

Dissertation

Teague Hutchinson – 40509190

***The Perception of Whisky and its Relevance in Bringing in
New Audiences***

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1. Introduction – The Brief

The Brief – This project and study, using technology and digital innovations, explored how it might work to bring new audiences into the whisky industry. It focussed on the current whisky industry as well as the various design approaches available to hook new audiences. The project looked particularly at how to infiltrate a younger demographic of future whisky drinkers. The project then took this information and designed a whisky label as well as its contents, which are both tailored to simultaneously give a superior whisky experience to its targeted demographic. This whisky was thorough in the design process, making sure its appearance correlated to the taste of the whisky, and, therefore, should be critiqued on the solidity and coherence of the product. The whisky is called “Dunrobin Distillery” and a real-world location- Golspie (Scottish village in the highlands where Dunrobin is based) was used- for inspiration in this example piece. This physical production of whisky was made to have an integrated digital option which worked seamlessly alongside the product.

This digital presence came in the form of a side kick app under a separate alias of “Casked”. The app contrasted the whisky, being an entirely separate entity from the Dunrobin brand, however, shares the same core ideals in design and approach. The reason for this separation is not only to grant a different perspective but to also allow for future endeavours with other whisky distributors taking advantage of the app software and submitting their own data, populating the app for consumers, and so ensuring it is ever- evolving.

The project design piece consists of:

- Three Whisky blends, each with a thorough backstory, each story unique to capture the broadest audiences. The whisky blends’ final names have morphed throughout the project, however, have settled on, ‘Gada’, ‘Witches Circle’ and ‘Clearance’.
- The app – ‘Casked’. This app is straightforward and informative in design, with room to evolve with current digital trends. The app took advantage of current technology, while also fighting the distribution of counterfeit whisky through use of photo recognition. It does this while also being a valuable asset for its whisky drinking users to grant them more information surrounding whisky related products.

This project looks at existing whisky brands and their successes, and failures building a new but hypothetical whisky brand ‘Dunrobin Distillery’. The marketing both digital and physical, surrounding ‘Dunrobin Distillery’ as well as the blends themselves which have a common theme of the values and beliefs behind them. After speaking to a chairwoman at Dunrobin who is currently pushing for there to be a whisky start up within the estate, these core design beliefs consist of, but are not limited to:

- Young audiences – The whisky wishes to break into this demographic without disregarding other generations.
- Eco- friendly – The whisky wishes to be as carbon- neutral as possible.
- Eye- catching – Stylish and trendy.
- Local and small - Supporting local Scottish products and small businesses.
- Interactive – Interactive product design that works seamlessly with the proposed assistant whisky app.
- Storytelling – Marketing and design should tell a story.
- Taste – The flavour of the whisky itself has been extensively considered and correlates with overall design.



Dunrobin Castle

1.1 Introduction – The Background

The Background - In the past, budding entrepreneurs have worked with 'Dunrobin Castle' to launch a new malt whisky. Unfortunately, it never fully got the green light after COVID, with buildings and areas cleared, waiting and ready for production. This study is an experimental hypothetical design of what could be or what could have been. The study works as a pitch to the Dunrobin Client, while gathering valuable data on how to establish a new, effective whisky brand. It looks at what the best methods to bring in new young consumers into the whisky world; something highlighted as a major goal when consulting with the Dunrobin client and establishing the brief. This goal will later be re-established during the planning stage, however, example studies are first picked apart in relation to the mandate of the brief to attract a younger demographic.

Since the official Dunrobin whisky production never got to the design stage, nor the whisky production stage, the project is left with a large degree of creative freedom. The project, therefore, aimed to design a solid end whisky product which is unique and rich in storytelling. The product design takes advantage of everything learnt in the existing studies. While the project has worked with the Dunrobin client for advice, in establishing a relevant brief, the study is entirely independent from the brand and the project is purely for demonstration and portfolio driven purposes and not for any type of commercial value, again allowing for added creative freedom. In addition, the project gives an example of a prototype app which expands on the whisky brand core ideals while also being beneficial from a utility standpoint. Lastly, the project aimed to finish by judging how effective these designs have been when looking at outside example studies and peer reviews.

1.2 Introduction – The current Scottish whisky ecosystem

The Scottish whisky industry is massive, generating 6.2 billion pounds in 2022 (Scotch Whisky Association, 2023). This wealth generation is quite substantial, but how is the industry moving forward in today's digital age - if they are at all? A lot of whisky distilleries very much pla

y into historical stories of the distillery, its founders, and the heritage of the surrounding area to sell the brand but could this be expanded upon with today's product design efforts and digital options to help make it more accessible to new customers who are looking to whet their appetite and delve into the whisky industry. "Scotch whisky is more than a whisky. It is part of Scotland's heritage and folklore. It is used as a medicine to cure many ills. As a toddy, it can dispel colds and 'flu. In porridge, it can drive out the freezing cold of Scotland's winters. It lubricates the larynx and helps parties go with a swing." As stated by Bill Walker (1987) when discussing the official Scotch Whisky Bill, highlighting the deep roots of history, and meaning Scottish whisky holds, even when speaking of law. Could combining marketing techniques with this heritage and ingrained storytelling behind the distilleries, not only bring in more consumers but also go as far as to affect what consumers taste and experience when they have a dram, and if so, has it been done before?

Here, we will discuss existing brands that are innovating in various ways, whether through digital means or product design. It will then be weighed how much of a value these efforts are in benefiting their corresponding brand. Going on from this, we examine how even small changes to product design, such as colour choice, affect not only the view the consumer has on the bottle but to an extent, how much they enjoy the liquid inside. Is extra labelling time worth it, or is it just an extra bit of rubbish to throw into the landfill? Budgeting and bottling can save money for companies. However, the extra costs on supplementary additions to packaging and presentation may be vital in bringing in new audiences and appealing to new target markets. The pros and cons of this, however, need to be weighed in terms of how they affect the environment. The whisky industry is a massive polluter, with fossil fuels being the distillery's primary source of energy consumption. Along with this, peated whisky pumps greenhouse gases directly into the atmosphere. While whisky companies look to combat this with, "The SWA member companies have agreed a target of ensuring that by 2020, 20% of their primary energy requirements will be from non-fossil fuel sources, with a target of 80% by 2050." (Terry A'Hearn, 2018), how will the industry reflect this change in their product design and branding.

1.3 Introduction – Digital media within the current alcohol market

In today's digital age, many brands are taking advantage of the technology around them. Currently, in Edinburgh, there is a new release of an artificial intelligence (A.I.) Indian pale ale by "Tin Robot" called "Cheat code A.I.P.A" and many more A.I. recipes are popping up all over the world. While the A.I. recipes may be an easy sell, taking advantage of the current artificial intelligence boom, how might this be adopted into product design? Does it still lack personality? The irony of talking about A.I. generated recipes is especially not lost on the subject of a written essay, with so many writers leaning towards the software in making shortcuts to stifle their creativity. The relentless push forward for new ventures is A.I.'s biggest current obstacle. Ultimately A.I. use was avoided during this project.

Another prevalent modern digital theme in the wines and spirit world of product design bears its fruits in augmented reality (A.R.). A.R. is a subject matter completely different and offers plenty of creativity in the spirit and whisky world which, while not used in this project, is touched upon, and will be used in future ventures.

2. Literature Review - Existing relevant products and external inspiration

In September 2022, Jamesons added an all new QR code to their famous whisky bottle. The QR code has been around since 1994, so this might not have seemed like a big leap of faith, however said QR code only rose in popularity at a steady pace through the millennium, until it boomed when COVID-19 hit in 2020 (Microsoft, 2023). It was a key ingredient in the new social distancing, digital age. Lockdown measures were lifted in Ireland in the early part of 2022, with the UK being a couple of months prior. This gave Jameson consumers plenty of practice with QR codes. After all, the public were expected to use the white and black 'devil' squares, to access covid passports, food menus, public transport, and various other amenities.

Altogether, this still doesn't seem like a major leap for the whisky giant. However, it was one of the first of the famous brands to adopt a more digitised style to sit proud and centre on their label. This very much contrasted the styles of Jameson's competitors. To this day, a great deal of traditional whisky brands are still hesitant to even create a website for their distillery, let alone spend the extra printer ink to add a linked QR code to individual bottles, whose web domain requires constant updates to stay relevant. (An update on our bottle - Jameson Whiskey. September 2022).



Jamesons QR code (Jameson Whiskey. September 2022).

In contrast, earlier that year, Glengoyne whisky distillery made the rogue marketing decision of charging its consumers £50 pounds on top of their already £50+ whisky (the whisky being the Glengoyne Legacy Series Chapter Three). This extra packaging involved an aluminium tube lining the traditional Glengoyne boxing. It could hold up to four smartphones and shield each device from receiving any signal while you are enjoying the dram. While the marketing move may seem like it comes from a traditionalist, anti-digital viewpoint, the distillery commissioned CensusWide to gather data from a sample size of 1673 people. This research ultimately found that 52% of adults forget what they are saying mid-conversation due to cellular devices, and 38% admitted to checking devices frequently while enjoying "special moments" with friends and families. 53% of adults then stated they would value moments with others more.

e without the distraction of mobile phones, which is the stat that must have propelled the marketing behind the data- blocking packaging (Glengoyne, 2022). While these stats are most likely now out of context due to them being taken during the social awkwardness that comes from coming out of a 2-year lockdown, the idea of innovating the package design into something more than just cardboard presents an interesting outlook on product design, even if it was gimmicky. This approach may raise some interesting points on how to best implement digital media into a social setting, such as enjoying a whisky, which could be seen as something too distracting or sensorially intrusive and may also take away from these “special moments”. The design of the app proposed in this project therefore looks to add to the whiskies social experience as opposed to taking away or replacing certain aspects. The app therefore acts as a ‘sidekick’ and creates talking points which can be discarded and closed without worry.



Glengoyne Offline Edition (Glengoyne, 2022).

2.1 Existing relevant products and external inspiration

Backtracking to the lesser -known Ardnamurchan distillery experimented with QR codes all the way back in 2017. This pre- COVID move made by the young distillery was groundbreaking both now, and at the time, as it helped not only describe which whisky came from which batch, but it also described the whisky casks and gave a brief description of the whisky you were drinking. Along with this, the distillery also made moves to use "blockchain technology", something used in bitcoin which helped battle counterfeit whisky as it tracked everything about the bottle, from where it was made, where it was exported and enigmatically "much more" according to Alex Bruce the managing director and master blender at Adelphi, Ardnamurchan's parent company (Giles Milton, 2017).

This bold innovation from the young distillery came from an environmental standpoint, as they opted to strip any possible packaging from their bottles in an effort to combat climate change. This comes as no surprise as Adelphi have been a leading Scottish brand in combatting their climate footprint, using only renewable and hydro energies to fund their energy consumption. From a product design standpoint, the packaging itself reflects the companies' environ

mental ideals, the minimalist style reflecting the companies' low climate impact, giving consumers an impression and a reminder of their eco-friendly agenda. Adelphi embraces a digital front, helping them reach more audiences without leaving a stain on the environment.

While a digital presence certainly helps with climate value in limiting the need for physical packaging, it should be questioned as to whether the QR code is the most that technology has to offer. There may be a variety of digital alternatives to the QR code that are a more effective means from a digital standpoint. The QR code relies on the regular upkeep of a specific website domain. With a brand which has the longevity of whisky it may not be a correct fit in terms of design, due to some customers leaving whisky in their cupboards for hundreds of years. This is especially relevant as the current image recognition technologies has vastly improved, giving a far easier option for consumers to simply scan the label to prompt the digital link. In future apps, along with the one presented later in this study, these different digital options are something to consider.

2.2 Existing use of clever product design

In addition to the interesting utility formatting packaging of the Glengoyne Offline addition, several similar package deals come with extra trinkets or tools. The most famous is the Monkey 47 gin bottle with an in-built ring around the cork, worn by brand lovers, bartenders, and mixologists worldwide. This iconic ring is not only built into the bottle design but also displays a sort of unofficial slogan stating, "E Pluribus Unum", Latin for "Out of Many One". This means the packaging design has not only persuaded its consumers to buy and drink the product, but quite often advertises the bottle itself (depending on the person's ring size). It is maybe a little impractical due to its size limitations, making it wasteful in resources, but ultimately is a bit of fun and seen as a stylish trinket, (Robert M. Parker, n.d.). These design values are appealing as they clearly show purpose from a marketing standpoint. It could be interesting to use this in relation to the Dunrobin Whisky project but to give these ideas more practical value. The trinket could have some use that didn't depend on its consumer's ring size, and come in a more utilitarian form?

Accounting for wasting resources, another simple design choice in terms of packaging comes from the Sailor Jerry rum label production. Behind each Sailor Jerry bottle is a secret sticker showing an illustration unique (more or less) to the bottle. There are currently over five illustrations in circulation, making it a niche collectable for its dedicated drinkers (as of 2018). It's a bit of a questionable design choice as the number of bottles that get thrown away, unseen, due to ignorance or feigning such, will be numerous, especially in the hospitality sector (bars and restaurants, etc.), making the design choice a waste of ink and time for the rum giant (Emily Price, 2018). However, let's not overlook the potential benefits of this design choice. By having a design on the glue side of a liquor label, we could provide more information about the brand. This could be a unique and effective way to further marketing efforts. From a production stance you are taking advantage of an otherwise unused side of the whisky label, making the waste of resources minimal. When looking further along the line, the Dunrobin brand of whisky investigates methods of taking advantage of this design technique. This may also be especially valuable as whisky bottles are generally displayed with more pride in bars and not hidden in an ice well disguised under the alias of "house rum" as is so often the case with Sailer Jerry. The trend of leaving whisky on display shelves or in cabinets allows customers at bars to request to see the bottle, a very common practice, which would eliminate the negatives to this design approach as the bottle and its labelling are scrutinised by more eyes.



Sailor Jerry Tattoo Label - (Emily Price, 2018)

Continuing with this trend of gimmicky bottle designs, a more practical design choice is Longmorn's whisky which includes a leather base. The distillery has spun various tales about why they chose to add this extra cost to the bottle design. However, the predominant story seems to be that it is the master distiller's favourite dram. The leather bottom serves the purpose of concealment as he sneaks down to grab a midnight ditcher before bed, the leather base conveniently muffles the sound of the bottle hitting the countertop without his wife hearing. This is a much more utilitarian design approach to what has been discussed already while offering a rich source of storytelling for consumers. Simultaneously it could be considered a rather stylish design choice. "Storytelling is the most natural form of communication from the beginning of human history" (Patterson and Brown 2005), and this very much extends into marketing. "Storytelling can be an effective way retain existing customers as well as to attract potential customers" (Jensen 1999; Delgadillo and Esealas 2004). Existing customers are integral to any business, so these little design choices add so much to the product and the brand, even if it is just a leather trim on the base of a bottle. Thus, the Dunrobin brand of whiskies looks to further this concept of a leather bottle base, experimenting with cheaper materials. A cork base for example offers the same muffled approach while also acting as a shock absorber for the glass bottle itself, making it more resilient during transit. Users would also be free to detach the cork bottom and use it as a coaster to protect surfaces from future mug stains, while displaying the prominent Dunrobin branding. The storytelling surrounding the whisky bottom may also help give extra meaning to this added design choice.

2.3 Established brands heritage and its use in storytelling marketing.

Moving forward with storytelling in marketing, we can draw parallels to fields with similar heritage, such as Japan's rich history and tradition of sake, which has been studied extensively. This is evident in the quote by Lee and Shin, "The success of sake is attributed to craftsmanship of Toji (sake master) for hundreds of years, systematic marketing strategies, and improved quality and standardization policies of the central government, local governments, and breweries themselves" (Lee, Y. sook, & Shin, W. jin. 2015). Illustrating how the sake industry i

s constantly battling to innovate via changes in the government policies surrounding the sake industry, making it ever-evolving. This majorly contrasts with the whisky laws in Scotland especially, which have stayed notoriously strict through generations, so the impact on the Whisky character has been minimal. The oldest still existing sake distillery is from the 1100s. However, sake itself goes back even further and originated in around 400 A.D. while Scottish whisky was invented in the 1400s, so there is definitely a thing or two to be learnt from Japan's sake.

What is the secret behind their impressive longevity? Is it clever yet consistent marketing over the centuries? Arguments have been made about storytelling in sake which has transgressed through generations and is integral to Japanese traditions, making it both relevant and giving it strong roots and longevity. There is a reason so much money and love have been poured into the industry and it doesn't seem to be a catchy slogan or a snappy logo. "All stories in storytelling can identify people and create emotional fellowship" (Herskovitz and Crystal 2010). To get realistic, people consume alcohol to feel different, whether that be among friends and family in celebration, or to self-medicate on lower moods. Alcohol is often somewhat of an occasion and therefore the storytelling that goes behind it makes it more enticing. In terms of sake, you have the conversation about the geography of origin, the rice farms it came from, the water springs that were used and even sometimes the monks and faiths behind brewing the liquid. Whisky, similarly, has the region and its history, the barley, the water, the casks, their seasoning and wood type and sometimes the type of peat that was involved in the process. As Yong-sook Lee and Woo-jin Shin (2015) stated, "We feel closer to people who frequently listen to our stories." Which in horrible corporate terms, might translate to people are more enticed by brands which spin them a yarn. This yarn is a storytelling marketing practice which presents itself as extra source of content for consumers to keep them coming back to gain extra information or anecdotes to learn and repeat to others or learn to amuse themselves. The question then presents itself -how best to make this storytelling content accessible to its consumers?

2.4 Modern brand production and the storytelling marketing surrounding it.

On that corporate note, many studies have been put into Pandora, the jewellery giant, which may be relevant. The company markets every piece of their collection to be symbolic in one way or another, which by extension, is another form of storytelling marketing. Their "charms" are a prime example, having some meaning. This can be anything, from passing your driving test, to finding your first love interest. They go for a strategy akin to a holiday, a birthday, or a well-wishing card, as they give each object a meaning. There is still a marketing strategy base, but due to the volume of the different symbolic meanings, some often get lost or feel factory produced. As it goes, they seem to opt for a "type of storytelling that is not about advertising products, services or brands, but that adds value to the product" (Dias & Dias, 2018, p. 2). This certainly adds a fun element to jewellery purchases, helping lost boyfriends on Valentine's Day, however when compared to the long-standing heritage of the sake it can often feel trivial. Maybe however that is the point. To start with only a little meaning, and using this meaning prompt, you, the consumer, can inject yourself, and memories into the product.

Whether only having a transient, headline meaning behind a product stands the test of time, is an entirely different matter. While I'm sure the company Pandora won't go bust anytime soon, it does raise an eyebrow, as it is so vastly different to the more heritage embracing marketing techniques that are seen in the whisky industry. However, as Dias P and Cavalheiro R

say in their study when talking about storytelling versus self-expression in the brand, "The literature on the antecedents of brand love, so far, reveals that each of them is not a requirement for the blossoming and nurturing of brand love, but they are complementary and act synergistically, reinforcing each other." (Dias, P., & Cavaleiro, R. 2022). Therefore, we have a two-fold advantage - making it seem it is up to the brand to provide a reliable product or service, then using marketing techniques as a – means of boosting their image and not a single trump card but a handy double UNO with possibilities of a product and its marketing being symbiotic. Following this, from the data gathered, the study details were positive towards the Pandora brand and its style of marketing. During the study, Pandora also made a 103% increase in sales (profit increase based in 2020) which altogether is nothing to be scoffed at. Finally, the Pandora approach is undoubtedly effective, and it would be interesting to see the result of committing the style to a whisky distillery which already has a vast heritage of storytelling to build upon. Product design in whisky certainly does this with careful choice in terms of distillery bottling and the symbolisms behind chosen attributes, however adding more and more little meanings to the bottle design might entice and personalise today's current market and encourage further meaning for the drinker themselves. This can be looked at from a product design standpoint, but also expanded upon from a digital point of view as more and more options for digitisation become available.

2.5 The science behind consumer loyalty and its relevance to planning new products.

How might a younger generation of adult whisky drinkers be attained? After all, if a young generation of consumers are attained and become brand loyal, the fortification of the brand will endure for years to come. But how might a company retain an audience like that? "Already in the 1960s, Theodore Levitt drew attention to the so-called "marketing myopia" and the fact that focusing on customers' needs and creating value for them in the long run is crucial for long-term success (Levitt, 1960)", (Wiñiewska, A., & Karasiewicz, G. 2020) showing it already a very established query, all the way back in the 1960. When looking for a specific product, a consumer ultimately, is met by hundreds of different brands, so how do you not only make yourself stand out, but keep them coming back for seconds? Putting oneself in the whisky drinkers' shoes, they are met at the bottle shop by various brands at various prices. Some of which are dead cheap and some overly expensive. Would innovation in digital and marketing storytelling really entice them in? Is the consumer looking to create memories with the product through their own self-expression? Of course, in order to create a loyal customer, the bottle needs to be picked up in the first place.

The Dunrobin project takes this mantra quite literally, aiming to design the label to be broad in wrapping around the bottle to encourage customers to pick up the whisky so they may read and view the full information. This action gives a greater connection to the item after merely touching it, helping people envision themselves owning the product. This is again backed up by Joann Peck, and Suzanne Shuin in the quote, "In four studies, we find that merely touching an object increases the feelings of ownership a person has for the object. This, in turn, results in a person being willing to pay more for most objects that they touch versus objects that they cannot touch" (Joann Peck, & Suzanne B. Shu. 2009), when they spoke of touching and perceived ownership as a result. This demonstrates the value of having a design that encourages physical interaction over a product due to the action leaving an impression on possible customers. Moving forward in the design process of the Dunrobin whiskies, this physical

interaction has been an integral part and has been constantly revisited when debating changes to past label designs.

Thinking onward after the bottle is picked up, the loyalty of the customer, according to past studies, three main factors stand out. **Price** fluctuation, whether it is **recommendation** worthy, and the **stability** of the possible purchase. (Wiñniewska, A., & Karasiewicz, G. 2020). Price is seemingly the most obvious of the three, with most people looking to spend less money. However, Wiñniewska, Agnieszka and Karasiewicz, Grzegorz stated it firmly “The literature indicates that loyal consumers are resistant to price changes, thanks to which it is possible to generate higher revenues by enterprises with regular customers (Dick and Basu, 1984; Donio, Massari and Passiante, 2006).” (2020).

Price - It definitely stands to reason that in a field such as whisky, where there are so many great competitors, a price point can often sway users. One example would be Macallan. Macallan is a high-end whisky and is priced as such and has done so for years. They work with perfume bottle designers and age their whisky in “rare” casks to be perceived as this high-end spirit. However, at the end of the day, you are getting the same ingredients, and whiskies of similar ages could be bought at half the price. The label, however, weighs an expensive price tag which is curious when Aldi’s own Glen Marnoch keeps winning award after award for a bottle that’s under £20. (Aldi Press Centre. 2024)

Recommendation - While Price is certainly something hard to measure when considering product design, recommendations are certainly in the same territory. We have seen by its very nature that storytelling marketing encourages discussion. This then hopefully extends to a form of word-of-mouth marketing, where friends account the stories of the brand and its story, which in turn persuades new buyers to approach the product. According to studies “Eighty-eight percent of people around the world said they trust recommendations from friends and family (earned media) above all other forms of advertising. This shows just how effective word-of-mouth marketing can be.” (Nielsen. Nielsen 2021.) This is fortuitous for the whisky industry. If one of the three pillars of creating a loyal customer base is recommendation, whisky certainly has this one ticked, which possibly points to the reason behind its longevity.

Stability - Finally comes the reputation of purchases. A brand with a reliable reputation, appeals not only to its consumers but also its third-party sellers. Buying and selling goods that have an unreliable track record will damage businesses along the supply chain. However, the whisky world has a couple of interesting case samples. One of which is with Springbank Distillery, as they bottle everything in-house and only allocate bars and hospitality sectors a couple of bottles a year. This is largely due to them furloughing their staff members during COVID-19 as soon as the lockdown was announced (with full salary), halting production for the following years and meaning the company has been playing catch up ever since. After this Springbank whisky, and its sister-company (Glengyle) are impossible to get a hold of unless you buy at auction or turn up at the distillery at the right time, but even then, they have a one bottle per customer ruling. You would think that Springbank and its sister-distilleries would be forgotten about, however they hold a very good reputation and are constantly sold out.

Coming at reputation from a different, more tech-based angle, hardware such as graphics cards, PCs and consoles are constantly in short supply and there is often news of ‘scalpers’ selling goods at an inflated cost. Nevertheless, all of these products are gobbled up in sales as soon as they become available again. Maybe the scarcity of these products has inflated their reputation making them seem more enticing. However, the argument seems like a reach when compared to a band of consistent, loyal customers. Ultimately it would be rather interesting to see how reputation truly factors into consumer loyalty in future studies.

2.6 How will tailoring to specific demographics encourage new audiences?

Now we can ask who really are the main base of whisky consumers and how do we reach out to more? There is this reigning image that whisky is for older adults. However, this is then contradicted by current studies such as “A report commissioned by Diageo in 2020 entitled The New World of New World Whisky showed that nearly 50% of consumers surveyed who drank whisky were between the ages of 24 and 44, with a 64% to 36% split of male versus female consumers.” (Dennis and Dion, 2021), which outright shows that while a large majority in the market are over 44, there are plenty of young adults getting into the whisky industry. This may be due to the massive effort of large companies who are looking to welcome in young folk and shed the older generation’s skin. More and more companies are pushing whisky cocktails and highballs to welcome newcomers to the spirit. Diageo (former United Whiskies) are very well known for this, as the company was started by Johnny Walker, who pushed whisky and ginger highballs even as far back as 1865 when it was founded. The move must have worked as they are now a massive company that monopolises the industry. However, you’ll still find the occasional Scotty as you mix your single malt. Indeed, there are arguments for both sides. It would be interesting to explore different means of welcoming young adults into the spirit in ways other than covering up a taste designed to be experienced on its own, without various sweeteners and citruses.

Looking again upon the sake industry, “Hathkoi, which means “first love”, is intended to break the prejudice that sake is only for the old generation. To attract young customers, this sake has low alcohol content and looks fresh, attracting university students or females. It tastes like non-alcoholic beverage, and it is in a 300-ml small white bottle with a pink label.” (Lee Y., Shin W. 2015). This example especially highlights that bringing in new consumers has always been an effort and a goal, even with the ancient sake spirit. The low-alcohol and fresh aesthetic would be interesting to mimic in the whisky industry, even as just a study of how a low-proof whisky spirit fares in the market. It could be that a whisky spirit low in alcohol may rival all the current low-alcohol beverages that are either overly sweet or too bitter. This may be something hard to master flavour wise, however, it may profit the whisky world greatly by bringing in new younger audiences who could be put off by the high alcohol content or the ethanol flavour. This would however contradict Scotland’s current laws surrounding whisky as it has a minimum abv of 40% in order to be considered Scottish single malt whisky. Altogether, maybe the laws simply don’t allow for a lower-proof alcoholic whisky demographic.

Maybe there is a reason why young adults might need to approach the flavour profiles of the raw spirit of whisky in different ways. In a study by Edmund T. Rolls a, Michele B. Kellerhals b and Thomas E. Nichols c (2015), they had set groups of 22-year-olds, 40-year-olds and finally, 60-year-olds. Each group was given orange soda, which all groups enjoyed. Next, the groups were given vegetable juice, which was largely disliked by the young and favoured by the elderly. Not only this, but monitoring their brain stimuli, the youths had greater negativity towards the blind tasting of the vegetable as a reaction symptom. This demonstrates the reaction of youthful tastebuds may have a greater adverse response to more harsh or unusual flavour profiles. Therefore, easing the tastebuds of new up- and- coming whisky drinkers is worth exploring.

2.7 How can colour theory be utilized in product design?

One method of attracting new untainted tastebuds to the whisky industry, that is often overlooked is the presentation of the bottle and the colour of the label. There are many studies into colour theory in terms of how the colours we perceive might affect what we end up tasting and feeling. Whisky marketing vastly contradicts this method of thinking, as the industry seems to have their own colour scheme agreed among distributors. Colour theory may, therefore, have to battle people's already implanted colour associations when corresponding to the whisky tasting profile. Lighter coloured labels tend to correspond with bourbon, and lighter casks of whisky with vanilla and sweeter notes. Red and deep colours tend to reflect a fruitier cask such as sherry which can often have oak or spiced notes. Finally, black labels seem to correspond with more peated malts with smoky flavour profiles. This colour scheme is not, however, universal, nor is it mandatory. However, it does create an expectation and association when bottle shopping. It would be interesting to see the effects of how the flavour is perceived or even enhanced if a more scientifically recognised colour associations fit the flavour profile of the whisky. A study done into the five main flavour groups and how different nations associate colours with the flavour profiles was carried out by the clever heads of Charles Spence, Xiaolang Wan, Andy Woods, Carlos Velasco, Jialin Deng, Jozef Youssef & Ophelia Deroy in 2015. From their research across countries, the colour black brought out more bitter notes, white salty, green brought out sour notes with orange a close second. Pink overwhelmingly brought out sweet notes, while the mysterious umami notes were a little inconclusive, with reds and brown colours in the lead, but not by much. These studies could be incredibly insightful if translated into packaging on whisky as they not only give consumers more association with what might be behind the label but could also be utilised to enhance specific flavour profiles and cover up any undesirable ones.

When it comes to the drink itself, there has been extensive studies on the colour of wine. These strong colour cues can even override the actual flavour of the food. "Studies on social drinkers, wine students and wine experts have found that adding an odourless, tasteless red dye to a white wine causes it to be described as a red wine." (Dr Caroline Wood, 2021), showing the preconceptions consumers have on flavours. One example of this in the whisky industry is Dalmore distillery which famously adds colouring to its whisky to make it appear darker than it truly is. This move from the distillery often turns noses up, however, research and evidence certainly coincide with their choice to do so. As the adage goes, 'we eat first with our eyes'.

2.8 How might existing examples of digital storytelling be improved by products/services currently looking to future the medium?

Sticking with the theme of eating (or drinking) wine with your eyes, the augmented reality that fell into the wine scene boomed. Various big names, with the most well known being 19 Crimes, jumped on the digital bandwagon. These companies took advantage of the digital storytelling options that can come with VR, with some brands speaking poetry, some advertising special releases, and others just taking advantage of the software to explain the heritage that

comes with the wine. 19 Crimes was particularly successful in this venture as, “This successful app has been downloaded more than a million times! Consequently, the brand’s revenue increased by 104% in the very first year of the app’s launch.” (Picelplex, 2020) back in 2020 alone. While 19 Crimes may have been first to the punch, most consumers do not want a different augmented reality app to take up storage in their cell phones for each brand they purchase or appreciate.

Augmented reality also hit the whisky scene in various distilleries, however in terms of storytelling, Old Pultney seems the most impressive. The App allows the users an option to learn about the whisky and the locals. It also creates an “immersive experience” with the sound of crashing waves, stories of those that were shaped by the sea, alongside various tasting notes. Overall, there is clearly a lot of work been put into the app, and the animation is impressive. It’s a pity they don’t advertise it anywhere, even on their packaging. The feature also requires another app, which is yet another drain on the mobile phone storage of the consumers mobile, for what may only be a one-time learning download (Old Pultney, 2021). This is a recurring trend with companies who introduce an augmented reality, and there is still no unifying app. A platform for A.R. would be a great marketing tool for the whisky trade to meet new audiences, as the clumsiness of having to download separate A.R. apps is currently an industry blind spot with the current system not being economical in terms of user’s phone memory capacity. During the app design for this project, unification, and the reason for it are in the future prospectus, however as is, due to lack of time, fundings and workforce, such a goal is out of reach for this particular project (‘Casked’) in its app design. On the other hand, it is an interesting goal for future projects, with augmented reality being a brand-new medium to explore.

The next logical step is an app which combines information. One example of an app that already led the charge of unifying whisky, is called Bevvv. The app scans various bottles and tracks down their location and origin to an impressive degree. Some rarer and niche whiskies, take a little longer to load, however eventually the app manages to give good information due seemingly to it being user submission generated. This user submission aspect allows it to keep up to date on any weird and wacky whiskies. The app also does this via recognition as opposed to QR codes which may not have as much longevity. QR codes, while being a handy tool, need to be updated and maintained with web domains etc. Recognition software on the other hand, seems to be a fairly reliable alternative. Bevvv has other features such as news forums and recommendations on whisky bottles. It even has a shop option, although there is not a great deal of choice, it provides good, clear specifications on the bottle you are buying (Bevvv, n.d.).

Another example is the ‘The Whisky Shop’ which offers whisky tasting kits in shops alongside various digital tastings calling them “Digital Drams”. The shop takes full advantage of zoom and webcam, meaning the tastings can happen worldwide so long as you have the tasting kit. This is certainly a novel idea for a gift, linking otherwise inaccessible people together (The Whisky Shop, n.d.).

2.9 Conclusion to Literature Review.

There are several influences from the literature review that require to be synthesised when approaching a design. The previous successes and failures of whisky designs, their ventures into digitalisation, and the story around the product all require careful analysis before embarking

ng on a design. This discovery period has branched out in several directions as we explore the use of technology, storytelling, and design. When we look at colour, it is interesting that scientific research is often at odds with the traditions and snobbery that infuse the whisky industry; while some distilleries take on scientific evidence, such as Dalmore, others are reluctant to follow. This is even more true with their use of technology as some distilleries choose not to create a website that reflects a digital era or look at some of the evolving innovations, such as A.R. What is evident, however, is that digitalisation and technology can attract new tech-savvy audiences, and we must explore this further as more people embrace digitalisation and technology.

3. Design Thinking

Moving on to the design face, there are two major artifacts to be designed.

- The Whisky – These are physical in nature and have labels and bottles designed and produced in a complete state.
- The App – A digital artifact which is under the name of 'Casked'. This digital artifact is a fully comprehensive prototype and is pitch ready.

Each of these artifacts have plenty of surrounding infrastructure, however they are the main production piece of this design exercise. Moving forward the discussion of the design approach, the design process and its measure of success will be discussed fully.

3.1 Design Thinking – Plans, Timelines and Approaches

So, down to business, Design. The approach to this project primarily consisted of Design and Thinking. This was ultimately because the project had an overall end goal of production in mind from the beginning, coinciding with many design thinking approaches. This Design Thinking process is split into six different steps. (IDEOU. N.D.)

- "Frame a Question—Identify a driving question that inspires others to search for creative solutions.
- Gather Inspiration—Inspire new thinking by discovering what people really need.
- Generate Ideas—Push past obvious solutions to get to breakthrough ideas.
- Make Ideas Tangible—Build rough prototypes to learn how to make ideas better.
- Test to Learn—Refine ideas by gathering feedback and experimenting forward.
- Share the Story—Craft a human story to inspire others toward action."

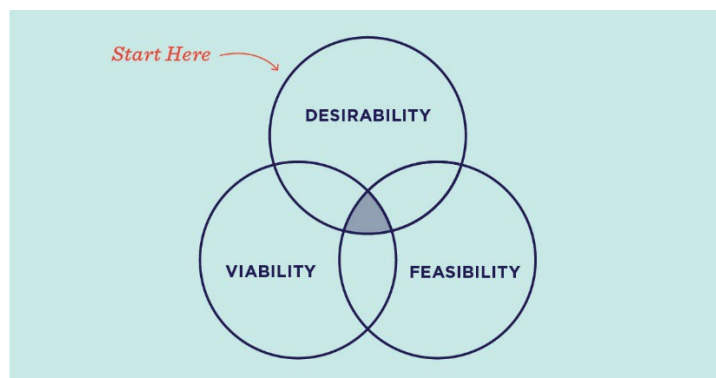
This is the structured framework that was followed throughout the entire design process and should be a relevant style of thinking throughout.



Design thinking steps (IDEOU. N.D.)

Design thinking is not just a process it’s a set of core values that guide on how to best start a project like this, by judging the value of the topics first step in designing a question. This mantra was constant companion throughout the entire design process. Given the broad nature of the Dunrobin project, it was instrumental for structuring critical thinking and directing it at the relevance within each section. This is best again summed up by the IDEOU gang (N.D.):

- “Desirability: What makes sense to people and for people?”
- “Feasibility: What is technically possible within the foreseeable future”.
- “Viability: What is likely to become part of a sustainable business model?”



Design values (IDEOU. N.D.)

These three mindset questions are not just guidelines, but they are pillars of the design process. It requires to keep in mind a coherent end product which has its user’s interactions built into the core of the design. Regarding coherency, the next chapters shall carefully document these designing factors in relation to the Dunrobin/Casked project, with focussed separation of designs ranging from the whisky designs and the app designs.

3.2 Design Thinking – Desirability - Whisky

The idea behind whisky flavours themselves is something that has evolved over the last year. Even though the flavours are entirely up to personal preference and irrelevant from a critical standpoint, the flavours were integral in boosting inspiration in the design while also giving each design point a flavour related background of storytelling and meaning from the get-go. These flavour profiles had specific notes to be achieved relevant to the overarching bottle design, and each required lengthy maturing time to achieve this. While the whisky brews, their bottling design needed to reflect these flavours and represent what was to go inside. These correlated with the 'desirability' of the design as they were two goals that needed to change to align with one another to produce the optimum experience for its consumers. The design ideas are as follows:

- First whisky – 'Gada' – represents the future and the positivity that the county of Sutherland can look forward to and celebrate.
- Second whisky – 'Witches Circle' – the Scottish myths that is often overlooked and should be learnt and spoken.
- Third whisky – 'Clearance' – the Sutherland history, the teaching behind them, and their relevance today. How can we learn from these gruesome Scottish wars, along with the bitter eviction of the highlanders?

The flavour goals are as follow:

- First whisky – 'Gada' – Apples and rosemary with a heavily peated base. This whisky should feel invigorating and set you up for a night of debauchery. The dram has sea salt that lingers along with its campfire smoke and viscous undertones.
- Second whisky – 'Witches Circle' – Herbs and spices. This dirty cauldron of roots and blasphemous herbs should be uplifted by the young whisky used, which hold these flavours in a centrepiece. This is underlined by a final punch of sweetness formed with the ginger wine casks used.
- Third Whisky – 'Clearance' – Leather, smoke, and aniseed. The design of this whisky looked to leave a bitter taste in your mouth, much like the highland clearances. The whisky experience may be controversial by some, with prominent notes of liquorice, surrounded by a heavily sherried fruity whisky, finalising in an umami source of bitter peat smoke.

These 'desirability's' were then brought together, with 'Gada' coinciding with the apple notes. This was mainly due to the inspiration of the name "Gala" which is a common apple and can correlate not only with the flavour profile but also the numerous gala week festivals that are hosted across Scotland, which bring village communities together in celebration. These gala week celebrations were likely originally harvest festivals; however, they now serve as a budget holiday for the working class with, Ross Anderson summing it up well in his 'National Museum Scotland' Blog: "There is a celebration held the length and breadth of Scotland that requires bunting all over the community, house decoration, floats and parades heading along the main street, brass bands, fancy dress, sports, the annual coronation ceremony and of course the ice cream." (Ross Anderson. 2018) This holiday is especially well-loved by locals of small villages in and around Dunrobin (the nearby village celebration being Golspie). While the apple-related fruit correlations seemed incredibly relevant due to the naming scheme, Gala Day is often locally abbreviated into Gada through local slang. Gada is therefore most cele

brated day of the week, which seemed fitting with the dram reflecting this with its rousing spirit.

Moving forward, the 'Witches Circle' celebrates myth and legend. The subject matter primarily consists of Scottish paganism; however, it bleeds into other cultures as well. The witch's circle is a stone circle that surrounds a tree, often correlated with a rowan tree and keeping spirits in said tree. This is backed up by Caroline Gladstone stating, "The rowan is seen as the tree of protection, particularly against witches and enchantment. It is often found near stone circles or ancient burial sites, as it was believed by the Druids to protect the spirits of the dead." (Caroline Gladstone. N.D.). This felt like an especially relevant theme when dealing with such a high-proof liquor. The connection between ghostly spirits and alcoholic spirits is interesting as a naming connection. The Witches Circle whisky looked to exemplify these themes further with the flavour, having ingredients such as wormwood used in the cask seasoning spirits (Montenegro Amaro). Wormwood is something associated with biblical Armageddon, this reinforces an anti-biblical theme, which paganism and witches can often reflect, being often antagonised by the church through history. "The third angel blew his trumpet, and a great star fell from heaven, blazing like a torch, and it fell on a third of the rivers and on the springs of water. The name of the star is Wormwood. A third of the waters became wormwood, and many people died from the water, because it had been made bitter" (Revelation 8:10-11) (openbible.info. N.D.)

'Clearance' was the initial inspiration for the subject matter and the first whisky planned. The flavour profile was based on a cocktail invented in Edinburgh called the Rapsallion. "Shepherd and Harper opened a bar in Edinburgh called The Hallion. There, they adjusted Harper's original recipe, adding a rinse of pastis to complement the cocktail's smokiness. They named the drink after the bar, Hallion, which is an old Scottish word for rascal, or rapsallion." (Tyler Zielinski. 2024). This cocktail brought sherry, Scottish peated whisky and finally, absinthe together into an umami delight. However, this twist on a Manhattan, could be refined into a less diluted form where the flavours may be savoured. This was done with 'Clearance' using carefully selected smoky malts, put into ex-Pedro Ximenez casks, and finished in absinthe casks. This dark, bitter amalgamation would hopefully be a lasting whisky that was thought about and stimulated discussion after tasted. The subject matter of highland clearances should never be handled delicately, and therefore, the whisky paired here hopefully brings it up as a talking piece by design and through discussion of flavours and their historic correlations.

Dunrobin and its seat at the time (the first duke of Sutherland George Granville Leveson Gower) helped fund the Highland clearance. This reflects its brand and is something to be handled with it being such a keynote in Dunrobin's history. Many Scots fled to Canada and other countries abroad to escape the clearances and still have resentment to this day, "In 1849, The Scotsman estimated that some twenty thousand Highlanders had left for Canada in that decade alone. Between 1846 and 1856, the whole of Scotland had lost more than fifty thousand people to British North America, with another sixteen thousand making an exodus for Australia." (Windsor Scottish Heritage. N.D.). This issue, according to the Dunrobin 'client', previously left potential designers stumped when dealing with the topic. The approach decided upon here, however, is to educate instead of milking for tragic history and easy sadness points. Dunrobin is a historic landmark which offers its castle as a museum for people to come and go, demonstrating the value the people at Dunrobin have in teaching people the history of Scotland, along with their dark heritage. These themes of educating around the clearances are specific in the 'Clearance' malt and its whisky design; however, the others look forward and do not dwell on the past. 'Witches Circle' looks to romanticise myth and 'Gada' looks to celebrate Scottish parties- the Ceilidh, and the tales that emerge in the aftermath. This design w

as done in tandem, specifically looking back to the study done by Yong-sook Lee and Woo-jin Shin (2015). In their study on rooted storytelling in sake, they highlighted the fact that these rooted storytelling ventures behind each brand would make sure the design would be solid and relatable to new audiences. These roots grant consumers a choice between three background storytelling ventures (the blends), tripling the odds that they might find extra meaning behind at least one of them.

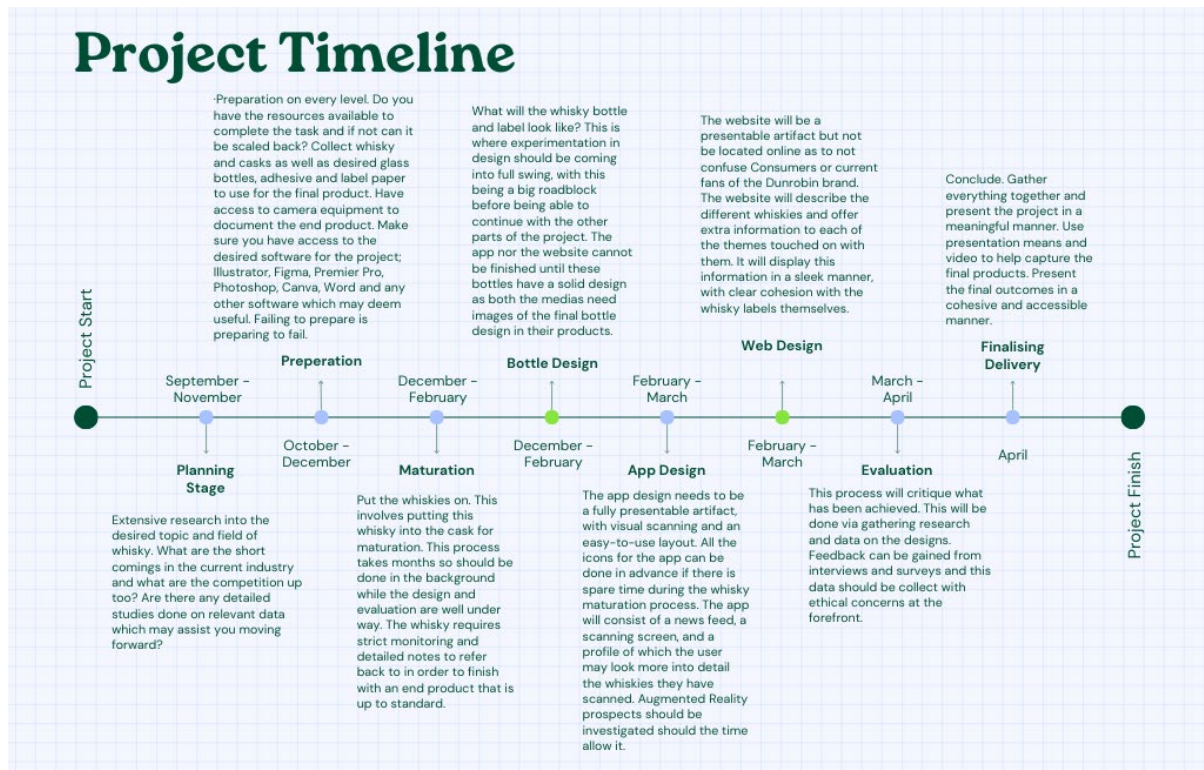
3.3 Design Thinking – Desirability – App

The App. This originally had a three-dimensional augmented reality whisky facts leaping from the screen. However, 'Desires' were introduced to correlate with the time limitations of the project. The app was therefore rethought, and scanning was introduced as its key feature. Scanning a whisky tells you its background bespoke to this whisky's bottling. The software relies on unique photographic recognition, which can track the specific bottling out of casks using handily subtle recognition, meaning it doesn't intrude on the design of the product itself with such visual recognition prompts as the QR code. These identifications would mean that every time this whisky was scanned via the 'Casked' app, the location on the device would act, by extension, the location of the whisky and that specific bottle number. This, as a result, acts as a form of anti-counterfeit measuring as it tracks specific bottlings through G.P.S. (Global Positioning System). This photo recognition works very similar to how the previously discussed 'Bevvvy' app works and is of comparable in style but offers more information to its users so long as distilleries take advantage of it.

Some of these additional experiences also demonstrate values in measuring ingredients. The app locates exactly what ingredients were used in the whiskey and indicates the location in a form of road map. It displays ingredients such as the whiskies barley, yeast, water, casks, bottling, the shop you bought the product from, where the label was last scanned and everything in-between. This opens itself up as a geographic tree in the form of a map. This map information will hopefully be presented to its users to make it look like a root system across Scotland, summoning imagery of family trees in the showcase of ingredients. The expression of information highlights the vast amount of work, locations and cultures which come together to make the final whisky product. The information can then help whisky drinkers connect better with their malts through additional knowledge which would normally be kept from them or presented in a way its hard to understand or remember. This move for the application was made once again due to the sake study done by Yong-sook Lee and Woo-jin Shin (2015) and was an effort in highlighting storytelling heritage design in a more understandable, and absorbable format for users.

3.4 Design Thinking – Feasibility

The feasibility of this project and the planning surrounding it start with detailed timetables and dates. This project requires a large amount of planning, and therefore, these dates matter; however, part of a project is being flexible. If issues arise (which they did), the ability to change structure is essential in delivering a final solid deliverable. Dates were therefore outlined in the initial planning stages; however, they were not entirely adhered to due to unforeseen events.



Timetable (Teague Hutchinson. Project Diary. 2024.)

3.5 Design Thinking – Viability

This project timeline, while keeping things vague in the sense of monthly estimations, proved itself to be something that was not strictly followed. The maturation process bled into March due to the whisky taking longer to mature, meaning there was less overall time to finalise the app. This lack of time meant that things such as augmented reality had to be sacrificed to still deliver a solid and complete product. Altogether, the initial mission was too ambitious and, while the end design result is solid, it would have been interesting to see what extra time may have given the final outcome.

The biggest overall hit in scheduling was the estimation to complete a full working website within the time period. This was altogether an overburden on expectations and wasn't a viable goal, even if things had gone right. The concepts for the piece made the brief appear clumsier, while also doubling the workload. This meant that it was dropped as to make sure the other digital artifacts were more refined.

This lack of time also bled considerably into data gathering, with only having a couple of weeks to gain data from survey work done with peers and therefore limited the number of surveys collected.

4. Design

Diaries were kept which captured, design thoughts and inspirations, over the course of the project. These diaries proved valuable when referring to the specific design choices that were made, along with the initial thoughts behind them. This, paired with the never-ending paper trail

ail of prototypes and first drafts, becomes a valuable tool in tracing back to the design process and, therefore, are referenced throughout.

The design process had four main sections to grapple with. The whisky liquid was the first and was meticulously planned out with flavour in mind from the start. This consisted mainly of picking out 12 different whisky distilleries to use in the final blends; however, was later resized down to 9 to keep down costs. This meant that an entire whisky blend was sacrificed as the project had initially planned to create four different whisky blends as opposed to three. In the end it worked better with the type of storytelling structure each of the blends had behind them. This sacrificial blend helped the narrative streamline itself and was necessary when looking at the workload. Another new whisky label would mean a massive shortage in time and an unrefined product, so it was a blessing in disguise.

The second design step came with the whisky labels. The labels were intended to be double-sided from the start due to the earlier 'Sailer Jerry' inspiration in the case studies. This meant that six different sides were to be designed, with an extra spanner in the works in the form of printing misalignment and glue, causing one side of the label's ink to leak. Adhesion was especially tricky as online most label hobbying enthusiasts recommended milk to stick on bottle labels. Due to the expiry date, this was avoided, and after experimenting with some higher end glues, the humble Prit stick came up on top in terms of stickiness as well as ink streaking (or lack thereof). On the other side of the label, the glass bottle was something to be figured out. How tall and what shape are key articles which needed to be planned out as it directly correlates to how well they stand out on a whisky shelf among other brands. Due to the wide and wrapping nature of the label design, the scale of whisky bottles was chosen to be a wider fit so it wouldn't wrap around itself. The bottles were chosen as they were also not too stubby and, therefore, wouldn't go unnoticed for being too small in stature to compensate for their wide nature.

The third hurdle in design came in the form of the app. Due to the app being a separate entity under the alias 'Casked', it was granted more creative freedom to stand out independently. This app is intended to be very simple in nature and understandable and user friendly for everyone using it but specifically with a younger audience. As a result, a significant inspiration was 'Snapchat' in its user interface, as the app is very relevant to a younger audience. "Snapchat's target audience skews younger. Gen Z makes up 49.6 million of Snapchat's US users, followed by millennials (31.5 million), Gen X (8.1 million), and baby boomers (2.6 million), per our forecast. Snapchat had the highest share of Gen Z users in the US compared with other major digital platforms." (Sarah Lebow. 2024) According to analytics on Snapchat's target audience. It stands to reason that a similar structure would be easy to navigate for the young audience of Snapchat users specifically. The app, therefore, would be sectioned only a few times, with three main bodies, being a newsfeed, a scanner and a profile which showed off any previous whiskies that had been scanned. While the app incorporated augmented reality initially, the loss of this service didn't render the app useless, overall, it made things more streamlined in structure. This loss of A.R. could also present itself as a goal for the future.

4.1 Design – Reasoning – Dunrobin Distillery

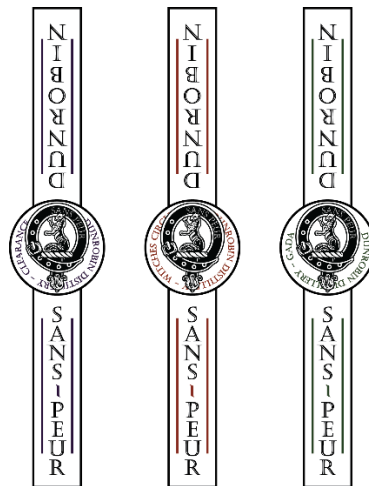
What would whisky produced from Dunrobin look like? A few design choices were made apparent straight away. One essential was the logo. The obvious decision was to use the Sutherland coat of arms. This iconic wildcat crest is heavily associated as a sigil of Dunrobin as the estate is under Sutherland lordship and has been for generations. This coat of arms needed

to be re-illustrated to not look out of place within the rest of the whisky label. As a result, a couple of designs were mocked up. The final one used featured, an inky illustrative approach.



Reworked Sutherland Coat of Arms, and Dunrobin Distilleries Logo.

This more modern version of the logo was the first step made in designing the labels. The emblem also triggered the font, with “Sans Peur” being the Sutherland motto – meaning “without fear” in French. This decision in font came to be the formal ‘Castellar’ which was a font reused through most of the project and was used to reinforce the idea that Dunrobin is long established. The motto also offered itself as a slogan for the whisky and was reused in the whisky seals. “I have designed the whisky top seal also which helps fill some space on the bottle and acts as a mechanism to tell if the whisky has been tampered with.” (Teague Hutchinson. Project Diary, 2024.). This addition to the whisky label meant that there was a method of telling if the product had been tampered with before purchase in the form of a paper labelling seal. This also added to the product’s design as the upper portions would look unfinished without. The seals were marked again with the coat of arms on top, reminiscent of a form of stamp of approval. This stamping gave imagery of wax sealants on letters which was used to in keep the integrity of letters through use of Sigel or coat of arms impression in the wax. The correlation between letter wax sealants and the tampering paper sealant with the coat of arms stamp may, therefore, give customers extra piece of mind that their whisky has received no tampering with the imagery of this wildcat acting as a ‘seal of approval’.



Dunrobin Whisky Top Labels.

It was decided also to make each topper unique to each whisky, to make the overall design look complete. This came via extra branding on the top and a slight deviation in the colour with each topper, differentiated each brand. While this was a subtle change, the end product design was deemed effective in making them distinguishable from one another but not too different to seem unrelated.

Under the seals, the corks were painted black with the use of acrylic paints to help resemble the black outlining of the labels and logo. Black was the, only colour which transcended each of the three blends (except for the colour of the paper used in the white space of the graphic). This use of black acrylic paint was also used in a shock-absorbing cork bottoms to the bottle. The cork base not only ties the bottle together artistically, having a black top and bottom layout, it also directs the eye in-between, towards the label. In addition, it also has a utilitarian purpose, in the form of a coaster. The cork acts as an extra source of protection for the glass bottle. This design mimics the early spoken Longmorn whisky, which uses leather bottoms for some of their whiskies. The cork acts similarly in muffling sound from while having addition from a storytelling perspective. Given these whiskies were designed to be a personal favourite flavour profile of the blender, echoing the design of Longmorn, and a nod to it being the favourite dram of its master distiller, it felt very fitting. Lastly an argument could be made in having an extra source of storytelling marketing behind this cork bottom. Certain folk in the Scottish Highlands often believe that tapping the glass of a high spirit dram keeps the luck in the cup. The cork, therefore, acts as a method of keeping the luck from pouring out the bottom of the bottle. This idea of having a cheers superstition is not unique to Scottish mythology. The German tradition of eye contact when cheering (and other parts of Europe) is a custom meant to ward off poor sexual performance. "Yet that is a superstition, not a reason. "Look me in the eye or you will get seven years of bad sex"" (the local. 2019). These superstitions give a new meaning to the cork bottoms, as they not only protect the glass bottling, but also remind its consumers to protect themselves from ill-advised sexual encounters while enhancing the use of good toasting etiquette, weaving in the practical, the mythological and a bit of fun.

This cork bottom may also be removed for consumers to use as a coaster to avoid watermarks on tables, as discussed previously in Longmorn's design. While in its current form it doesn't have any eye-catching Dunrobin Distillery branding, that would come later with more resources available to the development.

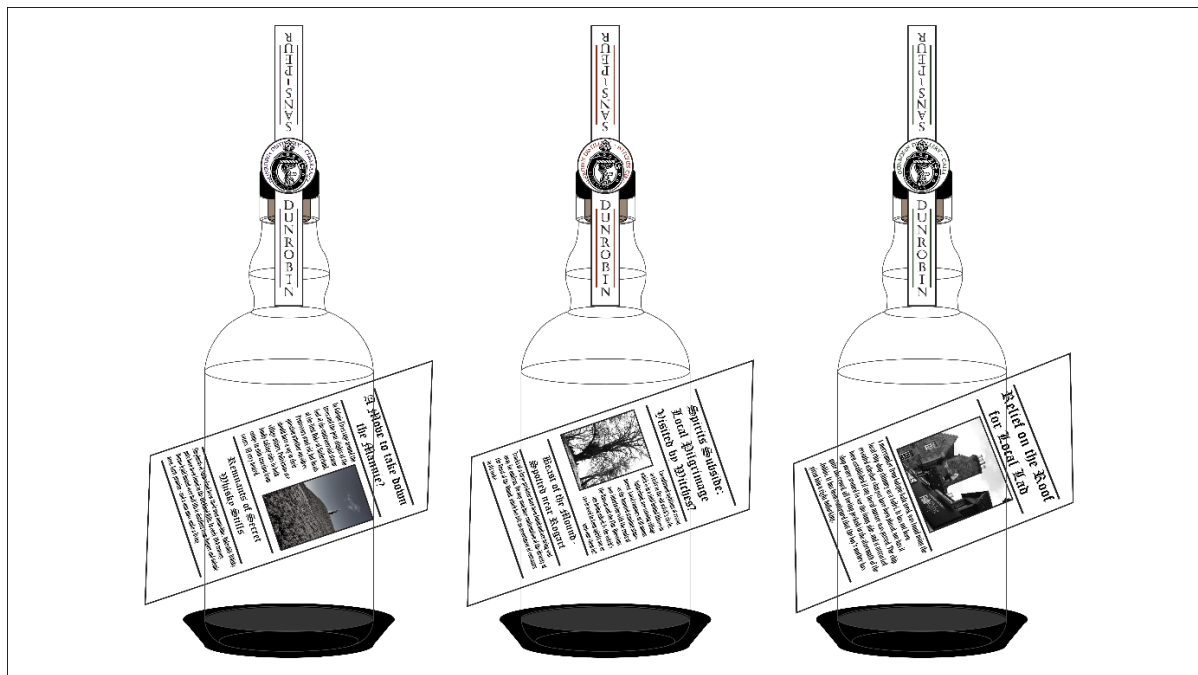


Dunrobin Whisky Cork Bottoms.

The labelling's main body took full advantage of the already established themes thus far. The belt imagery, from the logo, was directly carried into the final design of the product. This helped add coherency through the whisky design while also offering some eye-catching colour. These belts also helped frame the labelling's main body of information, something that was especially relevant due to the nature of its diagonal design. This added boarder stopped the eye wondering and acted as a leading arrow towards the relevant information.

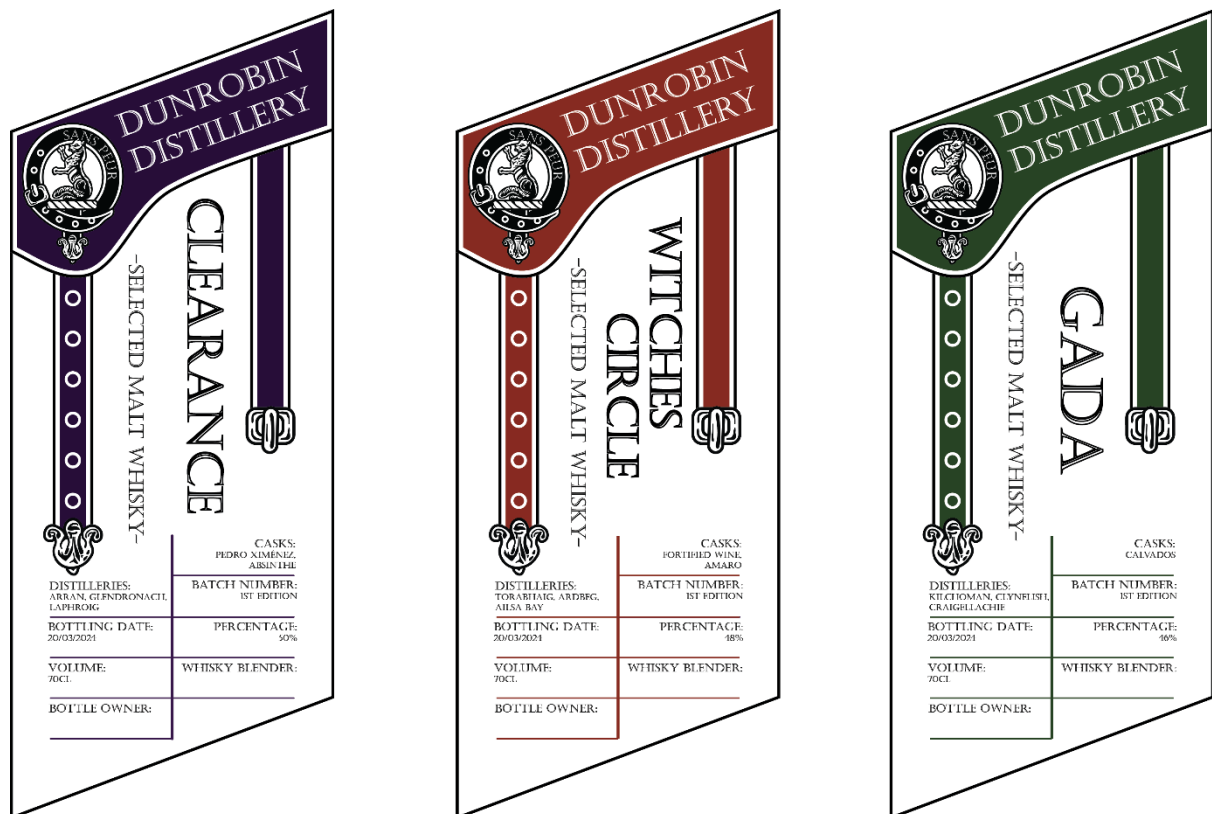


Dunrobin Whisky Front Bottle Design.



Dunrobin Whisky Back Bottle Design.

The reason for this diagonal design was for the sake of imagery. Because of the themes of 'Clearance' and eviction, the diagonal design was symbolic of an eviction notice stamp which are often red and diagonal. This coincided with the overall inspiration for the label, being of old legal style documentation. These overarching themes of law documents and eviction notices worked together, embedding themselves into the end product. This formal style of document is apparent in the text information at the bottom of the label, which details keynotes related to the liquid inside. This informative approach helps consumers know more about the whisky and appreciates the discerning mind of the whisky connoisseur, displaying important information and not attempting to hide information as many whisky labels often do. Another inspiration for this style of labelling came from hand filled casks which often have this style of contract labelling. The product is then finalised by offering a signature, which not only adds to its contract style of labelling, but also adds to the personalisation of the product for the customer. This signing idea was done with a couple of the previous studies in mind. The first of which being the envisionment of ownership that it may convey done by Joann Peck, & Suzanne B. Shu. (2009) when discussing handling potential buys. Writing a name on something may even hammer this point as there is no bigger claim to ownership then it is having your initials /signature. The second was the study on the act of personal sentiment done with pandora. This act of writing your own name makes this whisky yours and therefore allows you the ability to project your own meaning into the bottle to increase the sentimental value of the dram. (Dias, P., & Cavalheiro, R. 2022).



Final Whisky Labels.

The back of the label presented itself as a blank space available as a possible subject for design. As discussed, when referring to the design approach taken by ‘Sailer Jerry’ rum illustrations, the back of a label provides space that may offer an additional canvas for storytelling in design. In the Dunrobin design, this was taken advantage of via the use of newspaper articles. These articles were based on historic news snippets and then rewritten into a unique dialogue that reflected the whisky it was based upon. The articles each gave extra incentive to drink the whisky and not leave it gathering dust on the shelf. It adds as an extra source of reward to the consumer, with each dram revealing a new line of dialogue. The idea behind these was that they would have unique newspaper articles corresponding to the three separate whisky themes. These articles would need to be constantly refreshed to encourage users to collect each of the different labels as a form of marketing-based gamification. The current article headlines and their corresponding whisky are as follows:

- Gada – “Relief on the Roof for Local Lad”.
- Witches Circle – “Spirits Subside: Local Pilgrimage Visited by Witches?” with the sub heading “Beast of the Mound- Spotted near Rogart”.
- Clearance – “A Move to take down the Mannie?” with the sub heading “Remnants of Secret Whisky Stills”.

Relief on the Roof for Local Lad



A merrymaker from Golspie Gala week was found using the local chip shop chimney as a toilet. It has not been revealed whether charges have been placed, nor has it been established if any faecal matter was passed. The chip shop owner seemed to see the funny side, and it attracted quite the crowd, all feeling peckish in the aftermath of the Jobbie. It has been confirmed that the boy's mother has given him a right bollocking.

Spirits Subside: Local Pilgrimage Visited by Witches?



Unconfirmed sightings of recent activity in the old witch's circle, which is in a field behind Rhives in Sutherland, are causing village unrest. Local rumours of ill omens as the haunted standing stones now intertwine with the roots of the Rowan and the Elm. Questions are being asked: Is the witch's circle used to keep spirits out or welcome them in?

Beast of the Mound - Spotted near Rogart

Tracks of a large predator have been found and are being sent away for analysis. We may soon have confirmation of the identity of the Beast of the Mound, which has left an assortment of carcasses in its wake.

A Move to take down the Mannie?

In Golspie Fires rage around the trees and the peat alights at the foot of the controversial statue of the first Duke of Sutherland. Protestors want rid, but locals question whether outsiders should have a say in their village affairs. Politicians are loudly taking sides in both camps to gain traction from voters. All very heated.



Remnants of Secret Whisky Stills

Shepherds of Sutherland brew their own moonshine. Makeshift Whisky pots have been found in the Highland Hills. In early 19th century, Dornoch jail hosted over half illicit distillers from Rogart and Golspie area. Early promise - and a man must make a living.

Final Whisky Labels – Back Newsprint



Final Whiskies

4.2 Design – Reasoning – Gada

'Gada', along with the other whiskies, seemed to evolve with the project. The design process began with cask seasoning. This is the act of taking a whisky cask (in this case, a quarter 3 - litre cask was used) and seasoning the wood of the cask with a spirit, wine or beer by soaking its inside with the liquid and leaving it for a period of time (in this case 10 days) so it soaks into the wood. This liquid is then emptied or bottled. Gada's cask first had the cask smoked in rosemary. This rosemary was local to Edinburgh and, as a result, left a salty campfire-smoked essence in the oak casks used. The seasoning was then encouraged via the use of "Pochle" which is an Edinburgh-based apple spirit calvados. Pochle was picked as the brand was local and sustainable in their approach, using locally sourced apples, which would otherwise be discarded or left to waste if not for the spirit production. Pochle were also kind enough to donate a bottle for this production, which was greatly appreciated. The apple spirit paired well with the rosemary smoke and resonated with the name Gada. Three single malts were selected, and the flavour developed creating Gada. "This whisky will be made up of three whiskies; Kilchoman Machir Bay (the base spirit) at 1 litre, Clynelish 14 at 500ml and Craig

ellachie 13 at 500ml. Kilchoman will offer a peaty note to work alongside the rosemary smoked casks. Kilchoman Machir Bay specifically was picked as the bourbon casks meant that it wouldn't overshadow the calvados spirit used to season the projects casks. Clynelish 14 will offer a viscous waxy note which will help give the end product texture which is necessary due to the light properties that the calvados casks will offer. Craigellachie was chosen due to its apple and tobacco notes which will complement the apple spirit calvados rosemary smoked casks." (Teague Hutchinson. Project Diary. 2024). Therefore, the end product worked closely together in thought and flavour profile, with each ingredient having an intended outcome in the desired flavour.

Moving on, the colour choice was something heavily deliberated with heavy thought back to the studies done by Charles Spence, Xiaoang Wan, Andy Woods, Carlos Velasco, Jialin Deng, Jozef Youssef & Ophelia Deroy (2015) in relation to colour theory and how they reflect flavour. In the end, the colour chosen was green as it not only suited the apple notes but also the prior colour theory in its association with sour. Sour apple green is a standard already established profiling used in sour apple sweets worldwide. This may help the whisky seem more approachable to newcomers due to the existing impressions people may associate with the colour scheme.



Gada – Final Whisky

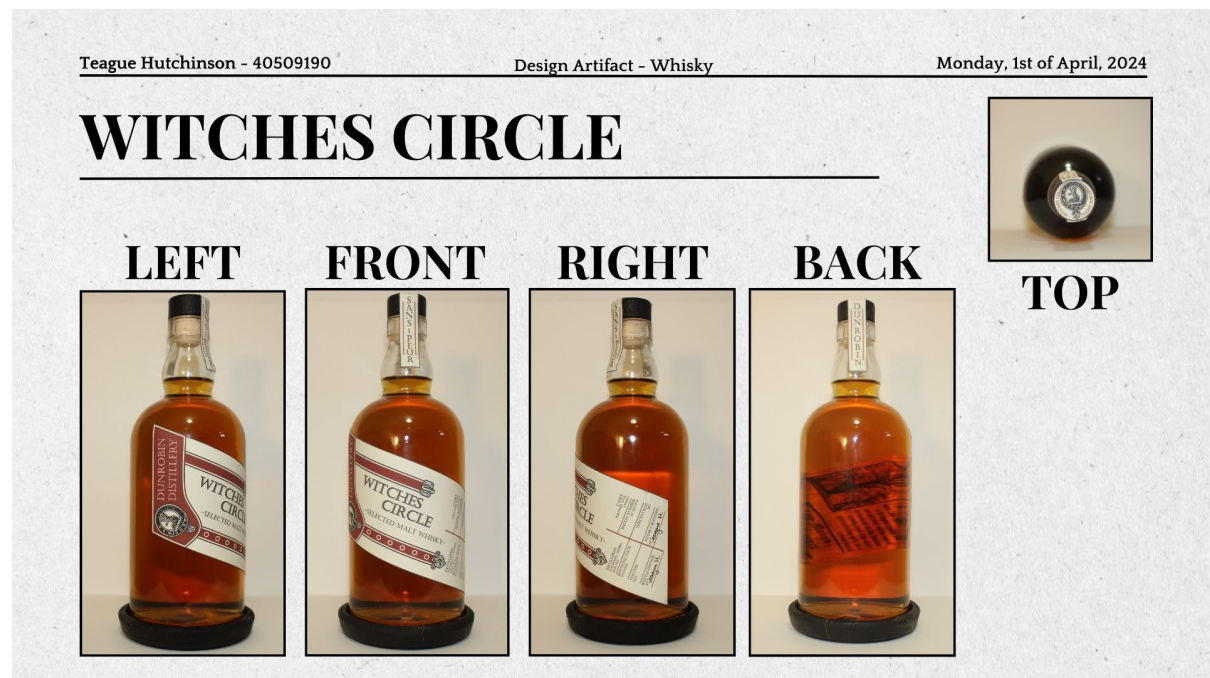
4.3 Design – Reasoning – Witches Circle

The whisky 'Witches Circle' also experienced much evolution over the design process, and probably the most out of the three. The old name of the whisky – "Beast of the Mound" was based on an urban legend surrounding a black panther-like creature patrolling the Scottish Highlands. The echoes of this name can be seen in the newspaper article labelling, as well as the whisky malts which were selected to be used. Ardbeg wee beastie was one of the three which was intended to be a nod towards the black cat which stalked the hills. Clynelish 14 was also used in initial testing, with its wild cat logo for a similar reason (Clynelish borders Dunrobin and is based in Sutherland, meaning the wildcat imagery are comparable). The Clynelish 14 was however, not used as it wasn't working with the flavour profile and there was a switch

h of whisky's when the new title of 'Witches Circle' was decided upon. With this new title, young whiskies were selected with Ardbeg wee beastie remaining in the mix. The final line up was discussed in detailed notes: "The whisky itself is made up of Torabhaigh (the base spirit) at 1 litre, Ailsa Bay at 500ml and Ardbeg Wee Beastie 5 year old at 500ml. Each of these whiskies are young and peated, with the young new make spirit aiming to uplift a large amount of the more herbal natures of the casks used. The young spirit also helps in making sure the peaty notes aren't lost behind all the other bold flavours. Torabhaigh has a lot of brine and salt to it, sounded by peaty undertones. This makes it quite a good simple stock to work off with a sweet cask as its flavours contrast the sweeter liquors used to season the cask with its more savoury notes. Ailsa Bay is quite a light sweet ethanol forward dram which will work in the background and lift the other flavours. Ardbeg will have a similar job, only on a more savoury note, working well with the ginger due to its fiery nature." (Teague Hutchinson. Project Diary. 2024).

The sharp flavours need a catalyst to work, and this comes in the form of cask seasoning. The casks were seasoned in a fortified wine (ginger wine specifically) and finished in Montenegro Amaro. This combination offered a sweet and herbal combination to work alongside the uplifted flavour profile of the younger single malts. This worked much akin to how acids and vinegars are used in cooking, as the ethanol properties of the whisky enhance the sweet flavours used in the casks while contrasting each other. They each stifle one another's sharp properties and give a boost to the flavour notes which went previously unnoticed.

These flavours then needed to be assigned a colour for the label. While the flavours were sharp in some places, a certain sweetness shone through. This then coincided with the recent colour theory studies showing sweet to overwhelmingly be associated with pink. Therefore, a pinkish light red was chosen, which not only furthered the sweetness connotations in an eye-catching way but also gave a nod back to the Witches Circle, of stone circles surrounding rowan trees. Rowan trees have a recognisable colour of berry, which, are a soft red bordering on pink. The rowan berry bringing things full circle.



Witches Circle – Final Whisky

4.4 Design – Reasoning – Clearance

The final of the three. “Clearance” as discussed earlier, was inspired by the rapsallion cocktail. While researching the casking, it emerged Pedro Ximenes sherry casks are common, but absinthe casks were hard to find. The only one was with ‘Lost Loch Spirits, Singular Series, Whisky Absinthe Cask Finish’ of which had a single written article surrounding it and no buyer reviews at the time of writing (March 2024). The article discussing the dram also advised users to sprinkle demerara sugar into the whisky, promoting concerns that the whisky would not taste like whisky after too much time in the absinthe maturation cask (Inverurie Whisky Shop. 2020). This analysis was correct, as after testing, the whisky would only spend two days in this absinthe cask to avoid the flavour overwhelming the whisky. The end product was mainly matured in the sweet sherry cask, with half of the liquid placed in the absinthe cask for two days and then returned to the contrasting sherry- flavoured cask to finish its maturation. These paired flavours created an evolving pallet which remained with drinkers after consumption, providing an umami sensation. The casks were then contrasted with the selected single malts: “The blended whisky was made up of Machrie Moore (the base spirit) at 1 litre, Laphroaig Sherry Cask at 500ml and Glendronach Cask Strength at 500ml. The casks used here will be done in Pedro Ximenez sherry for around 4 weeks. After 4 weeks, half the liquid will be drained and stuck into Absinthe seasoned casks for anywhere between a day and a week and should be monitored and pulled accordingly. This absinthe flavour should not be the centre piece flavour but instead add an umami note which rounds off the sweetness from the sherry. The PX sherry will add a sweet reasoned spicey note which will be rounded off by the absinthe forward absinthe. These flavours will complement the particular whiskies chosen here, with Machrie Moore being a solid stock with its smoky salty notes which will complement the liquorice notes with salted liquorice being a common sweetie. This smoky whisky paired with the PX sherry, along with the absinthe spell all the ingredients for the cocktail; a “rapsallion”. This cocktail was invented in Edinburgh, being a riff on a smoky whisky old fashioned, with PX sherry being the sweetener and the absinthe being the balancing agent (which is traditionally done with a glass rinse). Moving forward the Laphroaig Sherry Cask offers more grounded sherry notes as these have already been matured with the Laphroaig spirit for up to 10 years. Finally, the Glendronach Cask Strength is used as the stronger the spirit means the more the whisky will absorb flavours from the cask. Glendronach Cask Strength is also matured in a variety of sherries and ports, giving the whisky much more depth.” (Teague Hutchison. Project Diary. 2024).

The flavour profile took a different approach from the others in terms of colour theory. The research dictated that a large margin of people associates umami flavours with brown. This however seemed like an awkward choice as the colour of the whisky itself was a deep dark brownish red, and as the ‘Witches Circle’ was already assigned with a light red, a dark purple blue was picked. This was largely due to the smell of the whisky as it had a hint of liquorice due to the absinthe influence. A colour like that of liquorice seemed more fitting, as it not only resembled the contents of the bottle, but also was distinguishable enough when placed alongside its sibling blends.

CLEARANCE

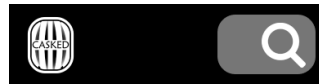


Clearance – Final Whisky

4.5 Design – Reasoning – App Design

The app required a carefully thought-out approach. The design needed to be minimal and manageable system, providing a modern look to attract a young demographic while not alienating an older demographic. It also had an alternative name to the 'Dunrobin Distillery' identifying as 'Casked'. This was to encourage other distilleries to use the app and populate it with their own content. This then makes use of photo recognition to scan whisky and add them to your own personal library. When designing the app, it was a constant tight rope between being independent enough to make it approachable for other distilleries, and for them not feel as though they are joining a west wing of Dunrobin. Primarily, it, needed to be thoughtful, and to work well in digitising Dunrobin Distilleries labels. Hopefully, this design coherency was achieved. However, more research is necessary for a fuller understanding.

Starting off with the home screen, the app displays an idea for a comprehensive newsfeed, meaning that users upon opening the app are automatically met with content. This feed, could offer everything touched upon with Dunrobin thus far, not only limiting itself to whisky but transcending that into its interesting storytelling anecdote. This would altogether increase content and therefore make the app more engageable for consumers.



Whisky News



Dunrobin whisky tastings are well underway, with positive feedback, thus far. Reviews incoming before the whisky hits the market.

Dunrobin Whisky has been bottled, the whiskies blends and are under the names of: Gada, Witches Circle and Clearance.



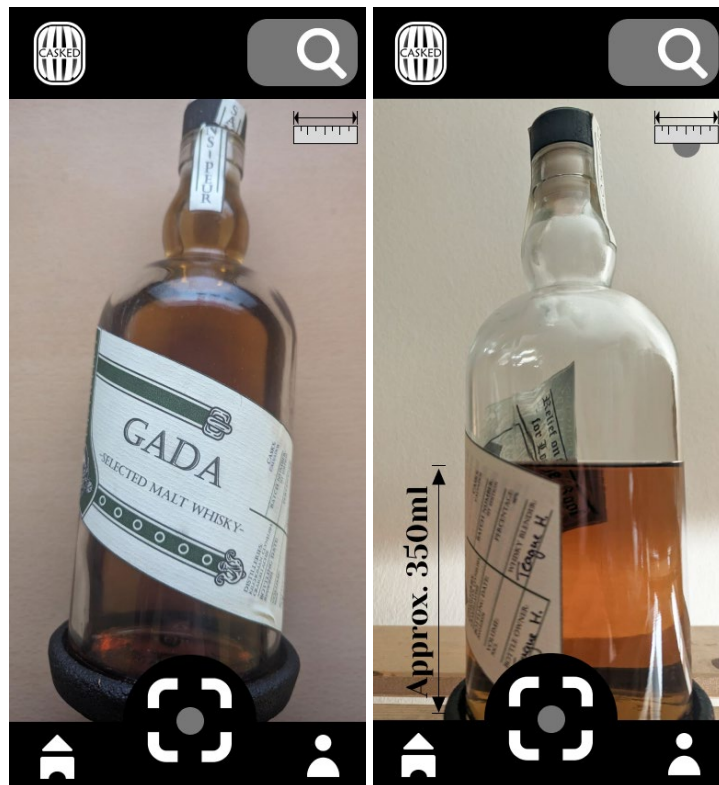
New things coming from Dunrobin Distillery as rumours of their blends are bearing fruits. Not long until production is under way.

Rumours of a new whisky under Dunrobin name



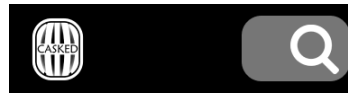
Casked – Home News Feed

Moving on from this, it has a simple yet effective camera app, which holds some extra utility tools. The camera not only scans the whiskies acting as a hyperlink to new information, but also helps measure how much liquid is left in the whisky via estimation. This may seem like a little thing, however “Casked” as a brand looks to leave the impression on its users that it holds a database on whisky (which it wishes to with all distilleries). This automatic scanning of bottles and estimation of content grants the app an air of confidence in knowledge if the contents are accurate, therefore gaining user trust.



Casked - Scanner and Measuring

The final page of the systems lies withing profiles. This area allows users to access their pre viously scanned items. Altogether while this seems simple on paper, this is where the app op ens up. Upon scanning a whisky, the app will award its users with information they may alter natively not possess. This gives the app a source of gamification, as it awards its users for fi nding whisky in the real world, by giving them access to information which alternatively woul d be locked off when rare whiskies are found and scanned.



My Whiskies

**DUNROBIN
DISTILLERY – GADA**
- CASKS: Smoked
rosemary, Calvados
- BLEND: Kilchoman,
Clynelish, Craigallachie,
- BOTTLING: 1st Edition.
- DATE BOTTLED:
20/03/24
- PERCENTAGE: 46%
- BLENDER: Teague
Hutchinson.



**DUNROBIN
DISTILLERY –
WITCHES CIRCLE**
- CASKS: Fortified
Wine, Amaro
- BLEND: Torabhaig,
Ailsa Bay, Ardbeg
- BOTTLING: 1st
Edition.
- DATE BOTTLED:
20/03/24
- PERCENTAGE: 48%
- BLENDER: Teague
Hutchinson.



Casked - Main Profile



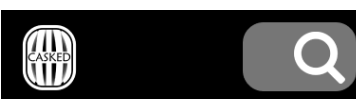
My Whiskies

DUNROBIN DISTILLERY – GADA



MAP

- CASKS: Smoked rosemary,
Calvados
- BLEND: Kilchoman, Clynelish,
Craigallachie.
- BOTTLING: 1st Edition.
- DATE BOTTLED: 20/03/24
- PERCENTAGE: 46%
- BLENDER: Teague Hutchinson.



My Whiskies

DUNROBIN DISTILLERY – WITCHES CICLE



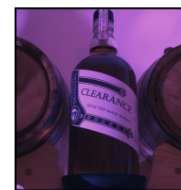
MAP

- CASKS: Fortified Wine, Amaro
- BLEND: Torabhaig, Ailsa Bay,
Ardbeg
- BOTTLING: 1st Edition.
- DATE BOTTLED: 20/03/24
- PERCENTAGE: 48%
- BLENDER: Teague Hutchinson.



My Whiskies

DUNROBIN DISTILLERY – CLEARANCE



MAP

- CASKS: Pedro Ximénez, Absinthe
- BLEND: Arran, Glendronach,
Laphroig
- BOTTLING: 1st Edition.
- DATE BOTTLED: 20/03/24
- PERCENTAGE: 48%
- BLENDER: Teague Hutchinson.



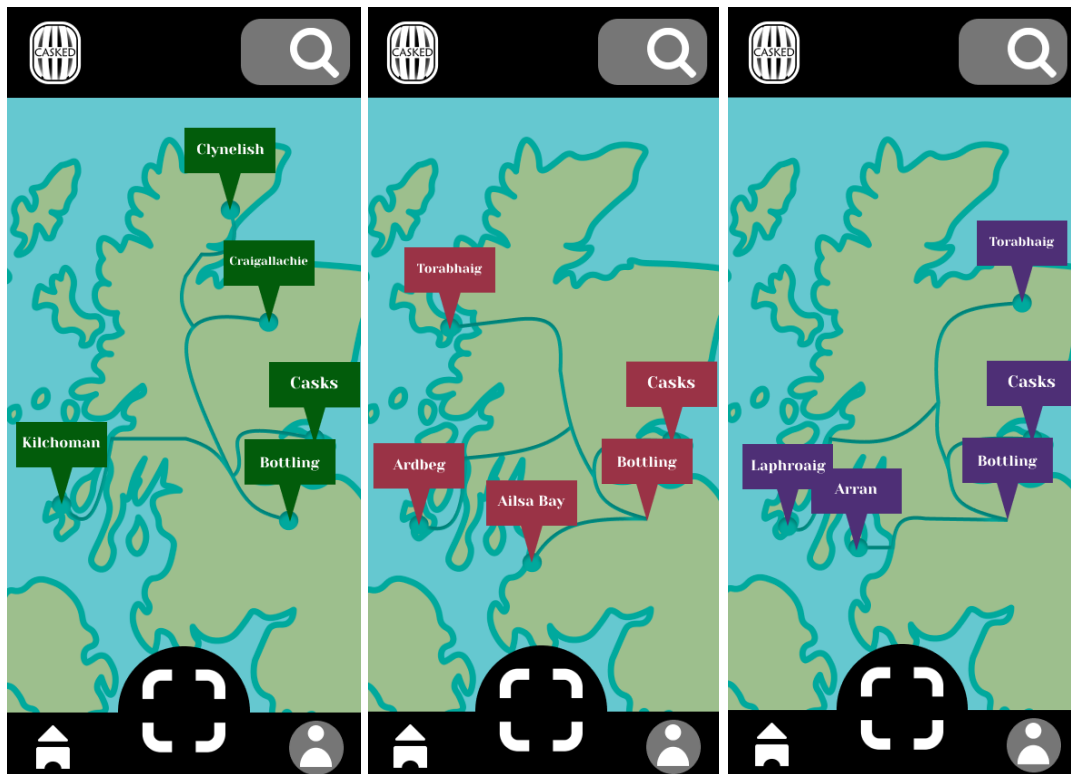
Casked – Profile – Extra Information

Looking at the details that make up the app, a simple yet eye-catching logo was designed with thought to how it would appear on a phone's app screen. The fear of falling into some nook, four swipes into the home screen, surrounded by apps such as Flappy Birds, Duolingo or the restaurant app you had to download in order to eat, is indeed the greatest driving force for any icon design. As a result, a black and white scheme was used which looked to contrast with the other more colourful designs on your app wall. This design was aimed toward the symbolism of whisky barrels for obvious reasons, with the word "Casked" being the steel ring tying the barrel together.



Casked - Logo

Moving on from iconography, the mapping used in the app looked to be simple yet recognisable. There are so many iconic maps designs out there, so how would Casked set itself apart? The current black- and -white approach to the app seemed like the answer, and ultimately, this was contrasted with illustrative sketches of land. The colourful style pops more so when surrounded by the formal black and white background and with the contrasting elements, helps the consumer feel like they have discovered a hidden feature or setting in the app. This hiddenness is again reiterated as the map can only be accessed via scanning of whiskies through your profile, meaning that the whisky would have to be seen or collected in order to unlock the knowledge.

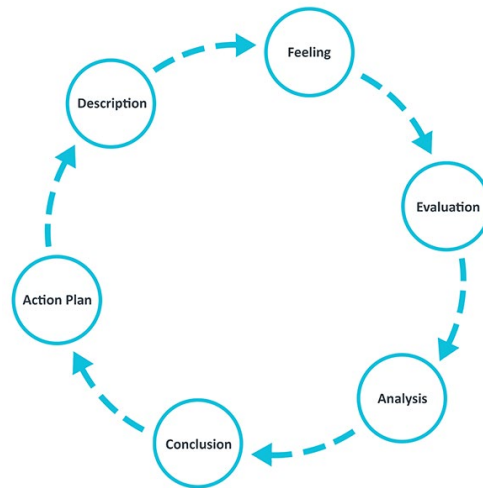


Casked Maps Section – Correlated to Gade, Witches Circle and Clearance

5. Evaluation – Base

The main approach used for evaluation was with the 'Gibbs' Reflective Cycle. This offered a basic framework to present and analyse data, allowing to learn from things that both went to plan as well as against it. The 'Gibbs' Reflective Cycle consists of 6 major steps:

- Description
- Feelings
- Evaluation
- Analysis
- Conclusion
- Action plan



Gibbs Reflective Cycle (The University of Edinburgh. N.D.)

With this in mind the project, to reiterate, was to investigate how a whisky brand may move to bring in new consumers and all the marketing surrounding such a task. The project then used this information to design a product with a solid digital infrastructure to encourage this marketing, bring in new consumers and meet new audiences. The end product itself should be able to stand on its own; however, when coupled with its app-based cousin it creates a user experience which enhances the original in a meaningful and productive way. The project had some caveats, however, with calls to be eco-friendly in place during the process. This end design would then be studied and judged as to the competence of its task.

5.1 Evaluation – Research and Ethics

One evaluation method used was in research which was discussed earlier in the design thinking stage. Two types of surveys were collected in the form of whisky tastings. The first was done blind, with users only being given the name of the whisky and the percentage. This acted as a good, grounded sampling, which offered less inherent visual conflicts for data collection of flavour profiles, allowing the sample to be unadulterated. This blind data was then compared to a tasting in which the tasters received a full explanation of the project's journey in the hope of building flavour profiles along with distillery connection and design comment. The two comparative data which was collected in the study were directed toward the whisky blends specifically, while the app and evaluated internally.

The ethics of this project were deemed a priority and current data collection conduct was strictly followed. Everyone doing the research was informed that the project would be entirely anonymous and that if they could redact comments at any time between now and the project's end date. The users were given a detailed written overview of the study, and each user signed a document indicating their willingness to contribute. Finally, the study made sure that alcohol laws were kept in place, with every subject being over 18 years old and providing I.D. if the 'ask 25' measures were deemed appropriate. A personal license holder helped with the tasting survey and oversaw the study, while whisky was given to survey tasters at a measure of 15ml and limited to three drams per person to discourage overindulgence.

Ethical concerns and questions have also been approved by program leaders and advice has been given where applicable.

5.2 Evaluation – Blind Tastings

The blind tastings were an interesting read. When designing the study, a big assumption was that the feedback for the blind tastings would come back with blander tasting notes. This, however, was not the case, with people tasting everything from “New York, New York, it’s a wonderful town” to “playdough”. The tasting notes seemed to be more chaotic and, therefore, offered an interesting outside perspective. Going through the whisky’s common themes, however the study was limited to ten, due to the amount of whisky that was available.

Question 1:

Do you consider yourself a whisky drinker?

50% said “yes”, 20% “occasionally” and 30% “no”.

Question 2:

What are some of the more exciting parts of the whisky industry which bring in new consumers?

Partying. Cool bottle design.	Stories, flavours, history – love the smell, packaging taste and effect.
A great career – good teams/conditions/chance to travel the world – like minded people/I like tasting different whiskies. The whisky family.	Its quite exciting to shot. Feels like I’m breaking the rules.
Flavour and history	N/A
For me whisky has always been associated with place. More people visiting distilleries could bring new customers.	Good quality ingredients. Tradition. Flavour. Welcoming distilleries. Fair pricing.
Auctions and investment purposes.	N/A

Question 3:

Do you consider digitisation to be valuable for the whisky industry to bring in new consumers and if so, can you think of any standout digital procedures companies adopt?

Diageo special release QR codes.	I think it would be good to have a QR code leading to a visual – “stories” or people enjoying whisky – nothing complicated if your drinking you don’t want to read – pictures of ‘notes’. Cool people drinking – music associations.
QR codes leading to interesting facts and tasting notes.	I like my local bars social media right now. A lot of slow-motion splashes!
Don’t think so, whisky probably sells for itself.	QR codes
N/A	Making people think they are where the whisky is distilled could help those unable to travel to Scotland.

Yes something along the same lines as 19 crimes.	Yes, Johnny walker blue label, Jude Law, Daniel Craig, Brand Building that goes viral and oozes sophistication but also feels aspirational.
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Question 4:

Tasting notes – Gada

Lemon. Doctors waiting room.	Citrus notes or fruity, smoky, sweeter a bit salty
Initial smoked berries/oranges slight liquorice. Leaves caramel / salted on the tongue.	Lemon and citrus with salt.
Lovely colour, not too dark nice pleasant taste	Immediate smoke on the nose bit of acetone. Big hit on fruit taste. Nail varnish. Apples pears.
Light, slightly citrus, mild leathering	Fruity and zesty. Smoky undertones.
Sweet fruity, cream soda, smoky, soapy, citrus	Sweet, smokey, frankincense, incense, iron bru! Or American cream soda. Ginger

Tasting notes – Witches Circle

Nutty strawberry nose/nail varnish fruit big hit of pepper taste/ cream, / lemonade lingering tropical fruity/banana	Toffee. Light. Good for the beginning of a night.
Tobacco, plasterboard- half finished house somewhere you shouldn't be. Vanilla.	A bit bitter this one for me, plenty sharp
Coffee fruit nose of tropical fruit ginger and pepper on the tongue, hint of smoke grilled bacon.	I thought it was light however the more I drink it becomes more complex. Thought I tasted ginger however my tastebuds are struggling.
Slight smokiness. Zingy.? Something conflicting?	Coffee, dark fruits, smokey again
Herbal, savoury, sweet, spice, earthy, lead pencil soapy, more interesting than number 3.	Honey, peat, chewy, carbolic soap

Tasting notes – Clearance

Blackcurrant, liquorice, orange zest, playdough	Anise, woody, PVA glue, smoke
Liquorice, treacle	Wax polish. Musky. Linseed flax. Treacle. Malt cake. Dark fruit
Loved this one, fruity medium	Immediate liquorice Very strong taste of liquorice, water opens up a leathery old jacket, quite sweet.
Liquorice, seaweed, edgy, New York New York it's a wonderful town. Cigars. Steam engine.	Mint fresh start. Salt. Feels burny afterwards.

Liquorice! Huge hit on the tongue. Moss/ Lemon cream / straw / seaweed	Leather and mud. Recognize something but can't place it. Really like this whisky but. It's like Chard onay salt and vinegar crisps. Tasty but addictive
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Question 5

Colour Scheme – From flavour alone, would you allocate each of these whiskies with a specific colour in mind?

Gada

Purple	Orange
Gold/Yellows	Yellow/Golden
Yellow	Green
Pink	Yellow – soft feeling
Orange	Yellow?

Witches Circle

Amber	Green
Bright red	Grey
Red	Blue
Mushroom	Lilac. Summery.
Yellow	Black?

Clearance

Tabacco	Brown
Scab reds/Blacks	Plumb
Pink	Orange
Electric blue	Red. Fire.
Smoky grey/blue	Brown. Deep bluish muddy green. Like a boot washed ashore covered in seaweed.

5.3 Evaluation – Full Experience Tastings

During this tasting, the survey tasters were offered a full explanation behind the whisky and project process as well as its design choices. Tasting notes were, however, avoided, and instead, only the ingredients were listed during the presentation, along with the storytelling and heritage behind each whisky. These notes were interesting as they displayed more structured patterns in their flavour descriptions. This study was presented to 10 people.

Question 1:

Do You consider yourself a whisky drinker?

40% of users answered "Occasionally", 60% "Yes" and 0% answered "No".

Question 2:

What are some of the more exciting parts of the whisky industry which might bring in new consumers?

Flavour, distillery heritage and new progressive distilleries that have opened in recent years with fresh approaches to whisky production.	Distillery heritage and history, whisky history and production techniques are key interests.
The different flavours that people are able to create on the whisky I think that is something so attractive.	Each distillery has their own unique story, it's a sharing experience.
The history and the versatility of the product can be made to any flavour profile.	I wasn't a fan of whisky when I first tried it. It was only after speaking to a barman who knew his stuff and talked me through the different flavour profiles and different distilleries I became interested. Flavour and distillery heritage (as well as bar people's knowledge and passion) played a huge part in bringing me in.
Exploring different flavours.	Sustainability, flavours
History and mythos	Taste and alcoholic content

Question 3

Do you consider digitisation to be valuable for the whisky industry to bring in new consumers and if so, can you think of any standout digital procedures companies adopt?

I think it helps increase accessibility to whiskies for people that don't have the utility to jump down to a whisky bar and to spend lots of money to educate themselves.	Having a social media is a great way of advertising whisky to a younger audience.
I think digitisation is essential for any industry to bring in new consumers. An app that can compare different whiskies and their flavour profiles based on what you're drinking would be a great thing for people like myself who enjoy whisky but don't have any knowledge of the industry would be great.	Yes, as whisky is often considered as an old man drink, so people are scared of it.
Definitely, it can reach a broader audience across the world, including scanning on bottles to link to their distilleries or surrounding stories.	I think that QR are something really easy to send people straight to the history of the brand, whisky events or wherever.
Main digitisation advantages to me would be access to comprehensive information about whiskies on market and creating a central learning centre. Material including whisky production, history and auxiliary information relating to finishing casks etc.	Yes. QR codes on bottles leading to websites with information on that particular bottling helps new consumers learn about a distillery/whisky in general! This is a procedure adopted by younger distilleries such as Ardnamurchan and Kilchoman in recent years.
N/A	Don't like QR codes but don't mind a good website.

Question 4

Tasting notes – Gada

Apples, Grapefruit, pears	Stewed apple, Christmas spice, liquorice, pastry, rosemary
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Fresh apple, lemongrass, peppery, spicy smoke finish, sour taste, citrus back of tongue	Sweet and fruity notes as soon as you have on your mouth but finish with a smooth smoky feeling that go perfect to balance.
Toffee apple nose, pear, super smooth, chewy and light smoke. Really well rounded.	Ripe sweet apple, caramel, touch of smoke
Beautiful, mellow and easy to drink. Would happily whip a bottle of this out in any social gathering. My favourite of the 3 easily.	Apples, Salty, Rosemary. Smokey.
Crisp apple after spiced and warm salt water.	Apples as the main flavour, followed by a savoury salted note. Finally a dirty smoke, kind of like a campfire.

Tasting notes – Witches Circle

Great into peated whiskies – gentle smoke herby-thyme-y	Sweet, plums, herbs
Spearmint, melon, apple, lemon, anis, cloves, thyme, burnt heather	Grass, brown sugar, bouquet garni
Herby and minty. My second favourite of the three. Slightly harder on the throat than the first one but more than tolerable.	Oily, dry fruits, smooth smoke
Smoked meat, BBQ, fruity and herby smoke.	The sweet and smoky really intense but feel so amazing. It's like caramelized sugar in a barbeque
Leather on the nose, sweet smoky syrup, bonfire, burnt oak, toffee.	Herby smoke. Thought it tasted thin at first however it broadened out and kept going. Don't normally like a whisky of this style, however this was tasty and grew on me the more I thought about it. First sip was booze heavy, second got sweeter?

Tasting notes – Clearance

Is like drinking an anise candy. Soft to start punch to finish.	Liquorice? Heavy herbal notes on the nose, but super sherry mouthful. Amazing!
Fiery, herbaceous, anis, heavy smoke, liquorish.	Quite a "bitter anise" after taste. Difficult for me to say anymore on this as I hate liquorice and that seemed to be the main flavour I was getting.
Liquorice all sorts, plums	Liquorice, plum, sea salt, spice, blackcurrant
Liquorice, sweet, peaty	Liquorice/Anise on the nose, warm liquorice oils, grassy absinthe hints.
Sweet, rich, fruity – cherries, sherry and aniseed. Yummy, liquorice, tasty.	A lot of liquorice. Maybe a burst of cherry? Really stays with you. Favourite of the three. It's weird though.

Question 5:

Do you find storytelling to be an effective method in enhancing the whisky experience or are

there other more effect methods for you as a consumer to establish a connection to a whisky and or the branding/distillery behind it?

Storytelling helps build a relationship with the whisky	Yes it related to the ideas- the names of the bottles, the tasting notes and the labels.
Yes, storytelling enhances the experience, romanticises the process in an engaging way.	N/A
100% more effective. I would never have gotten into whisky if it wasn't for a barman talking about the stories and tall tales behind the distillery or the names of the whisky.	Yes because it makes an instant association with the product
With the amount of whiskies which are saturating the market its 100% the main tool to hook you into a particular whisky distillery	The storytelling is really good to know about what you have in front of you. As well, introduce you and make you feel like part of everything.
Storytelling helps build a relationship with whisky	N/A

Question 6

Does the brand effectively showcase their ideals in teaching consumers of the heritage of Durnrobin Castle and the history surrounding Sutherland and if not, are there any design choices to properly display these ideals.

Yes it reflects on the past with respect in a way that's respectful of the turmoil the people of Sutherland have experienced and acknowledges the celebrations that developed from this.	Yes definitely. The label is really good and interesting for bottles
Yes! Its local to the blender so more of a connection. The whiskies link with the stories with style and context.	Yes, it makes the brand more personal and approachable.
It does a great job! Would be handy if there was a QR code on the bottle.	N/A
Yes it relates to the ideas- the names of the bottles, the tasting notes, the labels	I believe the heritage is showcased well without reliving the darker side of history. Other ideas to showcase the heritage could possibly be geological heritage.
Yes! I think that acknowledging certain parts of whisky history is important, we learn, acknowledge and grow!	N/A

5.4 Data Digestion

During the blind tasting:

- Gada – 60% of people tastes citrus and lemon, while only 10% tasting the apple from the calvados casks.
- Witches Circle – 20% of users tasted coffee. It is unknown as to whether there were other correlations.
- Clearance – 50% of users tasted liquorice.

During the full tasting:

- Gada – 90% mentioned apples. Only 10% mentioned citrus, however it came in the form of grapefruit, which itself gave different, more acidic connotations. 80% also referred to pears and apples on the opening lines, highlighting itself as a key flavour profile.
- Witches Circle – 70% of tasters mentioned sweet and smoky flavour profiles as a key note when tasting. 50% of users mentioned herbs and spices as a unique flavour profile.
- Clearance – liquorice or aniseed were mentioned by 100% of drinkers during this final study.

As the tasting demonstration never mentioned flavour profiles, but only history and storytelling behind Dunrobin, it meant that flavours were not influenced via hard flavour notes. This meant that taste was based on the spirit and the packaging participants were viewing. The survey samplers who viewed the packaging and its heritage, all had much more of a common flavour profile, with higher percentages, more in line with the initial flavour aims for the whisky bottles. This demonstrates the value of a clear marketing label which may influence flavour. This when paired with the study by Edmund T. Rolls ^a, Michele B. Kellerhals ^b and Thomas E. Nichols ^c (2015), surrounding young tastebuds, could work together to make a more approachable dram for newcomers. Pairing clever use of storytelling could streamline tastebuds and make sure that this use of marketing be mastered to indoctrinate its consumers to taste approachable spirits in a specific way. Another question entirely begs, is this kind of influence even ethical?

During the colour theory segment, there were a couple of coalitions:

- Gada – 70% said golden/oranges/yellows. The largest of which being yellows with 50%.
- Witches Circle – No similar colours
- Clearance – No similar colours unless you apply for colourful language which could allow a 30% of brown.

When going into this study, the thoughts of colour seemed so clear in the design process that it was thought as gospel. These exterior views are great anchors in judging the validity of the colours chosen, especially with 'Gada' where yellows and golds were so much more prominent.

5.5 Evaluation – Digital Artifacts

Participants were asked about what digital options they prefer. A whopping 70% of overall users (both studies were asked this question) mentioned QR codes. This maybe highlights the fact that QR codes may not in fact be irrelevant and while there are other options, the humble QR code still has a fan base. Every participant that mentioned QR was also positive about the system.

5.6 Evaluation – Storytelling

The research showed that overwhelmingly, people were fans of storytelling-based design. This displayed itself in many forms, going from bartender chats surrounding whisky to the distilleries themselves. It was described in many survey forms; however, conveyed the similar themes and meanings throughout. That of learning, talking and being with one another over a shared dram. The best method in storytelling's case in relevance to bring in new audiences, is to simply keep doing it. It works.

5.7 Evaluation – Timing

The initial project plans were overly ambitious. The prospect of designing an entire brand which explores A.R. capabilities and photo recognition along with battling the infinite war on counterfeit whisky was an unrealistic goal to set. The project did however reduce scope while delivering a solid whisky with related digital products. While there were frustrations with the app design, these goals can always be achieved in future and is something to be learnt from when embarking on new projects.

The website that was planned also presented itself as a huge task that was disbanded without issue fortunately.

6. Conclusion – Initial Findings

The subject matter of getting new demographics into the whisky industry is something that various distilleries have embarked on for decades. While there have always been a range of different approaches, it becomes a line to be balanced in how to approach the task without alienating their current target demographic. The project here, therefore, looked for a feasible tightrope line in which to both not discourage already affiliated whisky fans, but also render itself as being more approachable to new demographics. The approach to do this consisted of presenting itself in more of a teaching roll to its consumers, through clever use of design. This design can either be discarded or read into, giving people the option, however, the approach encourages users to look closer as it piggy backs off the already established viewpoint that teaching, learning and storytelling can be interesting to every demographic no matter the age or background.

The study also looked to monitor different technological approaches in specifically reaching new audiences in the whisky industry. A big step companies were making was largely with the use of QR codes, however, more advanced digital options are now becoming more accessible as well as being more user friendly. With the use of photo recognition becoming more viable as an option, not just from a technological standpoint; with its insecurity, as well as its unfamiliarity with some users, but also from a design perspective as a QR code can often look out of place and ruin the art and thought that went into the rest of the bottle design. This use of photo recognition, while simple, offers an opening door for apps or web presences to take advantage of through its use being tied to hyperlinks to more information surrounding products. This digital practice therefore can tie together the physical and digital world seamlessly, acting as a bridge between the two.

6.1 Conclusion – Example Piece Design

An example piece was drawn up in correlation to the prior study, looking to bridge this gap between the digital and physical world. Three whiskies were produced as this example of a physical artifact, with extensive use of storytelling formatted in the design of the bottling of each. Each bottling looked to reach new audiences without disregarding any established whisky drinkers. It did so by offering consumers extra information surrounding the product through design anecdote pieces related to each of their bottling and packaging, giving extra incentive for consumers to look favourably towards this product. These design choices aim to encourage word of mouth recommendation through this use of its storytelling marketing. The whisky produced took advantage of the past successes and mistakes of competitive brands, in its making, delivering a solid and coherent project which would also work as a solid physical catalyst for its digital counterparts to expand upon. These digital artifacts offered more unseen information surrounding each whisky and its parent distillery. One of said digital artefacts came in the form of an app, which gave an option to the tech enthusiastic whisky drinkers to expand upon their knowledge of whisky, via, scanning of labels and bottles which these consumers had seen in the wild. This information would come in the form of easy-to-understand text, mapping, and timelines, while also looking at the prospects that A.R. may offer to digital storytelling in future. The app would rely on distilleries and app designers to work together in relaying this information and populating the app, presenting itself as a platform and tool for distilleries to expand into new audiences.

6.2 Conclusion – Findings and Futures

While this project not only aimed to highlight the possible means of expanding into new audiences, it also aimed to offer something of its own to the subject. It did so by use of studies conducted surrounding the digital and physical artifacts discussed. These artifacts offered themselves as an unknown new brand to encourage unbiased feedback. The study was constructive in its information, offering outcomes such as how flavours can be encouraged through use of design. The study underlined that packaging, information and storytelling can guide users to desired flavours and without the approach, meant users flavour profiles were more erratic. The study also outlined that most users favourably looked at the digital prospects that may be adopted by whisky companies in marketing their product. This highlighted the necessity that digital options offered to the whisky industry, as the technological tools available could also enhance the storytelling options available. This was especially relevant as storytelling marketing was praised especially in the research as a means of how survey takers got into whisky in the first place. Due to sampling requirements of this study, (the whisky amount) only a small study sample was affordable. Even with this small sample size, some interesting data came out the other side and some judgement towards Dunrobin distillery, with the overall opinion being extremely positive with next to no negative comments— however, maybe that was due to some tasty free whisky.

Therefore, taking things forward, it would be interesting to see how future studies adopt what was learnt here and expand upon it, where a wider study may be adopted, and one with more whisky to be enjoyed. The future study looks to expand on this knowledge via the private bottling market, where it will aim to work with independent established distilleries in bottling a uniquely branded labelling. This new branding, paired alongside with an extensive digital presence that expands on the “Casked” design study, would fully envision the augmented reality shortcomings which were not met in this project, along with any other technologies which present themselves in the ever-evolving digital market. Having a new brand and digital marketi

ng may hinder certain associations consumers already have towards distilleries or provenances, while also offering more liquid available for the study, under this new private bottling name. The venture would also gain the opportunity to acknowledge how private bottling companies are perceived within the industry, and whether they are a viable market, something which some survey takers during the current study highlighted as being over saturated. This future brief could ultimately offer an opposing view to this particular study, allowing for interesting comparison between heritage and established storytelling-based marketing and a new modern private bottling, free from the associations consumers may hold over distilleries and their background.

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8. Appendices

8.1 Project Diary

Honours Project Work Diary

Teague Hutchinson – 40509190

The following is transcribed from a written weekly report for the duration of the honours project. It was decided to use pen and paper as it meant it was more accessible and has been found to be a personal method of easily getting notes down on paper before they are forgotten. This proved especially relevant given the long length of time this Diary would be kept, meaning it was especially relevant that there was something to hand which could reliably take down weekly notes. As a result of the longevity the diary was in use, the language tone often changes with sometimes appearing more relaxed and other times appearing formal.

Trimester 1

Week 1 - 04/08 – 13/08

To do: Read Available briefs.

Completed: Bought stationary. Wasn't much yet on Moodle but read what I could.

Week 2 - 11/08 – 17/08

To do: Get your head around the brief! What's your subject? What is your title?

Completed:

Thought of a good title; "Perception of whisky and its relevance on taste". Excited to see how a digital presence may be effect flavour profiles. Planning on doing tastings with one being blind, and later comparing the flavour profile of each to check the tasting differences.

Week 3 - 18/08 – 24/08

To do: A lot of exterior work with different modules. You should make sure you are ready for the scoping document, thinking forward to start essay plans and gaining any necessary references. Also, main priority should be to finish the learning contract of course!

Completed:

The previous title was deemed hard to talk about by supervisor during interviews. Flavour seemed hard to measure? Shame as I was personally more excited about it. As a result, the title has changed to "Perception of whisky and its relevance in bringing in new audiences." This doesn't seem to flow off the tongue as well and I am personally less passionate about the outcome of the study. The learning contract was approved and finished.

Week 4 - 25/08 – 01/09

To do: Work on other modules. Get them out the way so you have plenty of time to work on Honours project after.

Completed:

A lot of work on other projects. Wanted to get as much of this out the way so I have plenty of time during later down the line.

Week 5 - 02/09 – 08/09

To do: Find as many interesting sources related to the project as possible. Fun stuff that might be interesting to talk about: colour theory and how it effects taste, Artificial Reality in design, storytelling through product design. Investigate the app Mendeley as it's supposed to be for collecting notes and sources.

Completed:

Found a lot of sources and useful articles. Hopefully mastered Mendeley. Did a bit of work on other projects.

Week 6 - 09/09 – 15/09

To do: Work on referencing again. Make sure you have plenty of sources so there is a solid foundation ready for the scoping document.

Completed:

Made a plan! Did a bit for other projects also. Not as much work on sources as I would have liked however it seems like I have a solid amount to make a good start.

Week 7 - 16/09 – 22/09

To do:

Source casks from bars and set a timetable for how long the whisky will take and how long before its ready. Find a venue that could be good for whisky tastings that's suitable and a safe environment for gathering feedback. Talk to whisky representatives about maybe getting some free whisky for the project.

Completed:

Productive week, feel like I got a lot done. Found 2 casks from bars which have been borrowed as long as they get repaired as they are currently leaking and pretty battered. No start on scoping documents.

Week 8 - 23/09 – 29/09

To do: Scoping document! Get it started!

Completed:

Mendeley updated, and all my sources disappeared into the void. Gutted. Have since found some new sources and articles to talk about but could find many of the originals. A lot of work on other modules have gotten out of the way. Decided to go down a shift at work as feeling a bit overwhelmed with the amount of time spending working along with studies. Either I am short on time studying or I am burnt out from the week of working/university work. The shift changes should come into effect in the coming week.

Week 9 - 30/09 – 05/10

To Do:

Hassle whisky representatives for some free whisky. Get a big chunk into the scoping document.

Completed:

Scoping Document is officially underway and past the planning stage! Genuinely having fun writing about some of it and doesn't feel like work at all. Found another whisky cask from a local bar to use. That brings the total up to 3 casks all together. Was given a bottle of free Kilchoman to use in the whisky blends. A productive week!

Week 10 - 06/10 – 12/10

To Do:

Write what you can on the scoping document. A lot of deadlines are approaching however so make sure you have them under control.

Completed:

Got a bit finished with the scoping document but still a lot to go. Working a lot on other projects.

Week 11 - 13/10 – 19/10

To do:

Finish the other deadlines! Make sure they are done and then work on the scoping document when all is over.

Completed:

Working a lot on different deadline. Still got a bit to go on the scoping document. Don't think I will have much time for it to be reviewed and edited.

Week 12 - 20/10 – 26/10

To Do:

Finish the scoping document! Edit it up! Send the final document to mother/supervisor for additional advice.

Completed:

Finished the scoping document with a couple of days to spare. Not quite as much time left to edit, however. Sent the final document to my supervisor for additional advice, however all I had time for was a couple of last-minute changes which is frustrating. Submitted the final scoping document and awaiting feedback.

Christmas break.

To Do:

Over the next couple of months work on design. Put the whisky on as soon as you collect all the whisky together. While the whisky is on it will take at least 6 weeks for the whisky to mature so make sure to keep dates on when they go in the casks and when they will need bottled. While the whisky is on, use this time to work on design starting on the whisky labels. Once the labels are finished, you will have plenty of media options for the app and or website.

Completed:

got a few more whisky bottles over the festive period and actually ended up buying a cask as one of the whisky casks may not come out of it in the best conditions as there are plans to use smoked rosemary, so may be heavily charred. Still don't have all the whiskies necessary and only going to produce 3 whisky blends instead of 4 due to costs. Found a retailer which buy whisky at a discounted rate that are allowing me to order through their account which is saving a lot of money.

Never got as much done on design as I would like due to working full time over the festive period for personal financial needs. Have started rough sketches but not happy with any of them. One of the whiskies has been named "Clearance" as a nod to the highland clearances, one whisky is "Gala" as a nod to Scottish tradition of gala week festivals, lastly the final whisky is to be called "Beast of the mound" as a nod to Scottish folklore. Each of the labels will talk about specific history and heritage surrounding each of the connotations surrounding the names.

Decided on working on an app which demonstrates A.R. possibilities. The app also could do a lot of the stuff proposed in the scoping document such as add to the storytelling as well as be a

form of tracing bottles through visual recognition. The app will just be a proposition, however.

If I find myself ahead of schedule, options to whip up a quick website to display the brand, however I do not want to get in trouble with Dunrobin and mislead people into thinking that whisky production has started there. Could just do a proposition design for that too?

Trimester 2

Week 1 – 22/01 – 28/01

To Do:

Go back to part time work so I can ready myself to hit the honours project running. Catch up on briefs and absorb any material available on Moodle. Catch up on design and get the whisky in the casks and designs underway.

Completed:

Short staffing at work so struggling to find time on university work. Whisky has been ordered and will arrive within the next week or two. The casks are being seasoned, one with Pedro Ximenez sherry, one with ginger wine, one with calvados (smoked in sherry). They will need at least a week spent in the casks. The final cask is filled with holes and is currently being submerged in water in the hopes for closing the gaps. Using Bees wax in on the barrels also. Watched the briefing. A little overwhelmed but optimistic.

Week 2 – 29/01 – 04/02

To do:

Save any empty bottles from recycling at work and clean up for labelling. See what kind of bottles might work and what size or shade you are aiming for. Experiment with different designs with quick cut outs stuck on whisky. Think about what extra design options might work alongside the label. Bracelet going round the bottle neck? A coaster to wrap around the bottom?

Completed:

Checked to see how expensive it is to get 3D modelled bottles made into glass. Very expensive and out of budget. Few paper sketches of the design. Quite like having the label be at an angle? It shows the connotations with eviction which is a big theme with one of the whiskies being called "clearance". The label could be separate from the bottle and stuck on by the customer themselves to make it more interactive? Half of the whisky arrived. The remaining whisky should come next week, due to supplier issues.

Week 3 – 05/02 – 11/02

To do:

Empty the seasoning on the casks. Make sure everything is prepared for the whisky to go on. Decide exactly which whiskies work with one another and which ones don't. The blends should have 3 malts each and each be distinct and different. Experiment using water droppers to drop around 1-2ml of the blend into the blends to see as to whether the flavour profile works. Get the whiskies on and document everything.

Completed:

Whiskies arrived and went on Wednesday the 7th at 4pm. Each whisky has different needs so document everything and make sure everything goes to plan.

- Whisky bottling number 1 - "Gada" – the name has changed to "Gala" as it is a local colloquialism combining the words gala and day. It's supposed to highlight the most important day of a gala week. This whisky's packaging will show off the modern village festivals that happen yearly, normally during the summer months. As it is a spirit that is supposed to resemble celebration, the flavour profile will aim to be refreshing and bracing. This whisky will be made up of free whiskies; Kilchoman Machir Bay (the base spirit) at 1 litre, Clynelish 14 at 500ml and Craigellachie 13 at 500ml. Kilchoman Machir Bay will offer a peaty note to work alongside the rosemary smoked casks. Kilchoman Machir Bay specifically was picked as the bourbon casks meant that it wouldn't overshadow the calvados spirit used to season the projects casks. Clynelish 14 will offer a viscous waxy

note which will help give the end product texture which is necessary due to the light properties that the calvados casks will offer. Craigellachie was chosen due to its apple and tobacco notes which will complement the apple spirit calvados rosemary smoked casks. The labelling will be green in colour to show the resemblance with apples. According to the colour theory studies covered in the scoping document, green is associated with sourness, and while this won't be a sour whisky, sourness is often associated with apples. Apples are a big theme as it correlates well with the labelling as "gala apples" are a particular type of common apples that were most likely used in the brand of calvados used for the casks (a local brand named Pogle donated by "the Black Cat" bar in Edinburgh). This again ties into the name of the whisky being "Gada". The end product will be 46% in alcohol content unless any future adjustments are made.

- Whisky bottling number 2 - "Witches circle" – This whisky was originally called "Beast of the mound". The name was changed as the original was too long and clunky. The original name referred to a local legend surrounding a big black cat which roams the hills surrounding the highlands, including the Dunrobin Estate. This may still be talked

d about in the marketing of the whisky as the whisky aims to highlight Scottish urban legends in its branding. The “witches circle” was chosen as it relates to standing stones which are found surrounding Rowan trees specifically. These stones are supposed to keep spirits in the trees, something which felt especially relevant due to the high spirit alcohol content that whisky possesses. This whisky as a result will feature a light red in the label to correlate to the rowan berry. The flavour profile of the whisky will also be herbal in notes, this also ties into the name of the name with the connotations that witchery possess in terms of herbs and spices. This cask will spend the majority of its life in ginger wine; however, the flavour notes may come out a little sweet and should be monitored and pulled after three weeks. After these weeks are up, the secondary cask options are oloroso sherry which has a lot of options in nutty savoury flavours which may compliment the ginger notes from the cask. Alternatively, and amaro may be an interesting combination. Amaro is quite an herbal liquor which will not only fit the themes but also is made up of ingredients such as wormwood which has some biblical connotations. Wormwood was supposed to be a sign of the end times with versus of the bible stating that rivers would turn to wormwood. The bitter tasting herbal nature coincides very well with the anti-biblical themes which witches possess. The whisky itself is made up of Torabhaigh (the base spirit) at 1 litre, Ailsa Bay at 500ml and Ardbeg Wee Beastie 5 year old at 500ml. Each of these whiskies are young and peated, with the young new make spirit aiming to uplift a large amount of the more herbal natures of the casks used. The young spirit also helps in making sure the peaty notes aren't lost behind all the other bold flavours. Torabhaigh has a lot of brine and salt to it, sounded by peaty undertones. This makes it quite a good simple stock to work off with a sweet cask as its flavours contrast the sweeter liquors used to season the cask with its more savoury notes. Ailsa Bay is quite a light sweet ethanol forward dram which will work in the background and lift the other flavours. Ardbeg will have a similar job, only on a more savoury note, working well with the ginger due to its fiery nature. The final whisky will be 48%.

- Whisky bottling number 3 – “Clearance”. No changes to this title. Thoughts of changing it to “Fuadaichean” as this is Scottish Gaelic for eviction, however it was again settled on “Clearance”. This whisky will aim its marketing towards teaching. The whisky will teach consumers about the highland clearance. Dunrobin was heavily tied to the highland clearance as the first Duke of Sutherland who resided in Dunrobin, was the figure head for the clearances. This whisky will therefore have to be delicate in its nature, as it is such a sensitive product and doesn't want to seem as though it is purely profiting off the times of the clearance once again. The whisky will therefore aim to educate its consumers and highlight the topic in educating people. This will largely be done in the packaging which will hopefully encourage it to become a talking point for its drinkers. The blended whisky was made up of Machrie Moore (the base spirit) at 1 litre, Laphroaig Sherry Cask at 500ml and Glendronach Cask Strength at 500ml. The casks used here will be done in Pedro Ximenez sherry for around 4 weeks. After 4 weeks, half the liquid will be drained and stuck into Absinthe seasoned casks for anywhere between a day and a week and should be monitored and pulled accordingly. This absinthe flavour should not be the centre piece flavour but instead add an umami note which rounds off the sweetness from the sherry. The PX sherry will add a sweet r

aisoned spicy note which will be rounded off by the aniseed forward absinthe. These flavours will compliment the particular whiskies chosen here, with Machrie Moore being a solid stock with its smoky salty notes which will compliment the liquorice notes with salted liquorice being a common sweetie. This smoky whisky paired with the PX sherry, along with the absinthe spell all the ingredients for the cocktail; a “rapscallion”. This cocktail was invented in Edinburgh, being a riff on a smoky whisky old fashioned, with PX sherry being the sweetener and the absinthe being the balancing agent (which is traditionally done with a glass rinse). Moving forward the Laphroaig Sherry Cask offers more grounded sherry notes as these have already been matured with the Laphroaig spirit for up to 10 years. Finally, the Glendronach Cask Strength is used as the stronger the spirit means the more the whisky will absorb flavours from the cask. Glendronach Cask Strength is also matured in a variety of sherries and ports, giving the whisky much more depth. This whisky will correlate these flavours into the colour purple, as according to the studies done in the scoping document, often correlates to umami. A dark purple also correlates to liquorice and the dark nature may be associated with peat also. These intense flavours will hopefully leave a lasting taste in your mouth, much like the nature of the highland clearances. This whisky will be 50%.

Been a busy week and each of the design choices will have a chance of changing. Checking the whiskies weekly or more often should be encouraged as there is only one shot at this. By the 6th of March, most whiskies should be bottled or aiming toward bottling.

Week 4 – 12/02 – 18/02

To Do:

Learn Figma. Due to the nature of the brand already existing, I don't want to post anything online in the form of websites or apps. Figma should give a good opportunity to present a prototype app/website while also not posting any misleading content online. Labels should also be thought about, with designs hitting the first draft stage.

Completed:

Learnt Figma. Have begun on the app design. The labels are going into the first draft stage. Experimenting with glass bottle sizing. Stuck between tall and skinny bottles and short and stubby.

Week 5 – 19/02 – 25/02

To do: Decide what to do with 'Beast of the Mound'. Its not quite there. Labels!

Completed:

'Beast of the Mound' is now 'Witches Circle'. A cleaner name with the current label design drafts. Thought against finishing in an oloroso cask. Putting it in an Amaro cask for the herbal nature. I have quit my job and will now actually have time to catch up on things.

Also decided to ditch the website. Seemed like I was using all the same platforms as the app and altogether didn't offer much. I also loath web design. Just finished a website job with the charity TYKES and it burnt me out. Don't think I have the patience for web design, nor is it my strength.

Week 6 – 26/02 – 03/03

To do: Feeling a wee bit behind. Really need these labels finished.

Completed:

Decided on a newspaper article on the inside of the label. adds a wee bit of character along with a story. Sending the prints off to check for any spelling mistakes. Damn illustrator and their lack of spell check.

Week 7 – 04/03 – 10/03

To do: Experiment with glue and labelling. Finish the front labels off.

Completed:

It may now be the 5th draft of these damn labels. Spent around 20 pounds on various glues only for the 1-pound Prit stick to work best in not smearing ink on the newspaper side of the label. Decided on paper for the labels. "Velum Laid" paper. It has a nice texture and is off white. The texture grain suits the diagonal labels as the grain goes in the same direction as the label when printed. I have designed the whisky top seal also which helps fill some space on the bottle and acts as a mechanism to tell if the whisky has been tampered with.

Started dissertation bits. A lot of editing to be done.

Week 8 – 11/03 – 17/03

To do: Finish labelling bottles and fill them with whisky.

Completed:

Emptied each of the casks to halt the maturation process. Labels are incoming. Have found cork bottoms cheap from Ikea which are the perfect size and only 25p. They were a different colour to the tops so painted them all black and sanded them down. Brings the design together a little. Was just going to put this bottom on one of the bottles (Clearance) but it looked silly with the bottles being at different height levels.

Week 9 – 18/03 – 24/03

To do: Get these bottles finished and move onto the app for goodness' sake.

Completed:

Bottles looked great! Had them all finished. Its amazing how much whisky must soak into the casks? Lost so much more 'Clearance' yet didn't seem to lose and 'Witches circle'? 'Gada' was somewhere in-between. Is it because of the cask seasoning creating a barrier to stop soaking in the wood? The temperature difference couldn't have been that crazy for evaporation with them all in the same room? Difference was like 100ml.

Labels were all finished but the ink is smudging with fingerprints! The paper may be too fancy for my printer. It all needs stripped. Have got some research questions approved for tastings! Hope there's enough time to sort these labels.

Got a wee bit more done on the dissertation.

Week 10 – 25/03 – 31/03

To do: Sort the label smudging issue. Do the tastings.

Completed:

Productive! Have relabelled only to find a spelling mistake in 'Witches Circle' calling it "Circle". Also got the bottling month wrong! Idiot! Will have to leave it as is and hope no one notices in the tasting. Have found a printing option which works in reducing ink smudges with the p

aper (homemade paper setting). Have also sprayed each label with hairspray for an added protection. App is finished! Will be good to get myself away from a computer screen with the tasting feedback. Have whipped up a quick presentation and speech but don't want to influence tasting notes. Will see how it goes.

Have sent away whisky samples for blind tastings as a comparison. Posted them to my hometown where I have found a group of willing tasting participants!

Week 11 – 01/04 – 07/04

To do:

Dissertation. You are scattered and need a set plan to refer back too. Not enough progress in word counts being achieved. Sort research data into folders. Research tasting! And finally start thinking about the presentation of the design artifacts.

Completed:

Made a better more refined plan on the structure. Paragraphs seem to be writing a lot easier. Words are hitting paper.

Research tasting went great! A lot of great feedback and everyone seemed to enjoy the whiskies themselves. The blind tasting feedback is trickling in.

Started a presentation style format for the digital artifact. Going to have a B roll for the whisky and a presentation video to go through everything also for some added commentary.

Week 12 – 08/04 – 14/04

To do: Dissertation! Rattle through it so you have plenty of time to edit.

Completed:

Got a lot of words down. Some of its needing reinforcing but I am optimistic everything will come together.

Week 13 – 15/04 – 21/04

To do:

Finish conclusion of dissertation and send it to supervisor for additional notes at the start of the week. Work on appendixes after and make any final touches on design presentation so it is ready for submission. Any final touches to the editing of the dissertation, you need to be ready for submission on the 22nd!

Completed: Finished everything! Heck Yeah!

Week 14 – 22/04 – 28/04

To do: Submit!

Completed: Submitted!

8.2 Project Design Book

This link brings you to a design book which may give more insight into the process.

https://www.canva.com/design/DAGBK9gnbll/youWqpAR9EsoxxKTZyZokw/edit?utm_content=DAGBK9gnbll&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

8.3 App Prototype

This link brings you to the prototype of the 'Casked' app earlier discussed.

<https://www.figma.com/proto/YQR56l8Rn6bvlYigdL8Una/Casked-App?node-id=1-5&starting-point-node-id=1%3A5&mode=design&t=yx9KoG8DYWzIJa1J-1>

8.4 Whisky Video

This link brings you to a B-Roll of the finished whisky in action.

<https://youtu.be/zCrorB42nRM>

8.5 Ethical consent

Application for Cross-University Ethical Approval

1. Research Details

Name of Researcher(s):	Teague Hutchinson
School or Professional service department:	Edinburgh Napier University
Email:	40509190@live.napier.ac.uk
Contact number:	07415399650
Project Title:	Honours Project - <i>The Perception of Whisky and its Relevance in Bringing in New Audiences</i>
Start Date:	04/09/2023
Duration of Project:	14/05/2024
Is anybody funding this research? (Amount and Source)	N/A
Type of Research:	UG

2. Screening Questions

Please answer the following questions to identify the level of risk in the proposed project:

If you answer 'No' to all questions, please complete Section 3a only.

If you have answered 'Yes' to any of the questions 6-16 please complete Section 3a and 3b.

If you have answered 'Yes to any of the questions 1-5, complete all of Section 3.

	You Must Answer All Questions
1.	Is the research clinical in nature?
2.	Is the research in a health care setting?
3.	Is the research investigating socially or culturally 'controversial' topics (for example pornography, extremism)
4.	Will any covert research method be used?
5.	Will the research involve deliberately misleading participants (deception) in any way?
6.	Does the Research involve staff or students within the University?
7.	Does the Research involve vulnerable people? (For example people under 18 or over 70 years of age, disabled)
8.	Is the information gathered from participants of a sensitive or personal nature?
9.	Is there any realistic risk of any participants experiencing either physical or psychological distress or discomfort?
10.	Have you identified any potential risks to the researcher in carrying out the research? (for example physical injury)
11.	Is there a possible conflict of interest between researcher and participant that would affect the voluntary nature of participation?
12.	Will the research require the use of assumed consent rather than informed consent? (For example when it is not possible to contact participants)
13.	Is there any risk to respondents' anonymity in any report/thesis/publication from the research, even if real names are not used?
14.	Will any payment or reward be made to participants, beyond reimbursement or out-of-pocket expenses?
15.	Does the research require external ethics clearance? (For example from the NHS or another institution)
16.	Does the research involve the use of secondary datasets?

3A. Details of Project

In this section please provide details of your project and outline data collection methods, how participant consent will be given as well as details of storage and dissemination.

Please give a 300 word overview of the research project
This research project will involve participants taking part in a questionnaire. The questionnaire will be directed towards the design of a newly produced whisky and the digital presence that this whisky will have surrounding it. Two

sets of data forms will be collected. One being a blind sampling questionnaire and one being a person questionnaire which will give more information surrounding the project to help give comparative data.

Ethical conduct will be followed, and forms will be provided to each participant in order to give each participant a detailed outline of the project's nature. Participants will then be welcome to get in touch with the researcher (Teague Hutchinson) if they wish to withdraw any questionnaire answers or have any extra questions surrounding the data collection.

Ages 18-35 will be targeted specifically as the project is directed towards young adults who are of legal age to buy and consume whisky.

Data Collection

1	Who will be the participants in the research?
.	
	Young Adults ages 18-35
2	How will you collect and analyse the research data? (please outline all methods e.g. questionnaires/focus groups/internet searches/literature searches/interviews/observation)
.	
	Questionnaires.
3	Where will the data will be gathered (e.g. in the classroom/on the street/telephone/online)
.	
	Classroom/online/in person.
4	Please describe your selection criteria for inclusion of participants in the study
.	
	Inviting people who will be unbiased and available.
5	If your research is based on secondary data, please outline the source, validity and reliability of the data set
.	
	N/A

Consent and Participant Information

7	How will you invite research participants to take part in the study? (e.g letter/email/asked in lecture)
.	
	Email
8	How will you explain the nature and purpose of the research to participants?
.	
	In person when detailing the reason for the questionnaire, along with a detailed description and brief in the invite and the questionnaire itself.
9	How will you record obtaining informed consent from your participants?
.	
	Ethical forms for participants will need to be signed in order for the data to be collected. These forms will detail the procedure of consent and record their agreement in signature form.

Data storage and Dissemination	
1 0 .	How and in what format will data be stored? And what steps will be taken to ensure data is stored securely?
	Data will only be accessed via Teague Hutchinsons personal laptop and will only be given as a submission to be marked by Edinburgh Napier University upon deadline of the project.
1 1 .	Who will have access to the data?
	Teague Hutchinson
1 2 .	Will the data be anonymised so that files contain no information that could be linked to any participant?
	The data will be anonymised on submission however, ethical forms will take signatures. should any person taking part in the questionnaire wish to retract any comments the researchers (Teague Hutchinson) contact information will be provided.
1 3 .	How long will the data be kept?
	Until submission is marked and over with.
1 4 .	What will be done with the data at the end of the project?
	An overview of the data will remain in report form. The raw data however will be disregarded upon project completion.
1 5 .	How will the findings be disseminated?
	Findings will be disseminated via written report where it is related to existing relative data as comparison.
1 6 .	Will any individual be identifiable in the findings?
	No

3B. Identification and Mitigation of Potential risks

This section is designed to identify any realistic risks to the participants and how you propose to deal with it.

1. Does this research project involve working with potentially vulnerable individuals?

Group	Y e s	N O	Details (for example programme student enrolled on, or details of children's age/care situation, disability)
Students at Napier	<input type="checkbox"/>	<input type="checkbox"/>	Students 18 and over may be used to for data gathering purposes so long as they are comfortable doing so.
Staff at ENU	<input type="checkbox"/>	<input type="checkbox"/>	ENU staff will be avoided to avoid unbiased marking of work.
Children under 18	<input type="checkbox"/>	<input type="checkbox"/>	Children under 18 will not be suitable for this study.
Elderly (over 70)	<input type="checkbox"/>	<input type="checkbox"/>	Elderly over 70s data would not be suitable or relevant for this study.
Disabled	<input type="checkbox"/>	<input type="checkbox"/>	People with disabilities are welcome to take part in the study, so long as they are comfortable to do so.
Migrant workers	<input type="checkbox"/>	<input type="checkbox"/>	Migrant workers are welcome to take part in the study, so long as they are comfortable to do so.
Prisoners / people in custody	<input type="checkbox"/>	<input type="checkbox"/>	Prisoners or people in custody will not be relevant out for this particular study.
Learning difficulties	<input type="checkbox"/>	<input type="checkbox"/>	People with learning difficulties are welcome to take part in the study, so long as they are comfortable to do so.

2. If you are recruiting children (under 18 years) or people who are otherwise unable to give informed consent, please give full details of how you will obtain consent from parents, guardians, carers etc.

N/A

3. Please describe any identified risks to participants or the researcher as a result of this research being carried out.

Due to the subject matter of the report surrounding marketing alcohol, anyone uncomfortable with that particular subject matter should not take part in the study. Also due to the subject matter, only people over 18 will be invited to participate in the study.

4. Please describe what steps have been taken to reduce these identified risks? (for example providing contact details for appropriate support services (e.g. University Counselling, Samaritans), reminding participants of their right to withdraw and/or not answering questions, or providing a full debriefing to participants and understanding the responsibility of the researcher when dealing with confidential and sensitive information).

Participants will be informed that they have the ability to retract any comments that are made and be given a full debriefing on the code of conduct of the study. Participants will also be given the researchers contact information should they wish for any extra information surrounding the study or wish to retract any data.

5. If you plan to use assumed consent rather than informed consent please outline why this is necessary.

N/A

6. If payment or reward will be made to participants please justify that the amount and type are appropriate (for example the amount should not be so high that participants would be financially coerced into taking part, or that the type of reward is appropriate to the research topic).

N/A

3C. Justification of High Risk Projects

If you answered 'Yes' to the screening questions 1-5 this section asks for justification on the choice of research topic and methodology. The Reviewers have the right to refer high risk applications to the Research Integrity Committee for approval.

1. If you have answered yes to question 1, please give a full description of all medical procedures to be used within the research and provide evidence that the project has obtained NHS ethical approval.

N/A

2. If you have answered yes to question 2, please give a full description of the health care setting and what steps have been taken to reduce any potential risks and describe how you have gained permission from the Health Care Organisation.

N/A

3. If you have answered yes to questions 3 (research into a controversial topic), please provide a justification for your choice of research topic, and describe how you would deal with any potential issues arising from researching that topic.

N/A

4. If you have answered yes to questions 4 or 5 (use of deception or covert research methods) please provide a justification for your choice of methodology, and state how you will mitigate the risks associated with these approaches.

N/A

Declaration

<input type="checkbox"/>	I confirm that I have considered the ethical risks arising from this project and have provided accurate information and the research will be conducted in the manner described.	
AND		
<input type="checkbox"/>	I consider that this project has no significant ethical implications that requires the attention of the Research Integrity Committee.	
OR		
<input type="checkbox"/>	I consider that this project may have significant ethical implications that requires the attention of the Research Integrity Committee.	
Researcher Signature: <i>Teague H.</i>		Date: 31/03/2024
Director of Studies/Supervisor/Principal Investigator Signature:		Date:

Checklist

All applications require the following to be submitted with the application form

Participant Information Sheet	<input type="checkbox"/>
Informed Consent Form	<input type="checkbox"/>
Interview/Survey Questions	<input type="checkbox"/>

8.6 Consent Forms

Edinburgh Napier University Research Consent Form

The Perception of Whisky and its Relevance in Bringing in New Audiences

Edinburgh Napier University requires that all persons who participate in research studies give their written consent to do so. Please read the following and sign it if you agree with what it says.

1.

I freely and voluntarily consent to be a participant in the research project on the topic of the marketing, digital presence and product design of whisky to be conducted by Teague Hutchinson who is an undergraduate/postgraduate student/staff member at Edinburgh Napier University.

2.

The broad goal of this research study is to explore how consumers react to the branding of whisky in order to gather data on how specific branding techniques are received. Specifically, I have been asked to conduct a questionnaire corresponding to relevant examples, which should take no longer than 30 minutes to complete.

3.

I have been told that my responses will be anonymised. My name will not be linked with the research materials, and I will not be identified or identifiable in any report subsequently produced by the researcher.

4.

I also understand that if at any time during the questionnaire I feel unable or unwilling to continue, I am free to leave. That is, my participation in this study is completely voluntary, and I may withdraw from it without negative consequences. However, after data has been anonymised or after publication of results it will not be possible for my data to be removed as it would be untraceable at this point.

5.

In addition, should I not wish to answer any particular question or questions, I am free to decline.

6.

I have been given the opportunity to ask questions regarding the procedure and my questions have been answered to my satisfaction.

7.

I have read and understand the above and consent to participate in this study. My signature is not a waiver of any legal rights. Furthermore, I understand that I will be able to keep a copy of the informed consent form for my records.

Participant's Signature

Date

I have explained and defined in detail the research procedure in which the respondent has consented to participate. Furthermore, I will retain one copy of the informed consent form for my records.

Teague H.

Researcher's Signature

31/03/2024

Date

8.7 Blind Tasting Questions

Edinburgh Napier University

The Perception of Whisky and its Relevance in Bringing in New Audiences

Researcher: Teague Hutchinson

Phone Number: 07415399650

Email: 40509190@live.napier.ac.uk or Teague2000@outlook.com

You have been invited to participate in a research project which will record your initial perception on a new hypothetical whisky brand. The data gathered will be used to critique the design of the brand and product as well as the possible digital presence that surrounds it. This will help in investigations as to how well current work and prototypes have gone, as well as how best to move forward in the design process.

During and after this process you are welcome to retract any comments made and should understand that everything will be anonymised. If there are any follow up concerns regarding the data collection of this particular research project, please get in touch with Teague Hutchinson for any queries or questions. Please leave any questions answering blank if you are at all uncomfortable or simply don't want to fill out.

By continuing with the questionnaire, you are confirming that you have read and signed an ethical consent form which is there in place to protect you the participant and your data.

1) Do you consider yourself a whisky drinker?

Yes ☐

No ☐

Occasionally ☐

2) What are some of the more exciting parts of the whisky industry which might bring in new consumers? – *This can draw from how you personally got into whisky or examples such as flavour, alcoholic content, distillery heritage, social aspect, bottle design, etc.*

3) Do you consider digitisation to be valuable for the whisky industry to bring in new consumers and if so, can you think of any standout digital procedures companies adopt? – *this can be anything from an effective social media or web presence to a handy app.*

4) Tasting notes – *This is an exercise in collecting specific flavours within the whisky itself. What specific beats are you picking up in correspondence to the particular whisky you are trying? - Feel free to correlate flavours to existing foods or to explain the flavour profile however seems appropriate.*

Whisky No.1 - Gada

Whisky No.2 - Witches Circle

Whisky No.3 - Clearance

5) Colour Scheme – From flavour alone, would you allocate each of the whiskies with a specific colour in mind? – *What we colour pops into your head when you drink the whisky. You may have to close your eyes for this.*

Whisky No.1 – Gada

Whisky No.2 - Witches Circle

Whisky No.3 - Clearance

6) Do you have any additional points?

8.8 Full Experience Tasting Questions

Edinburgh Napier University

The Perception of Whisky and its Relevance in Bringing in New Audiences

Researcher: Teague Hutchinson

Phone Number: 07415399650

Email: 40509190@live.napier.ac.uk or Teague2000@outlook.com

You have been invited to participate in a research project which will record your initial perception on a new hypothetical whisky brand. The data gathered will be used to critique the design of the brand and product as well as the possible digital presence that surrounds it. This will help in investigations as to how well current work and prototypes have gone, as well as how best to move forward in the design process.

During and after this process you are welcome to retract any comments made and should understand that everything will be anonymised. If there are any follow up concerns regarding the data collection of this particular research project, please get in touch with Teague Hutchins on for any queries or questions. Please leave any questions answering blank if you are at all uncomfortable or simply don't want to fill out.

By continuing with the questionnaire, you are confirming that you have read and signed an ethical consent form which is there in place to protect you the participant and your data.

1) Do you consider yourself a whisky drinker?

Yes ☐

No ☐

Occasionally ☐

2) What are some of the more exciting parts of the whisky industry which might bring in new consumers? – *This can draw from how you personally got into whisky or examples such as flavour, alcoholic content, distillery heritage, social aspect, bottle design, etc.*

3) Do you consider digitisation to be valuable for the whisky industry to bring in new consumers and if so, can you think of any standout digital procedures companies adopt? – *this can be anything from an effective social media or web presence to a handy app.*

4) Tasting notes – **This is an exercise in collecting specific flavours within the whisky itself. What specific beats are you picking up in correspondence to the particular whisky you are trying?** - *Feel free to correlate flavours to existing foods or to explain the flavour profile however seems appropriate.*

Whisky No.1 - Gada

Whisky No.2 - Witches Circle

Whisky No.3 - Clearance

5) Do you find storytelling to be an effective method in enhancing the whisky experience or are there other more effective methods for you as a consumer to establish a connection to a whisky and or the branding/distillery behind it? – *How do you best personally enjoy a dram.*

6) Does the brand effectively showcase their ideals in teaching consumers of the heritage of Dunrobin Castle and the history surrounding Sutherland and if not, are there any extra design choices to properly display these ideals.

7) Do you have any additional points?