CHRISTOPHER KNOX

Landscape intaglio prints,
drawings & gravures

chrisknox.org.uk

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CONTENTS

FOREWORD

This thesis project involved a necessary change of direction at the end of June 2014. I will explain this decision first so as to aid understanding of the remainder of the report.

My original proposal had been to build a site for a personal startup called Printmakers Curated (PC). This was be a dedicated, curated site that would profile and sell the work of a number of "new and emerging" artist-printmakers prior to them receiving formal representation from a gallery or agent. All my first six-months' research and planning centred on this proposal. At the implementation stage in May/June 2014 however, I had a major rethink of the project.

Having started to work with two printmakers, create content and hard-code the Printmakers Curated site, I encountered some issues. The first was around a lack of quality content to make even a prototype site credible for launch. The original proposal involved creating the site as a sales tool that would encourage other printmakers to sign up. Having decided to involve only two printmakers to establish this prototype, one (Christopher Knox) went on to provide high quality image content, while the other printmaker, for personal reasons, found it difficult to commit. The use of a large amount of fake content seemed inevitable and was a significant reason for the change of direction.

Original concerns around basing any thesis project on too much externally-generated content (for one client) were however now irrelevant, while in late June, another angle also became apparent. Christopher had been reluctant at first (Nov 2013) to consider any redesign of his existing site or integration of this with an online shop due to political reasons within his other business. However, he had been keen to be part of the Printmakers Curated project – seeing reduced commission charges on print sales as a great incentive. Subsequently, on seeing the prototype for Printmakers Curated in June 2014, Chris became fully committed to the idea of an integrated site, shop and presence on the collective PC site.

For these reasons, I considered that actually a site focused on Chris' work was both far more credible and achievable (to build and launch a final live project) within the thesis time limits. Creating a spin-off site from the original Printmakers Curated idea would allow not only a finished, live site with a future, but would also allow me to gain experience on a whole package of site design & build with SEO and social media training with an individual printmaker. I decided that a spin-off site would still allow the promotion of a printmaking specialisation – especially as other media (drawings) are not the main focus on the resulting Christopher Knox site due to delivery and insurance issues.

My plan became one of gaining experience, refining such a digital package and potentially offering it to a number of other artists (and/or galleries) – eventually possibly arriving back at a future collective Printmakers Crated-style site. I decided that such a path would allow any future PC site to be greatly enhanced by lessons learned working with an individual artist. By working with one or two practitioners first, I could then approach any future collective site with more knowledge, real world experience and hopefully commitment from more digitally aware printmakers.

A further benefit to this change of direction was that a key weakness, identified at the business planning stage, was eliminated. For Printmakers Curated, a lack of reputation and contacts would have been a significant negative factor. However, the spin-off site is now based solely on the reputation of Chris. As an emerging artist-printmaker, his reputation is not yet established, but his profile amongst key London galleries is growing and buyers are coming to recognise his work. The trust factor is therefore increased via his association with those galleries such as the Royal Academy and the Mall Galleries on which buyers often attach 'kudos'.

Progressing with a site solely based on Chris' work immediately felt more realistic. It avoids the need for fake content, and it has allowed me to continue to use all my original research and thinking regarding markets, competitors, target users and design decisions – albeit with some branding modifications based on Christopher's preferences. As the site is a microcosm of the original project, I have been able to use much of the content originally planned too, while the site's primary focus is still on printmaking and developing a compelling printmaker story. Another positive outcome has been that in launching a finished site, all analytics and marketing results offer useful and relevant insights that will allow me to continue to work with Chris to enhance the site and take it forward post-launch.

I have therefore adapted much of this report, but have left details from the original proposal where it aids understanding of my decision-making.

CHAPTER ONE
CONCEPT

Elevator pitch

Christopher Knox, a 'new and emerging' artist-printmaker from East Sussex currently has a weak online presence and no formal representation from a gallery or agent. With a tables-based website, no social media strategy and unsatisfactory options for building a profile and selling his work online, he requires a responsive redesign of his existing site and a digital strategy to support his offline marketing activity.

At present, printmakers promote their work in five ways with each having limitations or issues. Some of these apply to Chris:

1. **An independent, personal website:** Most printmakers, including Chris, try this option. However, Chris' existing site has a weak design, outdated code that does not meet Web standards, a non-existent content strategy, no e-commerce function and no integration with social media and other important tools.

2. **Gallery representation:** An option unavailable to most new printmakers and certainly to Chris. Galleries require printmakers to have built a reputation independently prior to gallery investment.

3. **Art marketplace sites such as Saatchi Online:** While open to Chris, the lack of printmaking specialisation means that his work is featured amongst an ocean of other artists working in a range of media. These sites are also not curated leading to quality concerns. Anyone can upload work, add a price tag and start to sell.

4. **Print fairs:** These are mostly the preserve of printmakers represented by galleries. They usually also have large barriers to entry.

5. **Profile via membership:** This involves gaining promotion and publicity through being elected as a member. The Royal Academy or Royal Society of British Artists are examples where profile and a following is guaranteed. This is extremely rare for new and emerging artists.

The value proposition

The value proposition was to profile Chris and his work and support print sales via e-commerce functionality. It was to include regularly updated fresh content, to profile non-toxic printmaking, offer a number of supporting resources for novice buyers and position Chris as an emerging specialist who is gaining recognition.

I wanted to include artist biographical information and product descriptions that are more detailed than those currently offered on the sites of most regular printmaking studios and galleries and art marketplace sites.

So a new site and digital marketing package would specifically offer:

• A profile of Chris, including an artist statement and exhibitions information

• A gallery of work for sale – specifically limited-edition, signed intaglio prints

• Latest news, information and interviews, Chris' artistic studies and information on his influences

• A resources area including a selection of how-to guides, articles on collecting, profiles of print buyers and their recent purchases, information on the different types of printmaking etc.

• A glossary of printmaking terms to assist new buyers

CHAPTER TWO
BUSINESS

The business environment, trends and opportunities

At all price points, there is a growing trend for buying art online with over 300 online art businesses launched in the last few years globally (Grant, 2013) and an online market that is growing by an estimated 20% per year (Hudson, 2013). In fact, the market doubled in size between 2002 and 2012 (Deloitte, 2013, p.19) and in that last year, 71% of collectors and general buyers bought art unseen – based on viewing only a single digital image – a phenomenon that critics were cynical about until only very recently (Tully, 2013). The habits of art buyers – both collectors and general buyers – are evolving, the market is opening up to various groups of new buyers and there is soaring confidence in purchasing online. Online sales account for a small level of activity today, but this is expected to grow from 2014-17 (ArtTactic, 2013, p.4), while it is at the lower ends of the market (the ones that this site will target, with a sub-£500 price tag) that these trends are having the most impact.

The market is changing on both sides

Artists themselves are increasingly rejecting galleries and agents (and their 50% commission charges) by selling direct through sites such as Artfinder and Saatchi Online. But, the buyer relationship is changing too as new buyers, especially those aged under 35, prefer to do their own research, make their own decisions and buy online, forgoing interactions with gallery owners or other intermediaries. Further, galleries, in turn, appear to have little strategy for adjusting their business models and marketing plans to appeal to this group's needs, tastes and preferences.

Buyers prefer unique works

In the latest (2013) annual study from specialist global art market research consultancy ArtTactic, 43% of general buyers and 32% of collectors said that they seek limited-edition original prints as opposed to other media (ArtTactic, 2013, p.13). For a huge 92% of those buyers, the visual experience of a site and its product information content are the most important factors when making a decision to purchase online (Ibid, p.15). In my scan of the environment however, this is largely unfulfilled on the majority of gallery, studio and individual printmaker-owned sites that include an e-commerce function. As such, these observations were key to the development of this site.

Galleries failing to leverage online opportunities

The ArtTactic research makes a further point about the attitude of traditional galleries to the use of technology in supporting art sales. Bricks-and-mortar galleries are certainly being slow to embrace technology and as a result are missing opportunities. 41% of galleries surveyed stated that they did not know how to even get started in creating an e-commerce strategy. However, at the same time they were aware that for galleries that do sell online, 72% of online sales are to new buyers (Ibid, p.16).

For galleries, there is also a huge mismatch between their perception and actual activity as it relates to the online buying habits of older people – one of the key target audience groups for this site – and people who often buy art as an alternative investment. Indeed, 50% of surveyed buyers aged 65 and

over had bought art online during 2012, but amongst galleries that currently trade online, owners and managers believe instead that only a 'tiny' proportion of their online customers are over 60 – as the research says "Galleries need to recognise the power of the older buyer… older age groups are buying online, but are not being targeted by the galleries surveyed." (Ibid, p.16). It seems therefore, that besides missing opportunities that exist amongst a younger buyer segment, the galleries (when they do offer e-commerce) are also failing to tailor their marketing strategies to this older segment too.

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Existing opportunities & channels for printmakers to sell online

Currently printmakers market themselves and sell their prints online in various ways, many of which have limitations or exclusions for new and emerging printmakers:

1. Printmaker-owned websites

For many independent printmakers who do not have representation, their own website is their only online presence. Many printmakers struggle to brand themselves and market their work due to a lack of knowledge, experience or finance and this is often reflected in the quality of their sites. A typical site will have poor usability, little unique identity, it will be template-based with varying code quality, have content that is rarely updated and will have little if any digital marketing or social strategy, or e-commerce functionality.

2. Gallery websites

Promotion via this route is usually unavailable to new printmakers with no reputation, while artists are often reticent about paying 40-50% commission to galleries on each sale. Again, even if a printmaker does gain representation, gallery sites are often dated with little active promotion of individual artists, no opportunity to buy online and the sites remain exclusive to represented members. As such, they do not offer anything to emerging printmakers or the people interested in buying the work of new talent online.

3. Art marketplace sites

Sites such as saatchionline.com allow purchases to be made online and opportunities for printmakers to reach a global audience, but they offer no printmaking specialisation, nor are they curated. Buyers have little information on which to determine quality and, in the case of Saatchi Online, must wade through 420,000 items from more than 100,000 artists to find what they're interested in. Commission rates are lower than those of bricks-and-mortar galleries at 30%.

4. Smaller specialist sites

Sites such as newbloodart.com cover the 'new and emerging' and 'affordable art' angles well, but are not limited to/focused on printmaking, choosing instead to profile artists across all media. Again, they will take what is most probably in the region of a 25%-plus cut of all sales.

5. Print fair websites

It is rare for the websites of print fairs to offer online sales and again, print fairs as a marketing/ distribution channel are usually the preserve of galleries and established printmakers. The costs are prohibitive for independent printmakers.

Strengths

Current strengths that will allow Chris to meet some of the opportunities discussed above include:

• A growing reputation with some of the major London galleries. Chris has been successful in several high profile competitions. Over the last three years, Chris has had work shown in several of the royal societies' annual shows. Judging panels are aware of his work, established buyers are starting to recognise him and general buyers with little knowledge of the market are happy to buy his work based on his association with well-known galleries.

• The impression that landscape art is favoured by older buyers more often than younger buyers – an observation based on Chris' existing buyer data.

• To build a strong online presence that tackles some of the known weaknesses in the market, Chris' new site will directly address the weaknesses of existing online art channels as well as focusing on what buyers want. It will have a strong focus on visual design, good UX, regularly updated content, helpful resources, detailed product descriptions and social media integration. It will also aim to meet the desire of new buyer groups to purchase prints in an environment that is not intimidating, nor elitist.

Weaknesses

Buying from galleries has kudos and is part of the experience for many general buyers. As the ArtTactic research says "Seller's reputation is often a key factor in creating an online sale… the traditional galleries and auction houses… have a great advantage versus many of the new online-only players." As respected galleries such as the printmaking specialist Bankside Gallery or London's Mall Galleries will therefore offer a greater 'pull' to buyers, Chris will combine online sales activity with submissions to the prestigious annual competitions, thereby harnessing established gallery reputations and achieving exposure offline as well as online. In addition to this though, serious buyers are aware of the affordability that comes with buying early work from a 'new and emerging' artist. This weakness can therefore also offer an opportunity for positive categorisation.

Without the ability to sell prints at higher price points, there is some need for volume sales if Chris' site is to be commercially successful however Chris is fully aware that his printmaking, for now, is a supplementary source of income. The site will offer buyers an alternative method to browse and buy, but sales will most probably only reflect the status of his reputation.

Threats

There is a multitude of new businesses and individuals entering the online art market from all regions and price points all the time, therefore increasing competition for art sales. Chris will only be able to counter this by focusing on building his own reputation, gaining increasing recognition from galleries, improving publicity and being findable online for people searching for the type of work he produces.

Fulfilment & distribution model

Fulfilment and distribution is to be handled directly by Chris. He will upload all future inventory and be directly responsible for packaging and despatch to buyers within a specified time period. Online sales will obviously require the services of an established online payments service such as PayPal. To accommodate this, I researched appropriate online selling regulations and drafted basic appropriate terms and conditions regarding delivery, insurance, returns and ordering. As part of the Firmness stage, I researched the specific technology needed to support this functionality – outlined later in this report. To be compliant with regulations and competitive with art marketplace sites on service levels, the site offers 14-day returns.

To meet buyer brand expectations and customer service levels, Chris and I discussed branding and packaging requirements for site sales. Currently most printmakers rarely offer branded, distinctive packaging. Chris wraps his prints in branded, black tissue paper and high quality reinforced and branded black envelopes which buyers give positive feedback on.

CHAPTER THREE
RESEARCH

The web landscape & competitor analysis

Existing online channels including cognate and non-cognate sites

From the categories of existing channels for marketing printmakers' work online, many sites do not offer online sales nor any kind of profile for emerging artists. Some cannot therefore be considered direct competitors, but are featured to demonstrate design/content/marketing issues that I wanted to learn from and improve upon within the sector. Others are highly relevant.

Printmaker-owned websites

For many emerging printmakers, their own website is their only online presence. A large majority of printmakers struggle to brand themselves and market their work due to the reasons discussed above. Until recently it has been rare to find a responsive site in this category.

Chris' existing website is a good example of this. Having successfully marketed himself offline, his online presence is weak. The site profiles his work and is updated regularly, however content is limited to a non-descriptive showcase of prints and a basic exhibitions listing with no e-commerce, SEO strategy or digital marketing plan.

Figure 1: Christopher Knox' previous homepage

Another example is the site of Richard Forster who showcases his gallery of photopolymer gravures – http://www.richardforster.net/work/recent-drawings

Figure 2: Printmaker Richard Forster's website

Ultra minimalist, this site suits the print content in look and feel and is typical of sites emulating the starkness of offline art galleries, but it does very little to promote the prints, build a following or allow online purchases. The process for buying a print involves contacting the artist first – something that would certainly be off-putting to many potential buyers. For new buyers under 35, avoiding intimidating/pretentious environments or processes is a key factor driving online sales.

Both examples in this category are fairly typical in being poorly optimised with SEO audits (mysiteauditor.com) generating very low scores of 26 and 32/100, while Alexa doesn't have access to enough data to rank either site. Google PageRank was zero for Chris' old site and a healthier 3 for richardforster.net. Both however were offering a sense of getting closer to the printmaker which has been key for Chris' new site.

Gallery sites

Example 1: Bankside Gallery / Royal Society of Painter Printmakers

http://www.re-printmaking.com/buyprints.aspx

The Royal Society of Painter-Printmakers offers enticing 'Buy prints' and 'Shop' links on its main navigation, but this only leads to a silent video of the actual bricks-and-mortar shop with a line of copy directing customers to call the shop to buy. As the country's royal society for printmaking, surely they belong to the category of galleries that feel diffident about e-commerce? Missed opportunities abound on this site. Google PageRank is 3, while traffic is difficult to detect as Alexa has no data. The design is basic, non-responsive and offers nothing for new and emerging printmakers. Very limited promotion is offered for the mid-career and established printmakers who are represented here too.

Figure 3: Royal Society of Painter-Printmakers website

Example 2: The Biscuit Factory

http://www.thebiscuitfactory.com/

In my opinion, this is a successful example of a site and online shop. It is well structured and brings together friendly copy, mostly intuitive navigation, contemporary design, striking photography and clear product shots to create a good overall customer experience.

Generally, the site makes purchasing a breeze, although their filtering is annoying offering no categorisation of media. Instead, filters such as 'For Him' or 'Celebrations' don't help when looking for original prints amongst all media types. Again there is no specialisation and no responsive design. The site has a PageRank of 2 and 22 backlinks. Keywords driving traffic involve the gallery or featured artists' names or phrases such as 'buy art'. The site is poorly optimised (mysiteauditor.com). Commission rates are unknown, but an Arts Council report, *Taste Buds: How to cultivate the art market* states that even a decade ago The Biscuit Factory was "attracting new buyers and making very healthy sales in the domestic market, particularly outside London." (p.13, *Taste Buds*, Arts Council, 2004).
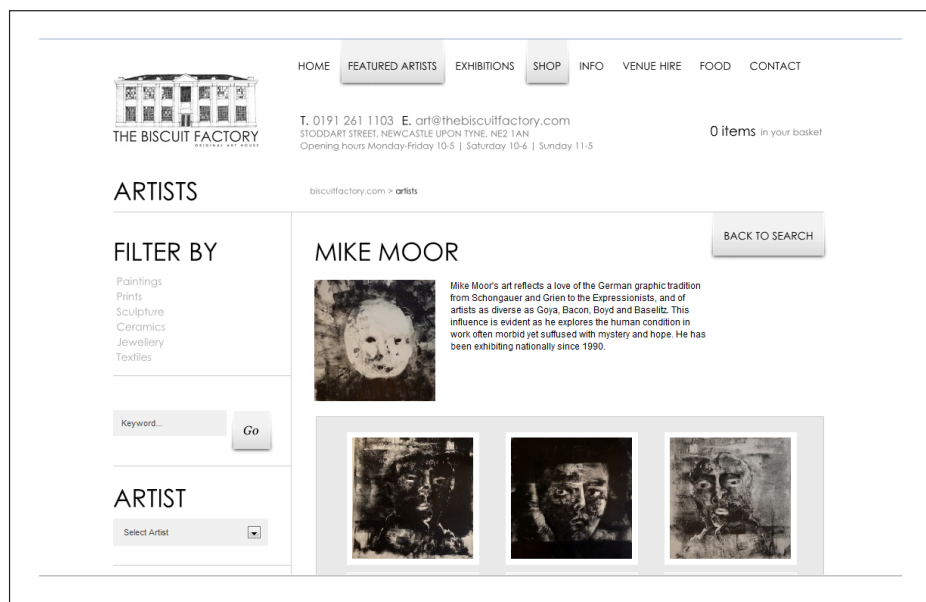

Figure 4: The website of The Biscuit Factory gallery

Art marketplace sites

Sites such as saatchionline.com, artfinder.com, paddle8.com (online auctions) and exhibitiona.com allow original print purchases to be made online and offer opportunities for printmakers to reach a global audience. However, they have no printmaking specialisation, most are not curated and some deal only in established names.

Often buyers have little information on which to determine quality and must wade through hundreds of thousands of items from anything from 1,000 to 100,000 artists to find what they're interested in. Mostly, commission rates are lower than those of bricks-and-mortar galleries at the 30% level although Paddle8's auction commission structure is significantly discounted from market standards: a flat 6% for vendors and 15% for buyers.

Finally, the large players offer very little, if any, education on different printmaking types and are too large for users to really get to know their favourite artists. Most are not responsive.

Example: Saatchi Online

http://saatchionline.com

One of the earliest big players and popular with artists and users, Saatchi Online (saatchionline.com) has 100,000 registered artists, traffic of 550,000 users per month, over 420,000 items for sale, a Google PageRank of 6 and 9,900 backlinks (alexa.com). The site is not curated (except for Saatchi employee and celebrity picks) therefore having no controls on access or quality. It offers 'One to Watch' and 'Invest in Art' features which profile say 12 specific emerging artists from around the world, but these are lost amongst the hundreds of thousands of other things to look at. There is limited information on each printmaker and while descriptions and articles mention 'investing', 'affordability' and 'future potential value' there is no specific investment case put forward. The site features no advertising; the sole revenue appears to come from sales-generated commission.
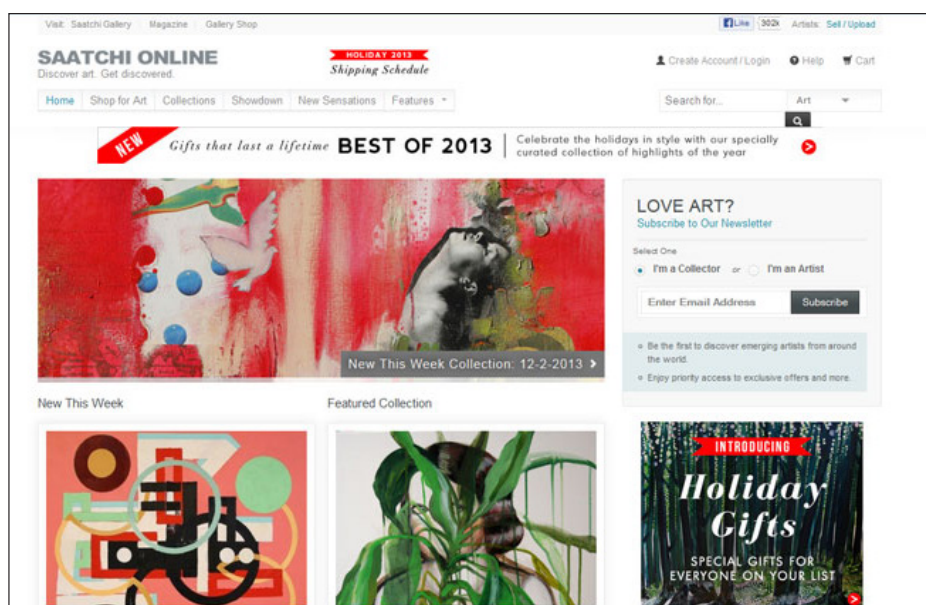

Figure 5: Saatchi Online's website

Saatchi Online has a huge and well-established profile within the sector and so top keywords driving traffic to the site focus on the business reputation as opposed to 'emerging artists' etc. People search directly for 'saatchi online'. As expected, the business' social media presence is huge with 40k-plus followers on Twitter.

According to Alexa, audience demographics show an over-representation of women and graduates – a finding that I will consider when developing my user personas.

The business model is one of exposure and promotion only, with artists themselves being required to manage their own profile, packaging and despatch. The site has excellent resources for both artists and collectors.

The site is optimised for desktop and mobile with no other breakpoints in between.

Smaller specialist sites

Sites such as newbloodart.com cover the 'new and emerging' and 'affordable art' angles well, but are not limited to/focused on printmaking, choosing instead to profile artists in all media.

Typical example: New Blood Art

http://newbloodart.com

Established in 2005, New Blood Art spots and showcases new and emerging talented artists, including printmakers, and offers original work at affordable prices (two-thirds of artworks for sale are at sub-£500 prices). The business rationale is to offer investment potential through access to art from degree shows and art colleges. NBA curates a large number (approx.250) of artists and has no printmaking specialisation or specific resources besides a blog. It sells to an international audience and in my opinion is a successful example of an online gallery.
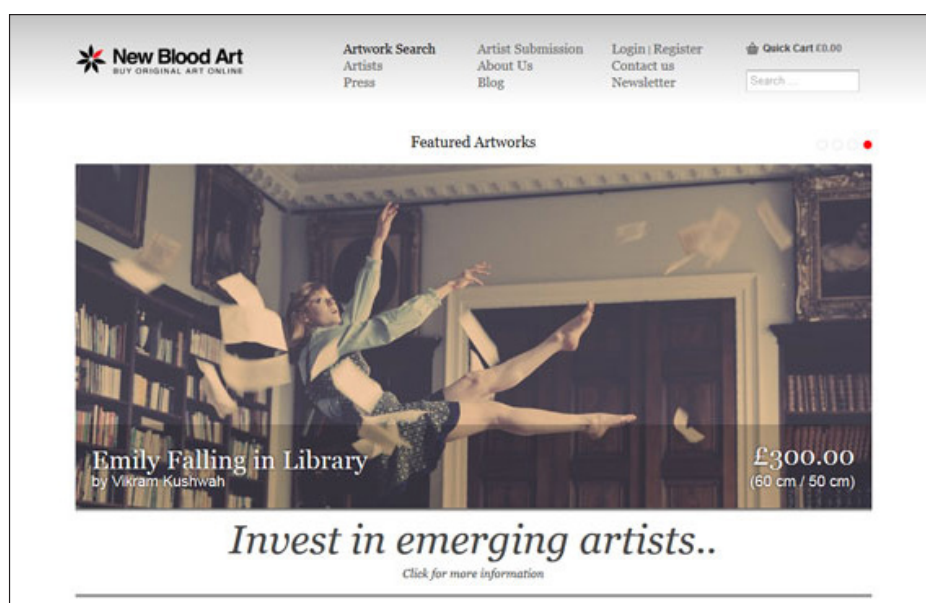

Figure 6: New Blood Art's website

According to Alexa, it has 1600 unique users per month and 80 backlinks. Customer testimonials are excellent and the site clearly includes expert knowledge.

The site has excellent usability and a modern visual design. It offers a good amount of artist information and a blog with interesting, quality content and special features. I intend to research these features ('You may also like' etc.) further to determine usefulness and user satisfaction.

New Blood Art has some fantastic press coverage and the founder, Sarah Ryan, contributes articles to the national press on the topic of art as an alternative investment thereby building profile and traffic via positive PR – see **http://www.theguardian.com/money/2013/jun/01/modern-art-degree** for an example. I am aware that this type of national coverage will be impossible to achieve for Chris' site and so a heavier reliance on content and SEO strategies will be key.

Top keywords that drive traffic to this site relate to rising star artists such as Bartosz Beda and variations on 'buy original art', 'art online' and 'works by emerging artists' (alexa.com). All copy and meta data on both the site and the business' social media accounts emphasises the words 'original', 'affordable' and 'emerging'. The site has a very low bounce rate of 10.5% (alexa.com) so content is clearly highly relevant and engaging to visitors – a blog with much fresh and interesting content from guest artist writers is surely a contributing factor. Google PageRank is 3.

The site lacks resources, printmaking specialisation and responsive design.

Other sites in the smaller specialists category include a wide range of businesses – from Opus Art http://www.opus-art.com/ which has some top-end pricing and which profiles mid-career and established artists as well as emerging faces, to other sites such as Degree Art – http://www.degreeart.com/ which has a similar business model to NBA but offers art rentals too. Others such as Art Web http://artweb.com/buy lack good design, but most strikingly, what all have in common is a lack of specialisation and responsive design.

Print fair websites

It is rare for the websites of print fairs such as London Print Fair http://www.londonprintfair.com/ to offer online sales due to their temporary nature and again, print fairs as a marketing/distribution channel are usually the preserve of galleries and established printmakers. The costs involved in print fairs are prohibitive to independent printmakers so this would not be an option for Chris.

Other notable non-cognate examples

notonthehighstreet.com offers all kinds of handmade products and various prints. Printmakers on this site are usually hobbyists offering more 'arts and craft' type products as opposed to serious, original prints that use traditional techniques and originate from a plate. However I appreciate the clarity of the site's user experience and their emphasis on benefits and clear process for selling – http://www.notonthehighstreet.com/join/why

Lessons & improvements

Across all categories, I identified the main ways in which I could improve upon what is currently being offered while taking the best elements of existing art e-commerce sites on board. This involves:

• Making it easy to buy online – failure to do so is an annoyance with a majority of competitor sites at all market levels. Including well-planned user journeys and eliminating barriers to purchase is key

• Promoting the specialist nature of Chris' work and traditional techniques

• Providing resources that capture buyer interest and which are good for SEO

• Publishing quality content beyond that of the usual minimal information on artists and products

• Establishing a non-intimidating tone of voice for copy

• Creating a well-optimised site in terms of speed, performance and SEO

• Designing responsively – at the time of research just one of the above links had an alternative resolution to a 960px fixed width, although New Blood Art launched a responsive site during the implementation period.

• Focusing on a non-cluttered, contemporary design with legible font sizes and good contrast for an age 35+ market

CHAPTER FOUR
COMMODITY

Target audience

More than 70% of Chris' buyer database matched broad groups of older, predominantly female buyers, and younger collectors creative careers with the rest being mostly older, male peers.

During my research for the Printmakers Curated site, I had discussed existing and target buyers with Chris. To develop a more detailed idea of potential target users (as Chris' contacts/buyer database is fairly small) I also pulled out key statistics from ArtTactic's *The Online Art Trade 2013* report. This helped me to think about potential buyers and general groupings beyond the scope of Chris' database. These included:

• Women prefer buying from online galleries (31%) against men (21%).

• The older generation of collectors are among the most active online buyers.

• The percentage of people who buy art online peaks at the 35-39 age group.

• More than 50% of the older age groups surveyed (60 years and upwards) are online buyers.

• 55% of respondents in the 65+ age group said they had bought art directly online.

• Buyers across all age groups have a strong preference for unique works. Limited-edition prints are preferred by 42% of buyers.

• The older generation are frequent buyers of art online, and are important for the middle to lower end of the online art market.

• Women prefer limited edition prints (55%) compared to men (36%).

• Investment is a motive only for small minority.

• 30% of buyers want to buy art with little or no contact with the intermediary.

Source: ArtTactic, "The Online Art Trade", 2013, Hiscox

Whilst 10 years old, *Taste Buds*, an Arts Council research report from 2004 also discusses the underdeveloped art market which has only recently begun to change via the emergence of online platforms. Whilst not as current, Chris and I believe from personal experience that the following "barriers to engagement with the market" identified in that report are still true:

• Many buyers – both existing and potential – remain intimidated by conventional gallery environments.

• The art that sells most easily to current domestic buyers tends to be art that is not legitimised or critically engaged. (Hargreaves McIntyre, 2004, p.19).

The Arts Council report includes an 'Evolution of a Collector' scale that identifies 'New Buyers',

'Repeat Buyers' and 'Budding Collectors' at the start to middle of the scale. These are the market segments that I wish to target. They can be considered 'unsophisticated buyers' and include 'Changing Rooms' types (people who are influenced by good design and who no longer settle for Habitat/John Lewis but who wish to own originals instead). The segment of the 'Serious Collector' who "moves towards buying emerging artists" (Ibid, p.19) is also featured in Chris' contacts database. The site will obviously need to offer something to this group.

Initial thinking

On this basis, my initial research led me to sketch out two main groups of interest for further research:

- Group A – Older people (aged 60 plus) who are interested in art and culture, have time and money and who think buying limited-edition prints is a good way to spend it. This group of people would perhaps value the socialising angle of visiting galleries and making new friends through this activity. Chris' existing buyers very much fit this profile.

- Group B – Younger (35+), affluent professionals, most typically employed in media, design, health, education and financial sectors who are perhaps thinking of starting a print collection for the first time.

ACORN profiles

With these two groups in mind, I developed three criteria for further research. My intention was to flesh out initial audience categories using CACI's ACORN profiling system – a customer insight tool that segments the UK population (CACI, 2014). My criteria for this exercise stated that people should:

- Have an above national average (not necessarily London average) income

- Have an interest in arts and culture (or related interests)

- Be active online

The ACORN search allowed me to identify the following 'types' of interest:

Group A – Older people with time and money

- Type 13 – Upmarket Downsizers

- Type 10 – Better-off Villagers

- Type 4 – Asset-rich Families

- Type 5 – Wealthy Countryside Commuters

Group B – Younger, affluent professionals

- Type 14 – Townhouse Cosmopolitans

- Type 16 – Metropolitan Professionals

User personas

Based on the corresponding demographic data, social factors and consumer behaviour for these ACORN types, I developed the following user personas:

Group A

Helen is 62-year old newly retired marketing manager and ex-Londoner. Since 2011, she has lived in a three-storey townhouse with her husband in an affluent East Sussex market town. Helen owns a tablet and is very confident in researching holidays, flights and insurance and buying books and films online. She is also unintimidated by social media as a result of a successful marketing career. Helen subscribes to Traveller magazine and reads The Independent. She has a good pension and an above average level of savings and investments. Helen shops at Waitrose and eats healthily.

Helen loves art and cultural events. She enjoys the socialising involved in trips to London galleries with friends and loves to discover new 'names', but in no way considers herself a serious collector and rejects intimidating art environments. Her interest in buying limited-edition prints started with an invitation from a friend to a private view at a local gallery. Helen's motives are not investment driven – she buys purely on taste, wouldn't dream of spending more than £500 on a print and associates buying sensual objects with quality of life. Helen likes getting to know her favourite printmakers and besides cultural events, enjoys wine, antiques and good food.

Group B

Stephan is a 39-year old Londoner who is financially aware and who makes a very good living working in post-production for a Soho film company. He uses the gym, like active, outdoors holidays and has related interests in film, art and photography. Stephan loves new technology and uses the internet for more than 4 hours a day. He owns a range of devices and is a prolific Twitter user. Stefan is dismissive of stuffy, elitist attitudes in the art world; it feels alien to him and he does not wish to engage with gallery owners or agents – he doesn't even understand how they work. Instead, Stefan wants quick access to printmakers doing interesting work, wants to do his own research and make his own decisions.

He completed an 'Introduction to Intaglio Printmaking' course at the London Print Studio, but is too busy at work to really develop his skills seriously. Instead, he loves the idea of, and has the disposable income for, starting a small collection. Stefan lives in Bermondsey. Both he and his partner are influenced by good design.

What buyers want

The ArtTactic research identifies what is important to buyers:

- Information and visual experience (92%)

- Seller's reputation (86%)

- A secure payment system such as Paypal (71%)

- Assurances around shipping (72%)

- The right insurance in place when shipping (69%)

- A returns policy (63%)

- To be pointed in the direction of information and research tools (64%)

- To research and buy without intermediaries (30%) (ArtTactic, 2013, p.15)

Research across various sources and based on Chris' insights relating to new buyers also indicates a general need for:

- Information about the print market

- Where to buy prints

- How much to pay

- The different types of print on offer

What buyers don't want

Taken from the older research, but which I believe is still highly relevant today, especially considering the popularity of the big art marketplace sites, buyers do not appreciate:

- Environments, experiences and practices that exclude people

- Being made to feel inferior

- Being made to feel intellectually or financially inadequate

As *Taste Buds* says: "These factors deter even the most highly paid, visually literate individuals from engaging in the art market through dealers and conventional gallery models." (Hargreaves McIntyre, 2004, p.19).

Content plan

In addition to factors that will improve on the existing web landscape in terms of UX, design and content (see competitor analysis above), key considerations for content strategy have included a focus on:

• Building a compelling story around Chris and his printmaking practice

• Writing copy that is non-intimidating and which has a friendly, unpretentious tone of voice

• Creating useful resources that appeal to new buyer groups through respecting their beginner status

Content types

I anticipated three groups of content:

1. Content sourced directly from Chris himself, i.e. images of work, an artist statement, biographical information, pieces on influences and inspiration, product descriptions etc.

2. Content produced by me: for Printmakers Curated, this was always going to include 'how-to' guides for emerging printmakers on topics such as copywriting, branding, marketing and social media. For buyers, it was to focus on guides to the different types of printmaking, articles on topics such as the benefits of owning original art, plus profiles of collectors/buyers. For the revised Chris-only proposition, only the latter is now applicable. For PC, I also wanted to produce a regular illustrated email for mailing list subscribers; it would give bite-sized information on printmaking terms so that subscribers could build their knowledge gradually. In practice, this has now become an on-site glossary.

3. Content to link to where neither I nor Chris have the necessary expertise or authority to write it – this includes links to content such as 'How to buy limited-edition prints' guides and links to mentoring information or collector initiatives that already exist.

CHAPTER FIVE
CULTURAL CONTEXT

As with every other art form, the history of printmaking reflects the technological, social and political and commercial developments of every age in which it has been practised.

Beginning with the invention of paper in China in 105AD (Haas, 2014), printmaking has a rich history that has spanned continents, supported social and political movements, been threatened by the invention of photography and the machine-powered graphic industry and which today sees the extension of print to consumer products alongside the connoisseurial market for limited editions and artists' proofs.

The Japanese produced the first authenticated prints in the form of wood block rubbings in the 8th century (Metropolitan Museum of Art, 2014). Five centuries later, the European cloth printers, sometimes known as 'Jesusmakers' for their printing of religious scenes onto textiles (Landau & Parshall, 1996), adopted paper following its introduction to Europe from China throughout the 12th, 13th and 14th centuries. By 1390, the first paper mills had been established in Germany and Italy (Thompson, 2014) prompting, together with input from the Netherlands, the basis for the future invention of all major forms of printmaking,

Prints suddenly became cheaper and more common from 1400 as a direct result of papermaking technology. The first woodcuts printed onto paper saw the invention of playing cards, while prints, no longer just the preserve of the rich, could now be purchased by skilled workers in European towns (Red Rag Gallery, 2014).

The printing of playing cards spawned the first "personality in the history of printmaking", the renowned Master of the Playing Cards. An anonymous German engraver working from 1430, the Master produced rare prints that today fetch eye-watering prices at auction – the most recent being *The Queen of Flowers*, which sold in 2006 for £243,200 at Christie's. (Wikipedia, The Master of the Playing Cards, 2014).

By the mid-15th century, *The Flagellation*, made in Germany, became the first printed engraving (worldprintmakers.com). The revolution in print caused by Johannes Gutenberg's moveable type mechanical printing system was combined with woodcuts to produce the first illustrated books by 1450 (Thompson, 2014). At the same time, intaglio emerged as a result of printmakers experimenting with acid to incise metal plates. By 1452, Gutenberg was printing indulgences – small, illustrated cards that were awarded by the Catholic Church to signify the forgiveness of sin in exchange for money. Chaucer would go on to immortalise this practice in his exemplum, *The Pardoner's Tale* (British Library, 2014).

A huge demand for illustrated books saw woodcuts increase in popularity throughout the latter half of the 15th century. From 1450, printmaking in Germany and Italy was to flourish, while the grand master of engraving, Albrecht Durer, began his career as an apprentice in Nuremberg.

By 1495, Durer had his own workshop, was a dedicated printmaker and was on his way to becoming "the most famous artist in northern Europe" (The Economist, 2011). Others at this time who practised exclusively in print were Goya and Rembrandt. Aware that their reputations could be promoted more widely through producing only prints, they focused on distributing this affordable, accessible and transportable art form. Painters on the other hand remained relatively obscure (Wikipedia, Old Master Print, 2014).

Latching on to this idea, painters such as Titian and Raphael in Italy started partnerships with printmakers. Prints as reproductions of important paintings soon overtook the market for original prints, with new dealers emerging each year who were desperate to cash in on the demand for copies of the most popular paintings. By the mid-16th century, the market for original prints was extremely weak (Ibid, 2014).

Around this time, copyright was still non-existent, although signed dedications to patrons were often scribbled into the margins surrounding the exquisite prints in books. As a means of declaring creative authorship, a group of silversmith-printers began hallmarking their prints in the same way as goblets. This period also saw the first watermarks of the 'fool's cap'. (Hyatt Mayor, 1971, p.15). Prints were, by now far more profitable than paintings, with some forms more lucrative than others. Durer's *Passion* engraving fetched higher prices than that of his *Passion* woodcut and he marketed it as such (British Museum, 2014). Engraving had become a 'luxury' process, associated with fine metals, compared to the woodcuts associated with the 'lowly' activities of carpenters. As such, engravings sold to the wealthy, while a town's poorer people bought woodcuts. Producing the highest quality prints of the 16th century, by the end of his career Durer had heavily influenced much of Italy.

Printmaking was to assist the important discoveries and professional practices of the 16th and 17th centuries. Skilled map engravers expanded coastlines to keep up with reports from expeditions (Hyatt Mayor, 1971, p.124). The fourth edition of Vitruvius' Handbook, complete with architectural prints, restricted the laissez-faire practices of medieval builders by regulating their developments and influencing centuries to come (Ibid, p.157). Texts with intricate printed images were also to offer a new way for the professions to demonstrate and explain key concepts in engineering, architecture, maths and botany. This paved the way for books such as *Every Man His Own Doctor* – as patients scoured the fields looking for natural remedies with detailed illustrations of herbs and plants from the book (Ibid, 1971, p.74). The fact that so many early prints were first created as this type of illustrative design for publishing has seen a healthy number survive intact over a 500-year history – certainly more so than their equivalent textile-based forms used so extensively in the decorative arts.

The 17th century saw intaglio's popularity increase as acid etched works were now well respected and considered more noble. While Italy became a hotbed of etching and Rubens, Rembrandt and Van Dyck produced phenomenal work in the Netherlands and Belgium, printmaking masters of the Ukiyo-e school at the other side of the world in Japan were perfecting the woodcut over several decades well into the 18th century. The output of Hokusai, the best known of this school with his delicate and subtle style was prolific. Making more than 35,000 illustrations and prints (Tikotin Museum of Japanese Art, 2005), his work was to heavily influence the work of European printmakers (Forrer, 2011).

It is here and into the 18th century that English printmaking begins. Drawing on the now centuries-old European printmaking traditions and innovations, artists such as William Hogarth and William Blake were to become the glittering stars of British print. Before 1730, England had produced only book illustrations, views and maps – there had been no decorative, original art prints. With copying still a problem, Hogarth's *The Harlot's Progress* was marketed whilst still being engraved, prompting the first copyright laws in England (Hyatt Mayor, 1971, p.354). By the time he'd produced *The Rake's Progress*, the concept of copyright and protection for artists was fully enacted, leading to printmaker freedom from haughty publishers and entitled patrons (Ibid, p.354).

By the 1800s, printmakers had begun to print and sign limited editions, thereby authenticating the prints in addition to holding the copyright. Around this time, in Germany, lithographs were printed onto wafers and sold as remedies for illness (Hyatt Mayor, 1971, p.22) while in France and Italy, engravers printed educational card sets. With the back of the cards left blank, the public began to improvise – adding their signatures as a precursor to calling cards (Ibid, p.26). The Italians took this a step further, producing printed scenes with a gap for a name. This eventually inspired John Calcott Horsley of England to design and print the first Christmas card in 1843 (bbc.co.uk, 2004).

Two technological innovations were to rapidly affect printmaking from the mid-19th century. With photography becoming the dominant method for creating images from the 1830s to 1860s, and the introduction of large-scale printing machines that were to be used for publishing, printmaking retreated to a niche position – one that it occupies today.

While centuries prior had seen prints mostly take a private role in the homes of collectors, the 20th century saw an explosion of print. Many of the great artists of the first half of the century, including Picasso, experimented with the major printmaking processes, taking printmaking in new directions and sparking a print revival. By the 1960s, printmaking had mostly been seen as a sideline – and certainly lower in status – to an artist's main works in painting or sculpture. But, with the efforts of collectives such as the London Print Studio and Fabric Workshop in Philadelphia, printmaking became hugely respected (V&A, 2014). It was to be seen as an artform in its own right, competing with more traditional media and, due to its multiple, cheap-to-produce nature, was instrumental in much of the dissonant expression of the time. (Ibid.)

The huge surge of the 1950s and 60s in printmaking resulted in much more public exposure – the silkscreen prints of Andy Warhol – an artist notorious for "centering his entire art around the notion of the reproduced image" (nontoxicprint.com) – being a famous example. Since the 1980s though, prints have become more affordable and accessible, while printmakers have continued to explore new techniques and push the boundaries of all the established processes. As the new technologies of centuries past impacted on printmaking practice, so too has digital allowed both absolute new forms of printmaking to develop, while updating traditional techniques for today (V&A, 2014) – for example in the use of digital equipment to produce new, non-toxic photopolymer gravures.

As the V&A in London states: "The rise of new media, viewed by some as a threat to the future of printmaking, has simply extended the options available. Just as the invention of lithography did not render woodcut and engraving redundant, so digital technologies have not replaced other methods, but rather extended choice and capacity." (Ibid).

CHAPTER SIX
FIRMNESS

In assessing which tools and technologies to use, I first analysed content types. The site was to have two main types:

• Plain text pages: for various resources pages, exhibitions information and news items etc.

• Product (print) information content: images of prints and their respective product descriptions. The online shop was to make prints available for sale, but sales were not to be the exclusive core function of the site – the primary function being to profile Chris. For both PC and the Chris-only site, there was always going to be less than 50 products for sale.

Functionality
My initial functionality requirements list included:

• Search

• Images for each print

• Shopping cart

• Checkout process

• Payment gateway & merchant account

• Checkout without registration

• Multiple email recipients for order notifications (for individual shipping)

• Content management for plain text pages

• Illustrated glossary sign-up

• Responsive design

• Product image zoom

Initial decisions
After much research and consideration, I decided to use WordPress as my CMS. The site was to be built on an HTML5 base with CSS3 for presentational styling, and SVG where/if appropriate. For the shopping cart, I had planned to use the feature-rich WooCommerce plugin – although during implementation this changed.

At the research stage, my preferred payment processor was Stripe (although this changed too) as it offers a combined payment gateway and merchant account with an attractive fee structure. However, I was aware that this depended on further analysis of security requirements for processing card

transactions on-site and the practical challenge of integrating this (including an SSL certificate) as a result. In going ahead and using WordPress I have used MySQL for the database and PHP to generate the site pages server-side.

Original rationale for WordPress & WooCommerce

- I originally liked the combination of an e-commerce/content site that WordPress with WooCommerce creates by default. A dedicated e-commerce store seemed unnecessary as product sales were only ever going to be one of several objectives.

- In-built WordPress functionality is perfect for handling more complex informational content. With several text pages, WordPress also allows quick content updates.

- Pure e-commerce CMS's, for example Magento & Shopify, seemed more appropriate for dedicated shopping sites where sales is the sole purpose. Both seemed to be slightly more limited in how they handle blog-style content. Shopify, while it has the advantage of not requiring an SSL certificate, just didn't seem quite as flexible for handling other types of content. Magento needs some advanced-level coding and some developers argue that it is a complicated platform to learn (Boag, 2011) - it is certainly overkill for my requirements. I also looked at JShop, Zen Cart, Cart 66 and Open Cart. My decision to reject the other three options in favour of WooCommerce was based purely on reviews citing SEO advantages and feature performance and flexibility.

- Both WordPress & WooCommerce were to integrate well with Stripe: WooCommerce has options to enforce SSL on checkout pages and helps with PCI requirements in avoiding the storage of credit card information (stripe.com/docs).

Payment gateways

At this stage, I considered the advantages and disadvantages of offsite and onsite payment options:

- Offsite payment processors like Sagepay and PayPal were appealing in that they do not require backend integration or an in-depth knowledge of security issues. However I felt that offsite options can sometimes look amateurish while they also take customers away from a site. My previous experience in setting up WorldPay at work also included a fairly bureaucratic application process – something I wanted to avoid if possible.

- I therefore originally favoured an onsite payment gateway such as Stripe as it has the advantage of keeping customers on site during the transaction making for smoother UX. Stripe allows for consistent branding, it looks professional and conveniently serves as a payment gateway and merchant account all in one (stripe.com). However, I also realised that I'd need to buy and install an SSL certificate and have a dedicated IP address to process card transactions in a secure manner. Reviews for Stripe were extremely positive, but its lack of support was a concern. I was also aware that if I decided to use Stripe, site design would be key in signalling trustworthiness to users.

In using Stripe as the main onsite payment option, I thought that there may be some resistance from users to enter card details. As a result, I always intended to offer a PayPal option as it is a payment processor that is familiar to most users. In reality, PayPal has become the site's only payment option (for now). Reasons for this are detailed in the Implementation section below.

Payment gateways comparison		
Figures based on selling 10 prints in year one at a price of £350 each, and including set up costs		
STRIPE	**£**	
Hosting – per annum	120	
Set up fees	0	
Transaction fees – 2.9% + 30 cents per transaction	103.5	
SSL certificate	50	
Dedicated IP – per annum	12	
TOTAL	**285.5**	**unit cost = £28.55**

WORLDPAY Business Gateway Plus		
Hosting – per annum	120	
Set up fee – merchant account	75	
Transaction charges – 1.9% + 10p p.t.	67.5	
Monthly charges x 12	180	
TOTAL	**442.5**	**unit cost = £44.25**

SAGEPAY	**£**	
Hosting – per annum	120	
Set up fee	0	
Transaction charges – 2.5%	87.5	
Monthly charges x 12	300	
TOTAL	**507.5**	**unit cost = £50.75**

PAYPAL		
Hosting – per annum	120	
Set up fee	0	
Transaction charges – 3.4% + 20p p.t.	121	
Monthly charges x 12	0	
TOTAL	**241**	**unit cost = £24.10**

Hosting

At the research stage, I favoured TSO Host as it has excellent support and meets the requirements for my chosen CMS. It is UK based – an important consideration – and having developed the site, it has been an excellent choice with an easy control panel, nightly backups, fast loading times and quick and extremely helpful customer service.

CHAPTER SEVEN
DELIGHT

A key finding from the research stage was that 92% of online art buyers report that visual experience is extremely important. Encouraging trust through design is essential. I have therefore aimed for a minimalist, but warm, contemporary design that uses several layout conventions and that user testing and feedback has so far supported.

Having seen the PC prototype at the end of June, Chris was keen for me to transfer the whole design to his spin-off site. Indeed, Printmakers Curated had been designed with the same target users in mind, with Chris' work as a central focus. As a result, the basic design philosophy remained much the same.

With Chris having no worked-through, pre-existing identity, integrating my original design decisions with the little branding elements that he was using (sans-serif font, black and white with an accent red as the main palette) was unproblematic. His basic look and feel was fairly masculine and based on user research I was keen to add some warmth and openness to appeal to a more female audience.

I had already decided during the implementation stage that the grey and dark teal colour scheme from my PC prototype was too heavy. While the original, PC Photoshop prototype designs were created 'desktop-first', from May I actually coded the original PC site and designed it for all screen widths in the browser using a mobile-first approach. The original designs are included in Appendix I. Design modifications for Chris' site were all made in the browser.

Colour

The colour scheme conforms to type – that of bricks-and-mortar galleries. A white background allows good contrast with the monochrome images and keeps the prints and drawings as the focus. The supplementary colour of the header and feature panels is very muted, but this, and the h2 gold, offers warmer tones to avoid starkness.

I have stronger accent colours for main headings and buttons that carry call-to-action phrases. In all ways, I have tried to use colour to support the work, not detract from it, while still offering good visibility for important UI features.

Typography

With my primary audience in mind, research helped me to understand the successful qualities and visual properties that are considered good for fonts when viewed by older adults.

After reading *Typography and the Aging Eye* (Nini, 2006) on the American Institute of Graphic Arts site, I found that a loss of light and focus actually begins at the age of 40. With the vast majority of my target users in this category I was very interested in this.

According to this article, typefaces that are helpful for people with reduced visual acuity have:

"…Consistent stroke widths

…Open counterforms

…Pronounced ascenders and descenders

…Wider horizontal proportions

…More distinct forms for each character – such as tails on the 't' and 'j'

…Extended horizontal strokes" (Nini, 2006)

On this advice, I experimented with some shortlisted fonts, using Photoshop filters to check strength and clarity under sub-optimal conditions. I eventually chose Commercial Type's Stag Sans for the body font.

Stag Sans mostly meets the criteria above. It is straightforward, blunt and strong, has no condensed proportions, even stroke areas and the simplicity helps with readability. The double storey "a" isn't ideal, and in places the Light weight can seem a little too fine (I may replace this with the Book weight after more testing). In general though, this is a suitable main typeface for the site's target users. Second, this clean, modern font has an open appeal and a contemporary look that I thought would also appeal to a younger, secondary audience.

The other preferred font on my shortlist was Neuzeit Grotesk Light which has similar qualities, however I felt Stag Sans had more open, warm characteristics.

After a long search for a complementary and interesting font for the glossary, I supplemented Stag Sans with the geometric display typeface, Moav. From Cyprus-based Alt Foundry (http://alt-foundry.com/fonts/moav/) this adds a dash of personality to the glossary and a technical feel that is appropriate to the processes of printmaking.

Logo

With no logo and with Chris' request for a simple, pared back identity, I used Proxima Nova for the wordmark, adding only a small white butterfly later on having discovered the importance of this as a motif in Chris' work. The butterfly is used minimally as a graphic device across the site and Chris has begun to use it on printed collateral too.

Some of the new branding elements have been used to improve Chris' packaging while in future I intend to brand the PayPal cart and checkout pages. These options are only available with a PayPal Business account – an upgrade that Chris will make later.

Icons

To be consistent with a simple, open and unobtrusive approach, I wanted any icons to be minimal and outline. I have begun to use the simple butterfly motif of the branding in an icon for the as-yet-undeveloped Resources section. I may develop this further to signal key resource types.

Photography

I have preferred to keep imagery reserved for content as the site, nor its users, need distractions in the form of decorative textures or filler images. However a switch from colour photography to mostly black and white for non-product content has been a slight deviation from my original delight proposal.

For Printmakers Curated, I had planned to emphasise the personalities, inspiration and personal approaches to printmaking by using rich, colour photography to focus on the people behind the prints and processes. This is still something I would have preferred to do, adding more life to sections where prints/drawings are not the focus. Chris however asked for a predominantly monochrome style which, no longer having a multitude of printmakers on the project, I was happy to accommodate.

Future plans for the site include shooting more 'process' type photography and video – of Chris at work, both in the studio and on location. The interview article where Chris discusses his printmaking process is the second most popular page on the site for users arriving through organic search, and feedback has been very positive on this content angle. Users have also commented on how interesting it is to see the photographic prep work behind the final prints. While heritage/craft has been overdone in design trends over the last five years, with its 500-year history, printmaking can offer some rich imagery that would support this type of content further.

CHAPTER EIGHT
IMPLEMENTATION

Implementation: Technology

Having hard-coded much of the original Printmakers Curated site, I spent a further (unanticipated) 2-3 weeks deviating from the project plan to adapt the layout and branding before I could make a start on producing the 63-page hard-coded Christopher Knox site. The plan was to then convert this to a WordPress theme.

This change of direction and the subsequent work involved (eg. drafting sales policies earlier than anticipated than for the PC site) impacted on my ability to implement all planned marketing activities. However, some marketing tasks have been achieved, and others will take place in future phases.

I launched the finished, fully hard-coded Christopher Knox site on 1 August at chrisknox.org.uk. This allowed me to monitor performance, complete further testing and consider UX tweaks whilst a) coding the WordPress theme on printmakerscurated.co.uk and b) training Chris to understand more about audience content needs and use social media tools more effectively.

Shopping cart & payment gateway

One other deviation from the original Firmness specification is that I have chosen, for now, not to implement WooCommerce as the shopping cart and Stripe as the payment gateway.

The three main reasons for this were that:

a) It was clear to me at a very early stage of working with Chris that he has a limited understanding of the internet and online tools. However he had been using a PayPal account which he felt reasonably confident about. For this reason, he preferred to keep payment processing as simple as possible and wished to use PayPal only (for now). Remembering Tom Turner's advice to keep it simple and explore more sophisticated e-commerce options if the site is commercially successful later on (grelawtk.users37.interdns.co.uk/blog), I agreed.

b) Over the summer I also gained more exposure at work to the complexities of the security issues involved in taking on-site payments. With no prior experience, this seemed to be a risk and learning curve not essential for launching a small site with less than 15 prints for sale.

c) Third, basic initial user testing seemed to support this. Two older participants commented on the very simple journey to purchase – involving easy browsing, selecting and paying for prints. They commented on frustration when using other sites at barriers such as having to register, login and remember passwords etc. and liked the fact that this site has a simple process.

WooCommerce is therefore something that I will return to. Having experimented with the woocommerce.php template for the site's Prints and Drawings pages it was reasonably easy to configure and style. Using PayPal and WooCommerce's "Purchase as a guest" without asking users to login are still options. Further analysis of the site and Chris' own management of it (and online sales) will determine whether further work to fully implement this is worthwhile. I do however intend to install a couple of useful features such as product zoom which come built-in with WooCommerce.

Losing site search

Another area where user testing forced a decision to lose some functionality was in implementing the built-in WordPress site search. I already had some reservations about whether search would impede UX on such a small site with fairly simple user journey routes. Having set up a search template, I was disappointed with the results. Results relevance was fairly poor – according to forums this is a well-known issue with WP in-built search. Even so, I added it to the site to test with users. The results were clear: users found it confusing and felt more comfortable browsing the relatively straightforward navigation and/or using the sitemap to find what they were looking for. As the site grows, I will monitor this, research other search options eg. Relevanssi and test again.

WordPress

For the responsive WordPress theme, I coded a Masonry layout for artwork galleries and used eight plugins to handle non-standard content structures, Mailchimp sign-up, SEO, performance and the homepage slider.

The Masonry layout was difficult to implement in so far as my right margins on each brick were not recognised, leading to images rendering adjacent to one another. A huge number of hours spent on CSS adjustments didn't fix the issue and it was only when I came across a hot off the press article by Las Vegas developer Dan Birlew - *Updated Masonry in WordPress* (Birlew, 2014) - that I found a solution. I used valid JSON markup in a custom data-masonry-options attribute that I added to the Masonry div within the theme template as follows:

```
<div id="masonry-grid" class="js-masonry" data-masonry-options='{
"gutter": 32 }'>
```

I finished the WordPress site on 20 September and migrated it to chrisknox.org.uk on the server that had previously hosted the hard-coded site. An activated W3 Total Cache plugin caused the whole site to fall over soon after migration.

I tried to fix this by deactivating the plugin and removing the file causing the error, but it remained broken. TSO Host cleared the cache directory in 'wp-content' and this allowed me to see the site on the front-end. However, when I tried to log in I got a repeat of the original error, plus another PHP error.

W3 Total Cache had been installed (but wasn't activated) on the staging version of the WordPress site, hence this only becoming an issue following migration whilst I was testing performance and optimising – tasks that included activating the plugin. Further research confirmed that others have had similar issues with W3 Total Cache (Solomon, 2012).

In the end, deleting the plugin, asking TSO Host to flush out all traces of it and installing the substitute WP Super Cache fixed this. A steep learning curve around this issue which took a full day to fix caused me to feel reluctant about making further adjustments to the .htaccess file at that stage. Speed optimisation is not as high as the level I'd achieved on the hard-coded site (at 89% on PageSpeed), but this is something I'll return to once I can feel confident that the site won't break so close to the thesis deadline.

User testing

Two user testing sessions took place – one during the build and one at the time of the WordPress version launch. The brief test results, observations and my resulting amendments can be found in Appendix II. Chris and I also tested checking out with PayPal with a live transaction.

Implementation: Accessibility & usability

All design decisions have considered accessibility and usability. The site scores 100% for user experience on PageSpeed due to its large tap targets, responsive design and legible font sizes. Even if people with visual impairments are not using a screen reader, they can still use the site comfortably due to generous clickable areas. The choice of open, clear fonts are key, as is a fairly monochromatic colour scheme, minimalist interface design and the use of design conventions. Copy is broken up with headings where dense text exists, while bold standfirsts and plenty of white space allows for good scanability.

Landmark roles have been used in markup to allow for direct navigation and alt tags offer a text alternative to images. I have had some difficulties in getting alt tags to display in source code for images in the Masonry layout. Alt tags entered in the Media Library on each image show on the individual product pages, but when pulled through to the Masonry landing pages for Prints and Drawings, the alt tags disappear. A similar issue happens on the 3 x homepage images. I am still searching for a solution to this.

I have used clear labels on buttons (although I'm struggling with link states on PayPal buttons so these are static images at present), while navigation and page titles were planned for simplicity. User testing prompted me to change the hamburger icon for mobile navigation to the word 'Menu', while the title of 'A glossary of printmaking terms' was dropped in response to suggestions at user testing for a more simple 'Printmaking terms explained'. Users found the navigation to be intuitive, while 'Delivery' and 'Contact' links are repeated in the very top header as a result of user feedback.

Implementation: Content

As the research stage highlighted the lack of in-depth artist and product information on competitor sites, content strategy was always focused on generating quality biographical content and useful artwork descriptions.

I have aimed for a fairly upbeat and accessible tone of voice across biographical and resources content, with a more factual tone for product information and news. As I'd written all content for the site, including copy that is written in the first person (signed-off by Chris) and all business policies, there was a risk that Chris' own tone and writing style would conflict with the site brand when using social media. We have overcome this with a few guidelines – no swearing or slang, using a spellchecker and a focus on printmaking while retaining the Geordie charm that his buyers like.

I didn't expect there to be so many target users who would span both printmaker and print buyer groups. I had built the original PC proposal around two separate groups with distinct content for each. A significant number of Chris' buyers are printmakers themselves. For this reason, I would like to further monitor the use of the site, gain more insight in the build-up to, and duration of Chris' upcoming show, meet more printmakers and buyers and plan well-researched Resources content that is relevant to users in – and across – both groups. In fact, I would now avoid differentiating between buyers and printmakers and instead create content for people with beginner or more advanced knowledge. Outside help will be needed for the advanced resources.

Policies for selling online

All fulfilment and distribution for site print sales is completed by Chris. With neither of us having sold online before, I researched relevant regulations and drafted some basic policies for ordering, delivery and returns. Based on the provisions of the Distance Selling Regulations, they were also updated to reflect the new Consumer Contracts Regulations from 13 June 2014 which implement the Consumer Rights Directive in UK law (Which?, 2014). These apply to all purchases that buyers make from a distance – both online and via mail (gov.uk, 2014). As this site is currently hosted on TSO Host in my company's name, I wanted to be sure that it has basic compliance with the regulations.

CHAPTER NINE
MARKETING

The site has and will continue to benefit from all offline marketing activities including Chris' own promotion of exhibitions and reputation building via word of mouth and competition entry to the major annual shows.

Since the hard-coded site was launched, we have focused on Chris' forthcoming solo show as the main 'hook' for this quarter – August to October 2014. In consultation with Chris, I drafted a press release (see Appendix III) for his exhibition which has supported a site launch announcement, encouraged traffic and has generated promised coverage.

Twitter

Setting some very simple social media guidelines early on for Chris was essential. He was using a Twitter account sporadically, but was unsure about even the basics and had no strategy. Training has helped him to become a more confident user of social media, while we both felt that he should retain full control of his account and post content based on his own opinions, recommendations and personal art practice.

Training consisted of 3 x one-hour phone sessions where we discussed brand personality, including tone of voice, suitable calls to action, key messages etc., set up a Pinterest account and populated it, reviewed Chris' Twitter profile, compared it to that of successful galleries and individual artists, and drafted some sample tweets. These sessions also included a WordPress tour.

Having shared the analytics data that shows Twitter driving traffic to his site (it is the top referrer), Chris is becoming more active as his confidence grows. Certainly, a more intensive period will follow in the two weeks prior to his preview evening on 18 October.

Pinterest

I set up a Pinterest account for Chris in mid-August. Having populated it with prints' images, Chris is starting to use it to promote his artistic influences. His work is being re-pinned onto various landscape art boards and this has so far resulted in a handful of referrals to the site. Again, hopefully as Chris' confidence grows, this source will bring further traffic.

Mailchimp

Mailchimp Lite for WordPress allows users to sign up for a Chris Knox-branded e-newsletter. I have created a sample template for this. Chris is waiting for the end of his show to use this for the first time to announce the launch of a new collectors' box set.

Domain

Choice of domain was obviously different from the original printmakerscurated.co.uk. Chris wanted to keep chrisknox.org.uk which, while not ideal, having an organisational suffix, actually had 21 backlinks from various galleries and art journals and a 3-year tenure. Chris also specifically asked to keep it. An email address for this domain will be bought at some point too.

Keyword research

Early versions of the site were not well-optimised according to my subsequent keyword research – a lesson learned as one to plan earlier in future (concerns about deviating from the original site build plan hindered this).

Besides "Christopher Knox" and "Chris Knox", original keywords were focused on the generic 'prints' term together with specific location keywords for each print eg. "Buy prints of Dunstanburgh Castle | Northumberland prints".

Casual monitoring of rankings in SERPs for these search terms (while I built the WordPress theme) saw that in many cases pages were actually nestled amongst results for sites selling photographic prints as opposed to original, handmade prints. This provided a starting point for keyword research.

With advice from SEO Moz in mind "It's not about getting visitors to your site, but about getting the right kind of visitors" (SEO Moz, 2014) I targeted keywords that would:

• Be relevant – allowing users to feel satisfied with the content on arrival

• Be appropriate to the sales goals of the site

• Have low competition

• Make clear the distinction between photographic prints and intaglio prints

Keyword brainstorming

Initial ideas that terms such as "intaglio", "landscape art" and "etchings" would be more specific, more focused on serious buyers and with lower levels of competition were correct. A focus on the more generic "fine art prints", "buy art online" and "limited-edition prints" were also potentials, although these were subsequently discounted due to high levels of competition. Using Google's Keyword Planner tool, I researched all brainstormed keywords, narrowing it down to the following with low competition (eventual chosen keywords highlighted in keyline boxes):

KEYWORDS	AVERAGE MONTHLY SEARCHES PER 1,000	COMPETITION
landscape etchings	40	low
landscape artists	4,400	low
landscape art	4,400	low / medium
intaglio prints	260	low
intaglio art	90	low
etching prints	140	low
original drawings	170	low
printmaking artists	1,300	low
graphite drawings	1,000	low
landscape drawings	6,600	low
gravures	880	low
northumbrian art	10	low
contemporary landscape art	110	low
contemporary landscape artist	390	low
emerging artist	320	low
landscape artist	1,000	low
new emerging artists	50	low
intaglio printmakers	590	low
original prints	590	medium

Phrases specific to locations were difficult to get data for, being too specific for average monthly search volume data. I will monitor how the preferred keywords above perform and experiment further.

On-site SEO

I have used the WordPress SEO plugin to help with optimisation.

Page titles

All chosen keywords have been added to the beginning of page titles, to a maximum of 70 characters and with a unique title for each page.

Meta description tags

All page descriptions are unique and offer keyword-rich descriptions of the content on each page or post to a maximum of 155 characters. I have aimed to make them compelling descriptions to encourage click-through from SERPs.

Images

All images have alt tags and filenames that contain important keywords. The homepage however still does not validate for alt tags on the three featured posts, despite alt text being attached to the images within WordPress. Besides the usability benefits of optimisation, as Google has used speed and performance as a ranking factor since 2012 all images have been optimised using smushit.com and Tiny PNG.

Validation

Almost every page validates as meeting W3C standards, although there are a few instances where plugin code prevents this eg. with Mapbox' iframes or Wooslider's CSS.

Webmaster Tools & XML sitemap

Following launch, I added the site to Google Webmaster Tools and submitted an XML sitemap to allow search engines to index the site. I considered redirecting some of the URLs from Chris' very first site (developed by someone else) as his images were showing on Google Images results. However as most of these were out of date, they had no equivalent home on the new site which may have disappointed users. I submitted URL removal requests for these in early August.

Submission to search engines & directories

The site has been submitted to Google, Yahoo, Bing and DMOZ.

.htaccess

I set 301 redirects in the htaccess file on all URLs from the hard-coded site to the WordPress site URLs to allow current search results for the old pages to be associated with the new pages – allowing users to find content via URLs already indexed. I initially thought that there might be a small negative effect on PageRank passed via these redirects, but Matt Cutts in a searchengineland.com video says "The amount of PageRank that dissipates through a 301 is currently identical to the amount of PageRank that dissipates through a link." (searchengineland.com, 2013).

Speed optimisation

Speed and performance has been optimised as much as possible using Google PageSpeed and GTMetrix recommendations. For the hard-coded site, this was much more successful as I improved scores manually via the .htaccess file by:

• Enabling gzip compression

• Adding expires headers to all assets

• Minifying code

• Carefully evaluating each design choice eg. loading one large image for each product at 700px. This causes a slight delay on the rendering of Masonry layouts (although ImagesLoaded prevents overlapping), but avoids double the amount of http requests to the server by having two image sizes for each product.

However my issues with W3 Total Cache breaking my site and the subsequent installation of WP Super Cache meant that on the WordPress site, speed isn't as optimised as I'd like. Further post-launch server errors caused by some remnants of W3 Total Cache creating issues with the htaccess file (30 September) have also made me wary of investigating this again so close to the thesis deadline in case it breaks the site again. I will return to this after November 2014.

Google Alerts

A Google alert has been set up to monitor the sites and pages that mention Chris or which link to the site.

Off-site SEO

This will involve requesting backlinks from key galleries and associations with which Chris is building a reputation. Some already link to the site, but others will be carefully targeted following further research and discussion as there is a need for gradual profile building that respects traditional methods for gaining exposure in the art world.

Other PR & marketing activity

Marketing activity both already implemented, and planned for the future, includes:

• Distribution of a press release (see Appendix III). Drafted by me, this was sent to 13 key contacts across local and national press and specialist art publications – as supplied by the Hop Gallery where Chris' forthcoming show will take place. This was a good opportunity to highlight the site as an information source for journalists. A good response has seen several reply, promising coverage and potential interviews at Chris' private view in October while the event is listed in a few sites online.

• Site launch announcement emails to Chris' database of 74 existing buyer, gallery and media contacts – followed up with own printed invitations to the forthcoming show two weeks later.

• 24 posters and 180 flyers in local bookshops, cafes, libraries, arts/crafts shops and the tourist information office in Lewes, plus restocks each week in the Hop Gallery foyer. Again, produced and distributed by Chris but advised by me, these all include a clear URL.

CHAPTER TEN
ANALYSIS

Browser testing

The site was tested live in all five major browsers in their current versions and was seen to be performing well. At browsershots.org, I tested again in Chrome, Firefox, Opera, Safari and Internet Explorer, and included various older versions of each across various devices and operating systems.
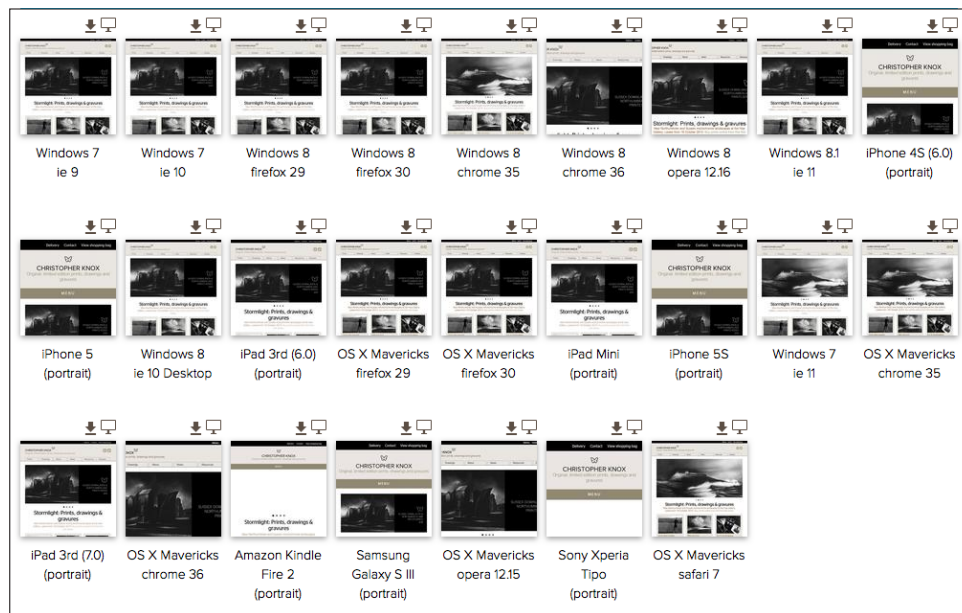

Figure 7: Browser testing screenshots at browsershots.org

In Internet Explorer, the Masonry layout works well for all versions except IE8 where it is not supported. At this stage I have decided to monitor how often the site is accessed in IE8 before making a decision on whether to support it with a specific stylesheet. From 1 August to 22 September, Google Analytics showed that less than 1% of users (4) were using IE8 – a situation that I'll continue to monitor.

The Kindle Fire 2 and the Sony Xperia Tipo images above show a white space where the slider should be. This is due to slow rendering of Flexslider which, after various CSS tweaks, I am still trying to resolve. The slider does actually appear on these two devices – albeit a little later than on others.

Google Analytics

1 August to 5 October: The majority of data is based on the hard-coded chrisknox.org.uk site as the WordPress site was still under development on a staging domain until 20 September when it was migrated to the final domain. Browser testing with browsershots.org caused a spike of 151 "users" on that day so while it's easy to minus this from the total number of users, it's less easy to work out how this impacts other criteria.

Users

During the two-month period, 574 users accessed the site from 149 geographic locations, although for much of the period I had not excluded Semalt via a filter. Semalt is a keyword research programme or robot that is counted incorrectly in Google Analytics statistics. As every visit from Semalt is new, and produces a 100% bounce rate, averages are skewed. Hence according to the community at moz.com, real visitor numbers will be slightly less, and bounce rates lower.
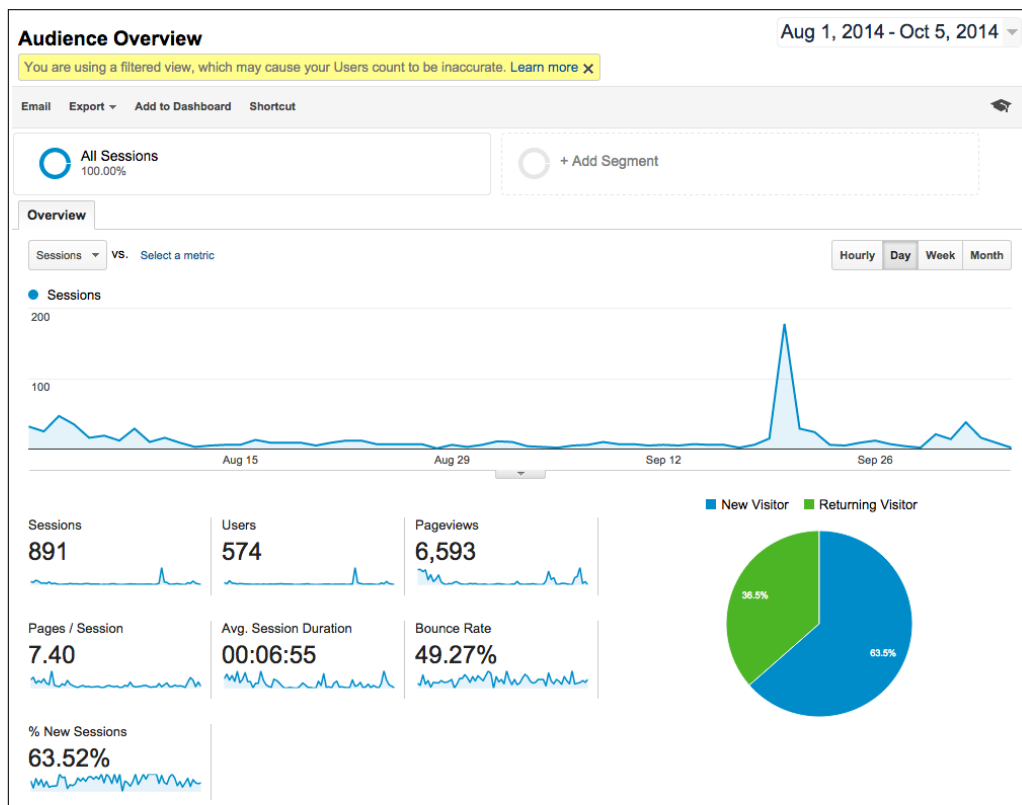

Figure 8: Google Analytics data on user numbers (1 August 2014-5 October 2014)

Landing pages & bounce rate

	Landing Page	Acquisition			Behavior			Conversions		
		Sessions ↓	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration	Goal Conversion Rate	Goal Completions	Goal Value
		403 % of Total: 100.00% (403)	52.61% Site Avg: 52.61% (0.00%)	212 % of Total: 100.00% (212)	41.44% Site Avg: 41.44% (0.00%)	9.47 Site Avg: 9.47 (0.00%)	00:09:46 Site Avg: 00:09:46 (0.00%)	0.00% Site Avg: 0.00% (0.00%)	0 % of Total: 0.00% (0)	$0.00 % of Total: 0.00% ($0.00)
	1. /index.php	203 (50.37%)	55.17%	112 (52.83%)	38.42%	8.72	00:08:16	0.00%	0 (0.00%)	$0.00 (0.00%)
	2. /	44 (10.92%)	50.00%	22 (10.38%)	27.27%	17.36	00:15:57	0.00%	0 (0.00%)	$0.00 (0.00%)
	3. /prints.php	24 (5.96%)	29.17%	7 (3.30%)	25.00%	10.33	00:12:29	0.00%	0 (0.00%)	$0.00 (0.00%)
	4. /knox-hop-gallery-exhibition.php	13 (3.23%)	30.77%	4 (1.89%)	23.08%	6.23	00:17:33	0.00%	0 (0.00%)	$0.00 (0.00%)
	5. /bamburgh-print.php	10 (2.48%)	100.00%	10 (4.72%)	80.00%	1.80	00:00:06	0.00%	0 (0.00%)	$0.00 (0.00%)
	6. /about.php	9 (2.23%)	44.44%	4 (1.89%)	33.33%	5.67	00:09:15	0.00%	0 (0.00%)	$0.00 (0.00%)
	7. /contact.php	7 (1.74%)	14.29%	1 (0.47%)	100.00%	1.00	00:00:00	0.00%	0 (0.00%)	$0.00 (0.00%)
	8. /about	6 (1.49%)	83.33%	5 (2.36%)	66.67%	2.00	00:00:25	0.00%	0 (0.00%)	$0.00 (0.00%)
	9. /drawings.php	6 (1.49%)	50.00%	3 (1.42%)	16.67%	15.17	00:15:14	0.00%	0 (0.00%)	$0.00 (0.00%)
	10. /glossary-a.php	6 (1.49%)	33.33%	2 (0.94%)	0.00%	12.00	00:10:21	0.00%	0 (0.00%)	$0.00 (0.00%)

Figure 9: Google Analytics bounce rates during initial launch period (1 August 2014-1 September 2014)

On 5 October, the bounce rate across the site was 49.27% – an average according to Google.

However, in the first two weeks following launch, when content was fresh and launch marketing was taking place amongst existing contacts, the bounce rate was less than this at a fairly good 41.44% – see figure 9. Visitor engagement measured via Average Session Duration and Pages/Session were also both higher during this first period (see below). Different types of fresh content and regular marketing activity would help to retain these earlier, decent bounce rates and make the returning visitor percentage higher – currently (5 October) at 36.5% for the period.

	Landing Page	Acquisition			Behavior			Conversions		
		Sessions ↓	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration	Goal Conversion Rate	Goal Completions	Goal Value
		891 % of Total: 100.00% (891)	63.52% Site Avg: 63.52% (0.00%)	566 % of Total: 100.00% (566)	49.27% Site Avg: 49.27% (0.00%)	7.40 Site Avg: 7.40 (0.00%)	00:06:55 Site Avg: 00:06:55 (0.00%)	0.00% Site Avg: 0.00% (0.00%)	0 % of Total: 0.00% (0)	$0.00 % of Total: 0.00% ($0.00)
	1. /	292 (32.77%)	76.03%	222 (39.22%)	58.56%	7.90	00:05:50	0.00%	0 (0.00%)	$0.00 (0.00%)
	2. /index.php	259 (29.07%)	59.85%	155 (27.39%)	39.77%	7.73	00:07:21	0.00%	0 (0.00%)	$0.00 (0.00%)
	3. /prints/	61 (6.85%)	70.49%	43 (7.60%)	59.02%	8.61	00:07:22	0.00%	0 (0.00%)	$0.00 (0.00%)
	4. /prints.php	30 (3.37%)	30.00%	9 (1.59%)	30.00%	8.90	00:10:02	0.00%	0 (0.00%)	$0.00 (0.00%)
	5. /bamburgh-print.php	23 (2.58%)	100.00%	23 (4.06%)	60.87%	2.09	00:02:32	0.00%	0 (0.00%)	$0.00 (0.00%)
	6. /about.php	16 (1.80%)	56.25%	9 (1.59%)	31.25%	4.88	00:08:38	0.00%	0 (0.00%)	$0.00 (0.00%)
	7. /knox-hop-gallery-exhibition.php	13 (1.46%)	30.77%	4 (0.71%)	23.08%	6.23	00:17:33	0.00%	0 (0.00%)	$0.00 (0.00%)
	8. /landscape-drawings/	13 (1.46%)	30.77%	4 (0.71%)	38.46%	2.69	00:00:12	0.00%	0 (0.00%)	$0.00 (0.00%)
	9. /about/	9 (1.01%)	44.44%	4 (0.71%)	44.44%	4.11	00:04:09	0.00%	0 (0.00%)	$0.00 (0.00%)
	10. /drawings.php	8 (0.90%)	37.50%	3 (0.53%)	12.50%	14.62	00:15:12	0.00%	0 (0.00%)	$0.00 (0.00%)

Figure 10: Google Analytics top 10 landing pages & bounce rates (1 August 2014-5 October 2014)

The data for the top 30 landing pages shows that the Prints and Drawings pages are performing very well in terms of providing relevant content to users and encouraging user journeys to other pages – see the top 10 stats above – figure 10. 'high-100%' bounce rates come from some of the glossary pages, the

Contact and News pages and the page for the Dungeness print. "Dungeness" was mistakenly optimised at that time for the keywords "Dungeness power station" which is actually the title of a different print – hence the disappointment on entry. Is it common for contact pages to have high bounce rates, but the data shows clearly that artwork content should be optimised, leaving policy pages etc. unoptimised. More could clearly be done to make the News landing page more engaging too by including images, reworked headlines, quoted content etc.

Average session duration & pages per session

With average session duration at 00:06:55, users are spending a good amount of time viewing more than 7 pages per session. Again, these figures are somewhat higher during the month after launch when comparative data shows 00:09:46 average duration and 9.47 pages per session.

Demographics

Demographics data within Google is only an estimate based on a sample of site users so it is best to be fairly sceptical about the data when interpreting the stats within short time ranges and on low-traffic sites. However, a small study has concluded that "Google is surprisingly efficient in making accurate estimations of your visitors' profile" (de Ridder, 2014). So, taking the data as a general guide, as expected, and planned for, site demographics show a slight majority of female users at 56.3%.

Age data shows a surprisingly large younger audience segment comprising just under one-third of users – an unanticipated outcome and one that I shall adapt the user profile for in terms of planning future content. Original target user groups however are well reflected in a combined total of 70.42% across the 35+ age range.
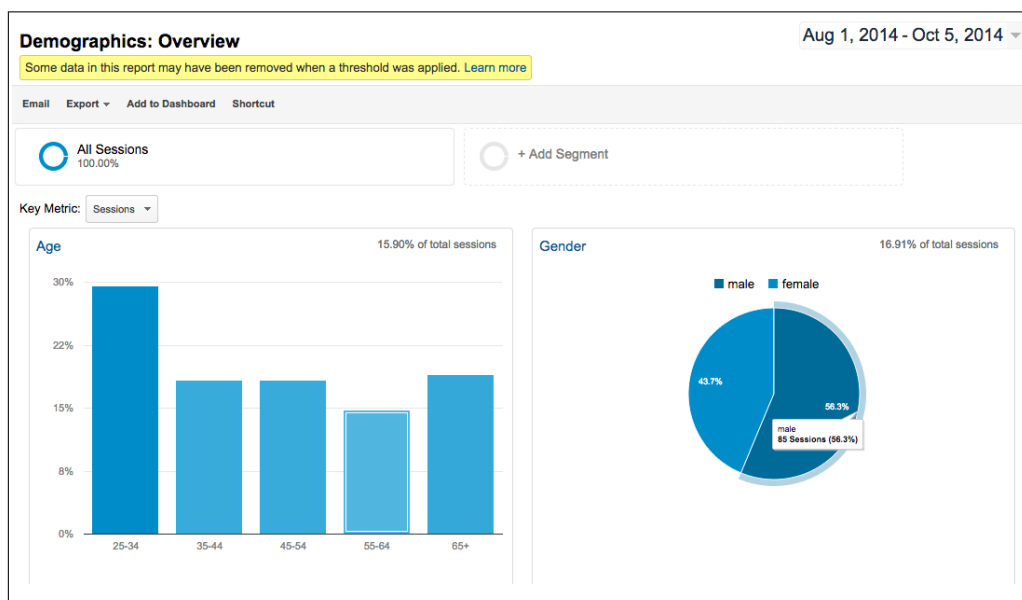

Figure 11: Google Analytics demographics (1 August 2014-5 October 2014)

Mobile

Mobile and tablet users combined comprise 17.5% using 15 different devices, although 83% of these are Apple users. It is interesting that engagement is higher on mobiles than on tablets: Bounce rate is 44% on mobile and 66% on tablet. Pages per session and average session duration when using these device groups also reflect this lower interest level on tablet.

	Pages / Session	Avg. Session Duration
Mobile	4.59	00:05:42
Tablet	2.26	00:01:31

Acquisition

Organic search accounted for 34.24% of traffic, directing 140 new users to the site. Bounce rate for this group of people was very good at 34.24% – see figure 12. While I'm satisfied with this as a start, more could be done to improve content to lower this rate. There is also always the chance that optimising for "Limited-edition Northumberland prints" for example may always bring users looking for a less moody and monochromatic style. I imagine that users would be quick to judge whether an artistic style matches their tastes or not, and stay or leave accordingly. However, optimising with more targeted keywords would filter out more of this group of people. I intend to discuss more niche and longtail keyword ideas with the 70 or so art contacts/buyers at Chris' exhibition preview evening on 18 October which I hope will generate further insights. I am considering a survey for this event.

	Default Channel Grouping	Acquisition			Behavior		
		Sessions ↓	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration
		893 % of Total: 100.00% (893)	63.38% Site Avg: 63.38% (0.00%)	566 % of Total: 100.00% (566)	49.27% Site Avg: 49.27% (0.00%)	7.44 Site Avg: 7.44 (0.00%)	00:06:54 Site Avg: 00:06:54 (0.00%)
☐	1. Direct	487 (54.54%)	71.87%	350 (61.84%)	54.00%	7.22	00:06:30
☐	2. Organic Search	257 (28.78%)	54.47%	140 (24.73%)	34.24%	8.23	00:07:25
☐	3. Referral	97 (10.86%)	69.07%	67 (11.84%)	67.01%	6.63	00:06:08
☐	4. Social	52 (5.82%)	17.31%	9 (1.59%)	46.15%	7.17	00:09:37

Figure 12: Google Analytics data on new user acquisition (1 August 2014-5 October 2014)

At first glance, a bounce rate of 67% for users entering the site via Referral traffic suggests they are not finding relevant content. A closer analysis shows that actually out of 44 referrers, 27 are Semalt. Had I applied a filter to exclude these earlier, this data would have shown lower bounce rates. As Twitter is the top referrer, users coming from that source are engaging for an average of nearly 11 minutes and viewing 7 pages as a result.

Landing Page	Impressions ↓	Clicks	Average Position	CTR
	8,322 % of Total: 104.02% (8,000)	357 % of Total: 142.80% (250)	110 % of Total: 96.13% (110)	4.29% Site Avg: 3.12% (37.27%)
1. http://www.chrisknox.org.uk/	1,300 (15.62%)	70 (19.61%)	85 (79.92%)	5.38%
2. http://www.chrisknox.org.uk/my-process.php	700 (8.41%)	5 (1.40%)	170 (165.76%)	0.71%
3. http://www.chrisknox.org.uk/lindisfarne-sunrise-drawing.php	600 (7.21%)	5 (1.40%)	210 (199.08%)	0.83%
4. http://www.chrisknox.org.uk/bamburgh-print.php	500 (6.01%)	30 (8.40%)	110 (101.07%)	6.00%
5. http://www.chrisknox.org.uk/knox-hop-gallery-exhibition.php	500 (6.01%)	5 (1.40%)	66 (62.63%)	1.00%
6. http://www.chrisknox.org.uk/prints.php	400 (4.81%)	5 (1.40%)	45 (42.35%)	1.25%
7. http://www.chrisknox.org.uk/drawings.php	320 (3.85%)	5 (1.40%)	190 (182.89%)	1.56%
8. http://www.chrisknox.org.uk/firle-beacon-drawing.php	250 (3.00%)	5 (1.40%)	52 (48.52%)	2.00%
9. http://www.chrisknox.org.uk/bosham-sussex-print.php	200 (2.40%)	5 (1.40%)	160 (156.43%)	2.50%
10. http://www.chrisknox.org.uk/drawings	200 (2.40%)	5 (1.40%)	220 (204.86%)	2.50%

Figure 13: Impressions, clicks and click-through rates (1 August 2014 - 5 October 2014)

SEO data (see figure 13) shows that a URL from the site appeared in search results viewed by a user 8,322 times during the period – although 23 pages from Chris' old site contributed to this too. This resulted in 357 clicks, giving a click-through rate of 4.29%. Queries include highly relevant keywords, giving some good ideas for further optimisation and keyword research. These include keywords and phrases such as 'buy landscape prints', 'high level bridge newcastle', 'northumberland prints' and 'printmaking landscapes'.

Sales

In the two months since launch, the site has encouraged two print sales. One of these came directly as a result of a local person in Lewes (where Chris' studio and forthcoming exhibition is) viewing the site after seeing exhibition publicity. Having browsed the full collection and selected the print online, the buyer visited the studio to collect and pay for it in person. The other was an existing buyer, who took up Chris' offer to tour his studio and chat about printmaking as mentioned on the Delivery page, thereby visiting having browsed online. Based on his experience of previous exhibitions, Chris reports that he fully expects more sales during and after his solo show when existing and potential buyers will view 40 new pieces of work that includes the full online collection. For those who don't buy at the show itself, the website now offers an alternative.

Social media

Twitter and Pinterest have driven almost 6% of traffic to the site. The figures are tiny and it will be a slow process, but since starting to use Twitter regularly and more effectively, Chris has increased his number of followers by 335%. He is posting much more content, using hashtags and @, is focused on printmaking and has improved his use of call to action phrases and short URLs to his site. He is now fully aware of how social media can help him to build his reputation as a 'new and emerging artist'.

Positive developments

Chris had an existing contract with the Biscuit Factory (since March 2014) that allows him to display six prints in the gallery, the launch of his site has recently encouraged the gallery to feature his work in their autumn collection and magazine. They have also begun marketing five of his prints online at the gallery website – something they had been slow to do until now. As a big player on the northern art scene, this is a great development which Chris feels his new site has encouraged. However, while the prints are featured at thebiscuitfactory.com, users cannot purchase online, but must call to discuss instead. With barriers like that, hopefully more people will be encouraged to search and discover his own commission-free print sales site.

A London illustration agency has also contacted Chris having viewed his site following a word-of-mouth recommendation shortly after the site launch announcement. Again, having viewed his work online, they have given positive feedback, are interested in commissioning Chris and will visit his show in October. Chris reports that this is entirely due to the online presentation of his work.

CHAPTER ELEVEN
REFLECTIONS

In general, my original aims with this project were to a) learn to develop a site using a CMS and b) learn more about e-commerce and SEO. The project has certainly allowed me to achieve both to a far more advanced level than when I started out, although this has been more relevant with regards to WordPress than to e-commerce. This has been due to the diluted approach to a payment gateway and limited time to fully implement a more sophisticated digital marketing strategy, but I am certain of returning to this – whether on future development for Chris' site, or on other projects. I have very much enjoyed the analytical nature of both the UX and SEO activity on this project and these are two areas in which, alongside design, I will definitely focus my future professional development.

In terms of lessons learned, in future I would now:

- Code only the required templates for a CMS development and not the entire site. While coding 63 pages for a static version of Chris' site allowed me to gain intimate knowledge of every aspect of the functionality, design, and content, this was fairly inefficient – although it did surprise me how quickly I was then able to implement WordPress so it probably balanced out.

- I related to the words of fellow student Barbara Asboth who reported an issue with using over-specific CSS selectors. Having more confidence in developing with a CMS, I would now focus on streamlining my code, giving equal attention to detail to all aspects of development. I feel that I was so focused on managing the learning curve of PHP, WordPress and the Masonry layout (and other activities) in the time I had available that I gave myself little opportunity to advance my CSS skills.

- I would approach the assessment of payment gateways and shopping carts with more awareness of what is realistic for projects of different scope and scale.

- Not paying enough attention to keyword research at the start of the project cost extra time and a duplication of effort. However, I was able to gain some useful insights from my informal approach to SEO on the hard-coded site which may not have been possible had I taken a more organised route from the outset.

- I would now build in more time to plan and assemble larger groups of users for testing prototype sites at various points during planning and build. The results from my very rudimentary user testing sessions were so useful - allowing me to see things that I was definitely blind to - I would have liked more time to learn how to plan and implement this properly as it would surely generate even more usability gems. This will be a future development that, combined with analysis of Google Analytics, will help to further develop the site through data to ensure an alignment with user needs.

- Finally, having more experience I would now also document and plan my process with a more realistic idea of how long various elements take and prioritise and schedule more effectively.

CHAPTER TWELVE
FUTURE PLANS

Future plans for the immediate development and marketing of the site include:

- Finalising content for the Resources section. This will be developed in line with analytics data and user feedback and will include some targeted resources for significantly younger users. I will produce an editorial calendar to keep content fresh – especially as bounce rates have increased since the initial launch and will probably continue if I/we don't offer something for returning users. Future content will meet the standards of being well-researched, useful, shareable and of high quality.

- Adding videos and podcasts of Chris – both on location in Northumberland and Sussex, but also of him demonstrating his process and discussing his work in his studio. This type of content is popular and is faithful to the whole approach of building a compelling brand story around Chris.

- Refining and experimenting with SEO. I intend to survey approx. 70 art buyers at Chris' forthcoming exhibition to get further specialist ideas for a more targeted approach (as well as content ideas). As SEO Moz says "SEO is always a long-term process...to gain maximum profits which are visible after some time." (Galecki, 2009). I will research, discuss and implement a backlinks strategy with Chris and carry out more research on keyword competitors.

- Developing a post-exhibition marketing plan that harnesses key insights from the two-week exhibition period. This will include a branded Mailchimp newsletter with details of latest work, prep studies and Chris' recommendations for events and shows across the printmaking world, further press releases based on his forthcoming exhibitions, and competition entires to high profile shows.

- Upgrading the PayPal account to a Business version to allow me to customise and brand the whole checkout experience. Adding some useful features to the shop, including image zoom on prints. Also adding prints/drawings categorisation according to location as Chris expands his geographical focus for future work.

- Training Chris to further use WordPress so he can update pages independently. By the end of 2014, I would like us to be experimenting with more advanced e-commerce tools if online sales warrant a further investment of time in this area.

- Setting up and experimenting with more tools at usabilitytools.com. I managed to install their click tracking tool, but would like to do more with visitor recording and the UX suite.

- A return to speed and peformance improvements once safe to do so!

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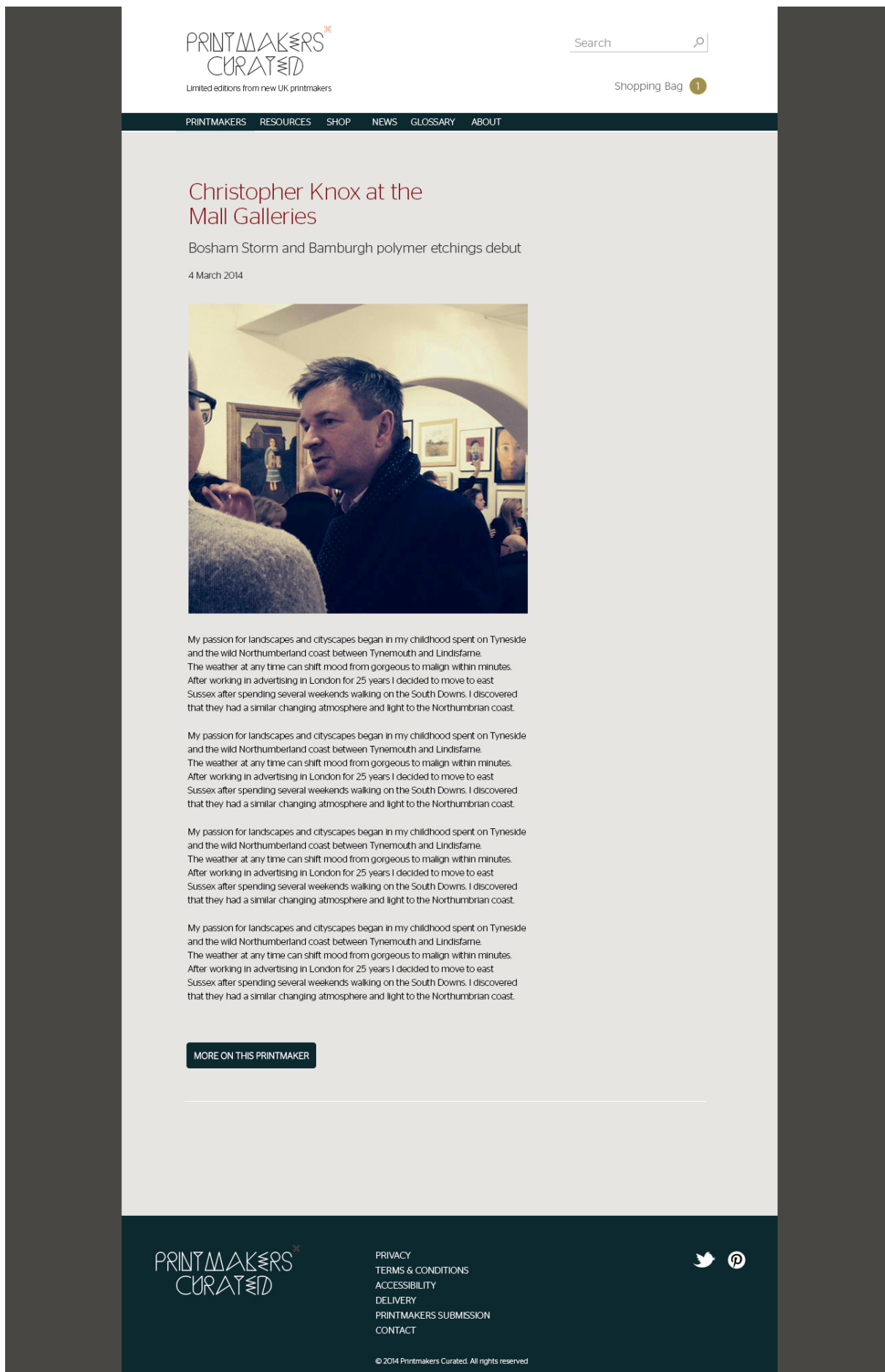
APPENDICES

Appendix I – Prototype stage Photoshop layouts
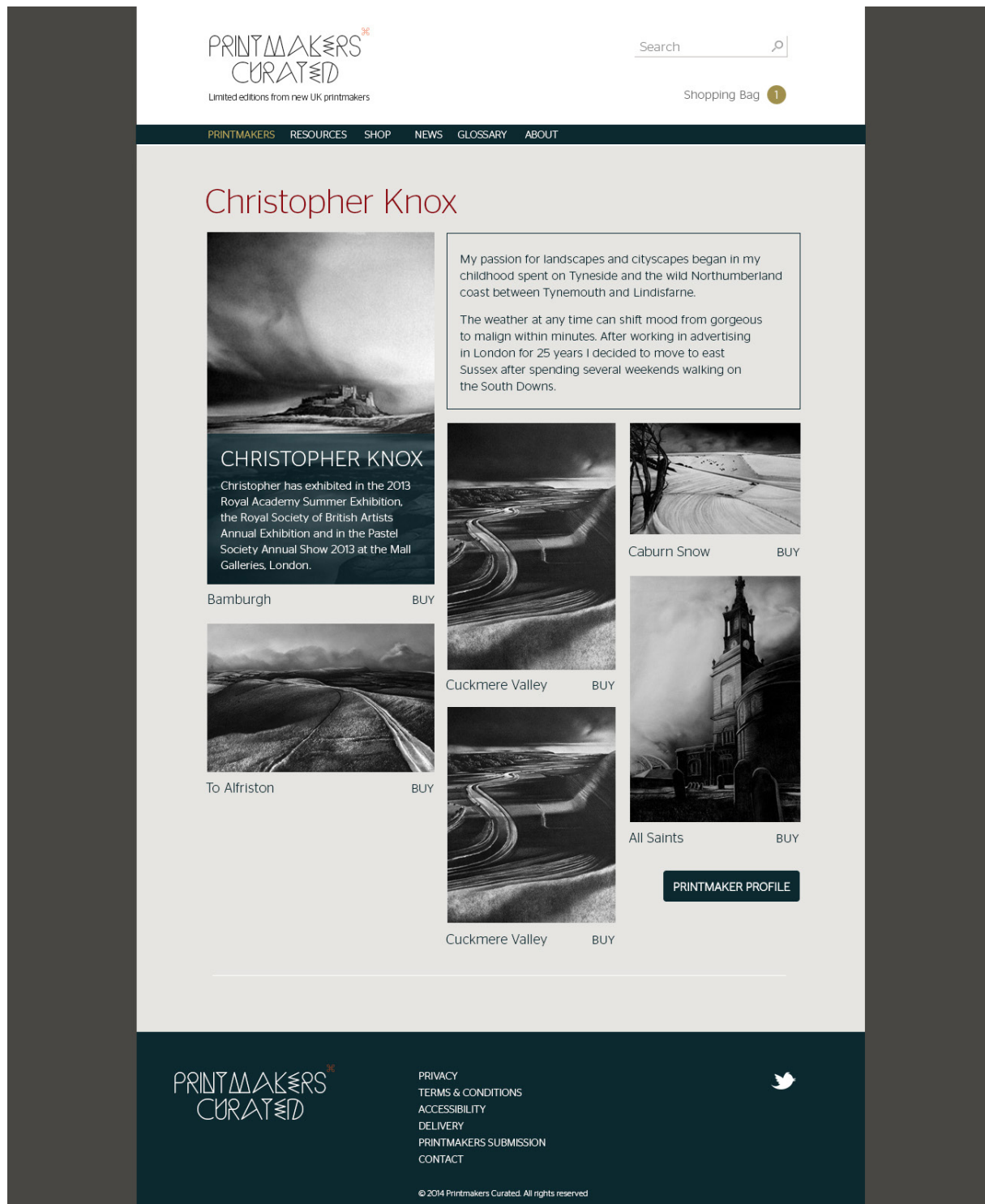
Appendix I – Prototype stage Photoshop layouts

Appendix II

User testing 28 July & 16 September 2014

Participants

- 1 x woman aged 42 with professional digital skills who is a prolific user of the internet

- 1 x man aged 73, retired engineer, with a superficial awareness of the internet, but who has made purchases of holidays, insurance, books, clothes and home appliances online.

- 1 x woman aged 70, retired housewife, with superficial awareness of the internet, but who reads magazines online and has made purchases of cosmetics, clothes, books and gifts on e-commerce sites.

- 1 x man aged 73, retired fire officer, uses internet for news, asked daughter to research and buy products online for him until recently when he used e-vouchers to buy an iPad at Amazon.

- 1 x woman aged 43, professional photographer with excellent online skills

TASK: Navigate to browse and buy one or more prints

TASK: Find out more about the artist and his upcoming exhibitions

TASK: Find information on ordering & delivery

Observations

Navigation

Older participants had a heavy reliance on using the back button to navigate as opposed to using internal links – with the exception of the top main navigation. Breadcrumbs were not used at all and were not considered important. They only wished to use the back button and the main navigation, reporting that this was simple to understand and use. One older participant had difficulty in returning to the homepage in the absence of a 'Home' link. On mobile, users (except one) did not understand the hamburger icon.

ACTION: Change hamburger icon to 'Menu' for smaller screen widths.

Individual product pages

Participants said that they wanted to see the prints at larger sizes (even though many already fill the screen). What they actually meant was that they wanted to be able to see the detail via magnifying glass/zoom functionality.

ACTION: Add magnifying glass/zoom functionality to WordPress version

Buying a print

The older participants thought that the main way to buy was via the 'Contact' link in the footer, but both looked confused. Once the 'Add to shopping bag' link had been pointed out to them on the individual prints pages, they thought that it was clear and that this shouldn't be changed. However, the fact that they didn't immediately see this means that I have decided to change the colour of the button to something less muted.

ACTION: change the colour of the button to a darker gold. Consider changing the call to action to 'Buy now'.

The older participants also wanted to see more information about delivery charges, payment methods and delivery dates on the individual product pages.

ACTION: Summarise the main types of ordering/delivery information on the individual product pages and add a link to the full information contained on the 'Delivery' page.

Product pages and site design

One older participant: "I would definitely trust this site enough to make a purchase online." This person wanted to know that there could also be an opportunity to view the print offline - that there should be a 'View at Christopher's studio' statement.

Response to "Does the site need more colour?" gave a unanimous "No", due to the need for prints to be absolutely the main focus with nothing detracting from this.

ACTION: Add a sentence on individual product pages that lets potential buyers know that they can also view offline.

Delivery

Hand delivery was thought to be a unique and very personal connection which was highly appreciated. They wondered how this would work in practice if there were a lot of orders. While both myself and Chris thought that buyers might like to see how the prints are packaged – that they are beautifully branded and wrapped to be packaged securely for transit – this was of no interest to the older participants who just expected that the parcels would be packaged to ensure no damage and certainly weren't interested in branding. The younger participants thought that this would be a signifier of quality however and would appreciate the whole experience of receiving something handmade and beautifully packaged.

All participants wanted to know more about delivery time estimates, the need to be in to sign for the parcel etc. and they didn't see the link to delivery information in the footer which contains this information.

ACTION: Place a conspicuous link re: delivery information on the individual product pages and perhaps on the Prints and Drawings overview pages. Maybe add this to the very top navigation to be more conspicuous.

News

The older participants missed the fact that the news story summaries on the 'News' page were just summaries and not the full story. They didn't realise that they could click on the headline to click through to the full article. They suggested the convention of a 'Read more' call to action here.

ACTION: Add 'Read more…' links at the bottom of each news excerpt.

News articles

On the full 'My process' article, participants all found the gold h2s very helpful and stated that without them they wouldn't have had the patience to read the piece. I observed them, and they also confirmed, that they used these to scan the page before reading the sections they were most interested in. The older participants also said that they found the red h1s and the bold standfirst helpful in communicating hierarchy, while they also found the order of content for this piece to be appropriate – with the most information regarding process at the top important (they said "the most useful information to influence my decision to buy"), and lower priority information eg. on branding and future plans, at the bottom.

Resources

Making the majority of the panel clickable was helpful to the older participants who immediately recognised the hover hand state, didn't have to find the clickable part of the panel eg. a title, and knew that this would take them somewhere. N.B. This has since been disabled until actual resources content is added.

Glossary

The two older participants didn't understand what the glossary was for and didn't realise that the letter 'A' on the first page was the start of a glossary. When it was explained to them, they suggested (and I agree) that the title of this section should instead be 'Printmaking terms explained'. Participants didn't think that this was higher priority content than say a page that outlines the steps in the ordering and delivery process.

ACTION: Change 'Glossary' title to 'Printmaking terms explained' while keeping 'Glossary' as the navigation label, but offer an alternative from the home page in the form of 'A-Z of printmaking terms'. Consider moving the Glossary page link to the footer, and including a step by step (maybe icon-led or illustrated) guide to ordering and delivery. (Update: this is planned for a later date).

Appendix III – Press release

From: CHRIS KNOX <mailto:cknox@st-james.uk.com>
Sent: Tuesday, August 05, 2014 3:40 PM
To: Kate Lawton <mailto:kate@cassbinder.com>
Subject: Re: Press release

Brilliant, Thankyou Kate xxx

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On 5 Aug 2014, at 15:03, Kate Lawton <kate@cassbinder.com> wrote:

PRESS RELEASE – 5 AUGUST 2014

************************ FOR IMMEDIATE RELEASE **************************

STORMLIGHT: NEW MONOCHROME LANDSCAPES OF SUSSEX & NORTHUMBERLAND BY CHRISTOPHER KNOX AT THE HOP GALLERY

PHOTO OPPORTUNITY: Preview and Meet the Artist event to be held at the Hop Gallery, Star Brewery, Castle Ditch Lane, off Fisher Street, Lewes BN7 1YJ on 18 October 2014 from 6.30pm to 8.30pm. Contact Angie Osborne, Gallery Director at the Hop Gallery on 01273 487744 or at info@hopgallery.com

In his first solo exhibition, at the Hop Gallery in Lewes, landscape artist and printmaker Christopher Knox will be showing 40 new monochrome landscape and cityscapes from on location in his native Northumberland and his home county of Sussex.

Atmospheric black and white images have been heavily influenced by spending time on the wild Northumberland coast where the light and weather can change within a fleeting moment.

The exhibition will include sketches, prep work and finished etching plates to help explain Christopher's printmaking process while Christopher will discuss his work with gallery visitors on the preview evening from 6.30pm to 8.30pm on 18 October 2014.

Christopher has had works accepted in the 2013 Royal Academy Summer Exhibition, the Royal Society of British Artists' Annual Show and The Royal Pastel Society Annual Exhibition at London's Mall Galleries. In 2013, Christopher was elected to the Society of Graphic Fine Art.

Ends

Notes to Editors

For an interview, please contact Christopher Knox on 01273 480497 or at cknox@st-james.uk.com. Photos of Christopher's work are attached, or please also view his website at www.chrisknox.org.uk

Christopher Knox is a landscape artist and intaglio printmaker who discovered a passion for landscapes during his childhood on the Northumbrian coast. After working in advertising in London for 25 years, Christopher moved to Lewes, East Sussex where he has a studio and works as a self-taught printmaker.

Exhibition information: *Stormlight: Prints, drawings and gravures* at the Hop Gallery from Saturday 18 October 2014 to Sunday 26 October 2014. Open: Monday to Saturday 10.30am – 5pm and Sunday 12noon – 5pm.

Appendix IV