activity in the business

The G3 members remain active in the day-to-day business, its culture and ethics. While Ann took great pride in looking after the company's people, John's extensive expertise in apples was still in demand, with 500 acres of orchards to be overseen and an Exhibition Orchard of 458 varieties, with some rare and ancient cultivars, to be maintained. Previous generations had worked from the ground up, gaining hands-on experience of everything from "sweeping the floor or making big marketing decisions or seeing customers," and Martin expected the G5 to follow the same route, as well as going out into other businesses to learn from them. This philosophy extends to non-family members too.

"For example, some of the marketing team are relatively young, so I've said they've all got to go and visit ten businesses this year, go to their marketing departments, not competitors, non-competitors, and share the ideas that other people are doing and see what 'good' looks like. Then come back and say, 'ok this was great we should do this'. Other places, they'll go, and they'll come back and say, 'this isn't going to work for us'."

A culture of learning

Rapidly growing businesses tend to bring in outside experts with the right skills as they grow, and Thatchers brings in new blood when necessary. However, the company was committed to a culture of growth and development for its existing, local workforce, where people who fit its ethos can be trained with extra skills to grow into the new roles needed. Many senior managers started out with Thatchers straight after school or university and developed their skill set as the business grew. Martin emphasised the importance of continuous learning and regularly visited other family businesses to observe and bring back the best practices back to Thatchers: "I do ring people and say – you've got a great business can I come

and see you? Jonathan Warburton, I rang him and said, 'This is really cheeky, but could I come up to Bolton and have a chat about how probably the nation's biggest, best run family business operates?' and he said, 'Yes, of course'."

Relationship with suppliers

Thatchers worked very closely with dozens of local farmers upon whom it relied for much of its supply, using exclusive contracts. These farmers supplement the crop the family grows themselves. Some of Thatchers' suppliers had been part of the supply chain since Martin's grandfather's era, while other contracts were over 20 years old. Mutual relationships had developed over time, with Thatchers and the farmers supporting each other through good and bad times. For example, when Thatchers increased production, many of its suppliers increased their orchard sizes too. The family had also taken on new contract suppliers, as well as spreading its geographical range to increase supply. Thatchers held an annual Growers of the Year awards to recognise excellence and commitment to quality from its suppliers. Thatchers is aware that it will need to refine its sourcing strategy to secure enough apples to fuel growth.

Thatchers' role in the community

Despite the significant change in its size over the past decade, Thatchers was deeply rooted in, and felt a strong sense of responsibility for, the local village where the family continued to live and work. Many of its employees came from families who had worked for the business for generations. Thatchers' website highlighted the huge importance to the family of playing their part in community life and emphasised that it was not just about giving money but investing in it to have sustainable activities and outputs. Activities range from: installing a pathway through the Katy orchard as part of an ambitious trans-Somerset

cycle track; sponsoring and supporting local sports; and regular open days at Myrtle Farm. Support was also given to regional shows via sponsorships and regional initiatives, such as providing a bursary for Somerset food and drink producers who have not engaged in retail trade, via the Eat:Festivals. This aims to encourage business start-up and entrepreneurial spirit. In 2015, a donation from the family allowed the Thatchers Foundation to be established. The Foundation was independent of the family, although family members were among its trustees, and it provided grants with a particular focus on the local parishes of Sandford, Winscombe and adjoining villages.

Growth and future challenges

It was clear that Thatchers is performing robustly in a troubled market. In 2016, the business continued to gain market share. Weston's 2018 Cider Report showed that although cider production was now truly global, with multinational operations dominating the top ten producers, only two of the top ten cider producers (Westons and Thatchers) were UK owned and based operations. Thatchers was placed seventh globally and had to fend off competition from large players such as Heineken and Carlsberg leaving no room for complacency.

However, Martin remained committed to not relocating and was aware of the challenge and the need to engage locally. "... *skills and people and development are going to become a bigger and bigger issue, for enough of the right people as time goes on. We are going to be doing more and more work connecting the schools and colleges.*" This was already being backed up by action, with the family involved in a range of job-related activities, including bespoke apprenticeship training programmes, graduate schemes, sandwich schemes and career paths. Further, in-house promotion and training to

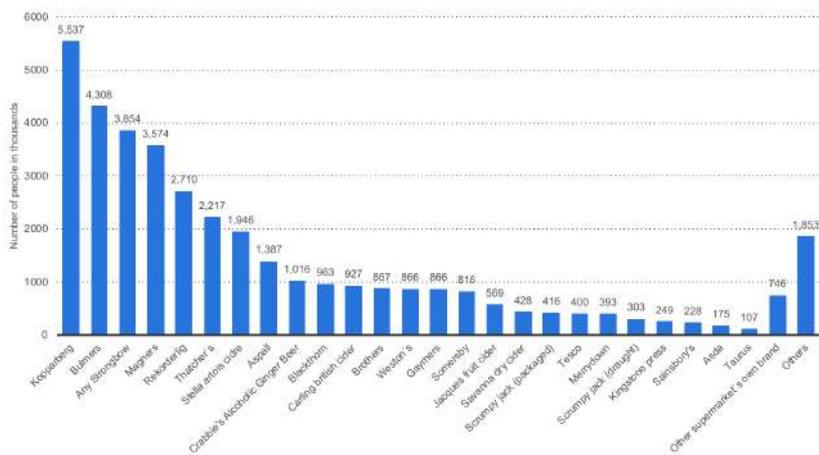
THATCHERS CIDER: EXECUTING LONG-TERM ORIENTATION

develop loyal staff also remain high on Martin's agenda.

"... the next few years focus on developing skills and technology together and bringing in new people for sales and marketing, which is an area where we continually need to grow our numbers. But the right people and again, training them and making sure we develop them, so they can start at field sales and end up at national accounts or head of sales in the future, so that's a career path."

Leading brands of cider in the United Kingdom (UK) 2016, by number of users

Brands of cider ranked by number of users in the United Kingdom (UK) in 2016 (in 1,000)

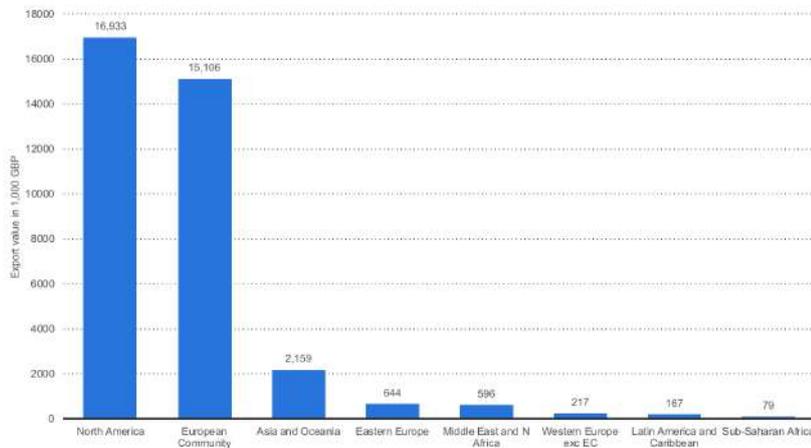


Note: Great Britain, January to December 2016, 15 years and older, 24,507 Respondents
 Further information regarding this statistic can be found on [page 8](#)
 Source: Kantar Media [ID 317820](#)



United Kingdom: Cider export value 2016, by continent

Value of cider exports from the United Kingdom in 2016, by trading region (in 1,000 GBP)



Note: United Kingdom: 2016
 Further information regarding this statistic can be found on [page 30](#)
 Source: HM Revenue and Customs [ID 305117](#)



About the IFB Research Foundation (Charity no. 1134085)

The IFB Research Foundation was established to foster greater knowledge and understanding of family firms and their contribution to the economy and society, as well as the key challenges and opportunities that they face. The Research Foundation's vision is to be the UK's centre of excellence for practitioner-oriented family business research.

22-24 Buckingham Palace Road
London SW1W 0QP
Tel. 020 7630 6250
Email. research@ifb.org.uk
www.ifb.org.uk/research

© IFB Research Foundation 2019. Some rights reserved.

Open access: The IFB Research Foundation has an open access policy. This work is made available under a

Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License



Anyone can download, save, or share this work in any format without written permission and free of charge under the following conditions:

BY: Attribution must be given to the original source

NC: Works may not be used for commercial purposes

ND: Any adaptations of works such as translations may not be distributed without written permission

