



A Directed Research Internship, presented as part of the requirements for the Award of a Master Degree in Management from the Nova – School of Business and Economics.

SPECTANDUM:

Data Driven Product Design for Online Art Retail

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ABSTRACT

The art market has seen a surge of online retailers in the past few years. It was one of the slower industries to adapt to the digital space. As of today, the online art market is worth over \$3 billion; the digital art space is vaster than ever and has not consolidated into a handful of platforms as previously expected. Spectandum, a new dealer entering the online space, is looking for ways to become an omni-channel platform with a strong following. This report will give an overview of the online art market; how it differs from the physical art market, what customers expect, and what trends to pay attention to. It then concludes with a description of the work implemented during my internship to help Spectandum reach its desired customers. This report is complemented by an interactive dashboard relaying insight on the market and on Spectandum's performance online.

Keywords: Product Design, Analytics, Online Retail, Art



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1. INTRODUCTION

1.1 Company Overview

Spectandum is an art gallery based in Leuven, Belgium. The company was started by Guy Kuypers in 2006 with a collection of rare taxidermy birds and Japanese Netsuke. Today, in the spirit of the 16th century Wunderkammer, it encompasses Naturalia, Artificia Scientifica, and curiosities from many cultures and periods of history. Spectandum operates through a network of buyers and sellers that its founder built over the years; through exhibitions, antique stores, trade shows, and networking events, Mr. Kuypers had built a loyal ecosystem of buyers and sellers. Seeing the emergence of online auction houses, show rooms, and sales platforms, he is keen on entering the digital space. Several attempts to enter the online art retail business have been made; Spectandum sells art on online art aggregators *Ebay* and *CataWiki*, but its online business activity represents only a small fraction of its annual sales. Spectandum wants to become an omni-channel art retailer, and as such has tasked me with the development of its online sales channels. This report explores the online retail space, provides an overview of the strategies implemented during my internship, as well as the plans and suggestions for the future of Spectandum.

1.2 Research Questions & Objectives

The main objective of this internship was to explore the digital art market to determine and implement the online sales channels for Spectandum. It involved understanding the art gallery business model, studying the emerging online art retail market, and developing an omni-channel strategy for Spectandum.

In order to deliver on these objectives, it is important to understand what drives collectors, particularly in the digital space. As such, this study will attempt to answer a few important questions regarding the online art retail space with respect to which aspects of the physical gallery should be translated to the digital model, what the price threshold is for online art buyers, and how a community is created and maintained in the art market.

1.3 Methods & Tools

The product design solutions proposed in this study are data-driven, and rely on information gathered from experts, analysts, and website traffic. The main tools used to perform the analysis are Google Analytics, which gathers website traffic data and gives valuable insights on how customers are behaving on the website. Data on the evolution of the art market was gathered through Art Tactic and their annual reports, which give an in-depth analysis of the online market through survey reporting and sales analysis. Information on Spectandum's performance is gathered through the various platforms where the company sells its pieces. All of the data collected for this study is processed and presented in Tableau, a powerful business intelligence tool, and presented as a dashboard which highlights the important information.

1.3.1 *Google Analytics*

Google Analytics helps identify the impact of website design and marketing initiatives on online sales and popularity. It allows users to present reports on: audience, advertising, traffic sources, content and conversions. The audience reports include:

- Demographics: Location and browser language setting.
- Visitor Behaviour: Number of new and returning visits, and the duration of their page visits.
- Keywords: Which words lead to the website for new visitors.
- Technology Used: Browser version, operating system and the network service provider to determine which technologies to use on the website (e.g for newsletters or video content).
- Mobile: Number of visitors via specific phone or other mobile devices.
- Visitor Flow: Pathways commonly used through the website to determine popular pages.

1.3.2 Reports

Traffic source reports identify the source and frequency of referral links from other websites, access via search engines including the search terms used, and the number of visitors accessing the website directly by entering the web address. The content report overview provides data regarding the specific pages accessed during a selected time period and identifies the relative popularity of pages within the website. As with the audience report, the number of page views is measured in terms of the total number (including returns to a previously viewed page) and the number of unique page views. Based on the time between the page views within a visit, the average time on the page is also presented for the given time period. The overview also displays the bounce rate and percentage exit, which are terms used to refer to the percentage of single page visits to the website within the selected time period (i.e. landing on the website and ‘bouncing off’ again), and the percentage of website exits that occurred.

1.3.3 Tableau Dashboard

Tableau’s dashboard allows users to aggregate a variety of data simultaneously to create an overview. Each view presents one graph and is built using data imported directly into Tableau or through a connection made to Tableau (e.g Excel, Google Analytics). Views are built by combining the relevant data and are customizable in format, colour, time granularity (i.e month, day, hour, minute). Views can also be made interactive by adding filters, where for example users can choose which year’s data they want to analyse. A dashboard is a collection of several views.

2. THE ART MARKET

2.1 Art: A Conspicuous Good

There exist goods that contradict the basic law of demand, which states that price has an inverse relationship with demand, because they appeal as a status symbol. These Conspicuous goods, also called Veblen goods, were first described by American economist Thorstein Veblen in his 1899 book *The Theory of the Leisure Class*. He characterizes these goods as appealing

to the affluent class, who believe the *'unproductive consumption of goods is honourable, primarily as a mark of prowess and a perquisite of human dignity; it becomes substantially honourable to itself, especially the consumption of the more desirable things'* (Veblen, 1899).

They pursue these goods to distinguish themselves and elevate their social status.

Conspicuous goods differ from many frequently purchased goods in an important way: They satisfy not just material needs, but also social needs such as prestige. This phenomenon is important to keep in mind when trying to create online sales channels for art retail, as it has important implications for how such goods are marketed. Marketing textbooks caution marketers of prestige goods that they should not price their product "too low," since they could sell less at a lower price (Boone and Kurtz 1999). A common practice of marketers of conspicuous goods, such as cars, jewellery, perfumes, and watches, is to highlight the exclusivity of their products. Other firms use exclusive distribution channels to restrict the availability of their products. Christian Dior, for example, sued supermarkets for carrying its products because wide availability could hurt the firm (Amaldoss and Jain, 2005). Luxury goods manufacturers are advised not to sell their products over the internet since it might dilute their image. Thus, marketers are motivated to maintain a product's exclusivity in part because they believe that some consumers might find the product less valuable if it becomes widely available.

Prior research has identified the existence of two competing social needs among consumers: a need for uniqueness and a countervailing need for conformity (Brewer 1991). When consumers purchase products to satisfy their need for uniqueness, the value of the product increases as its perceived uniqueness increases. In other words, consumers could value a product less when more consumers own it.

2.2 The Online Art Market

The data used for the online art market analysis was sourced from *Hiscox's* annual art report and *ArtTactic*, a London-based art research and reporting company conducting market surveys.

Online art market reached \$2.64 billion in 2015. Online art sales shifted up a gear last year, as global online art and collectibles sales platforms gained traction. Auctionata announced a 148% increase in auction sales and Heritage Auctions sold \$357 million worth of art last year, up 42% from 2013, to become one of the world's largest online auction houses.

Market Highlights

- 2013 was the first year that more art was sold online than in galleries.
- The most popular art medium sold online is paintings
- The value of the online art market was \$1 billion in 2013, \$2.64 billion in 2015, and is projected to be worth \$6.3 billion in 2019.

2.2.1 New Art Buyers

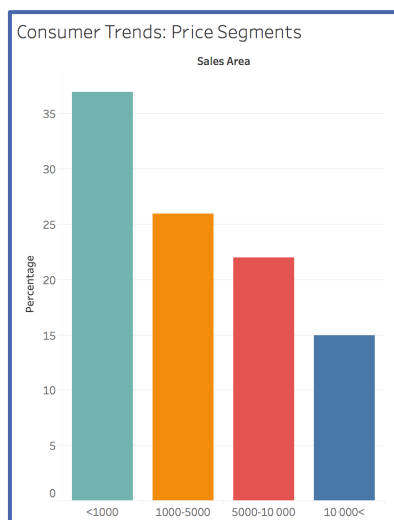


Figure 1. Price segments of art sold online (2018). source: ArtTactic

Online sales platforms have made the art market more accessible to new art buyers, who find the online art buying experience less intimidating than auction houses or physical galleries. These newcomers fuel the 'click-and-buy' trend and push it towards mainstream adoption; they are mainly motivated by the value potential of art pieces (also emotional benefits) and are attracted by the trading nature of online platforms.

However, this also means that most art trades under \$5000 online (see *Figure 1.*), with most averaging at \$1000. While it has moved up over the years, online dealers are having a hard time selling items for over \$10 000 online.

2.2.2 *Omni-Channel Experience*

It is difficult to gauge the total value of the art market; even if we only consider the sales of major art galleries and auction houses, the tail end of the market could still represent hundreds of millions of euros. While the online art market can give us a clearer and more transparent view, it only represents a fraction of the market.

It has been established in section 2.2 that the online art market has seen steady growth over the past few years, mainly due to it being more accessible to newcomers. It is important to note that growth has been stalling for the past two years with actual sales not reaching projected sales, and buyers still don't seem to be comfortable buying art for over \$10 000.

It seems that physical galleries and auction houses matter less to newcomers. However, it looks as if though the best performers in the market offer multiple channels to reach their customers and sell to them. High-income buyers, experts, and collectors, who have been active in the industry for a long time, seem to embrace the convenience that online platforms offer, but are still attached to the values (e.g. personalized service, the experience of buying) of physical galleries and auction houses.

While purely online platforms cater to enthusiasts and newcomers, established galleries and auction houses are blending the benefits of digital and physical art trading to offer an omni-channel experience to their customers.

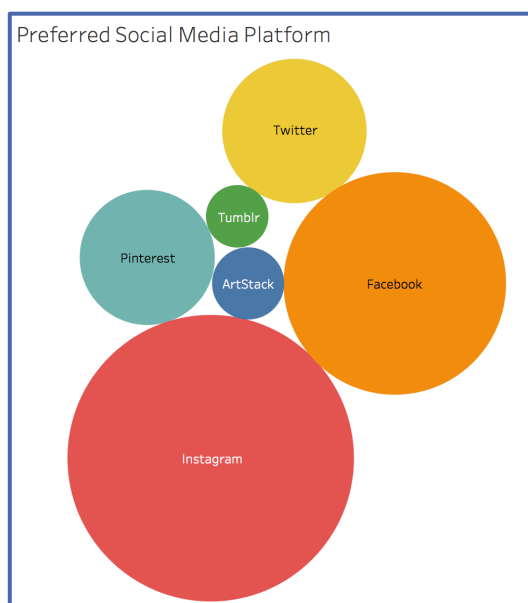
When comparing sales, even though online market places sell more pieces, omni-channel generate more revenue, meaning that they are able to sell more valuable pieces.

2.2.3 *Social Media*

Social Media platforms pair well with the online art business model, and dealers have learned to harness its power to advertise their brands and reach new customers, with 91% of surveyed dealers saying they actively use one or more platforms to promote their gallery. Facebook and Twitter were the dominant platforms in 2015 and 2016 but were taken over by Instagram in 2017. Today Instagram is the social media platform of choice for dealers and

collectors, with 57% of galleries saying they are finding it the most effective platform to raise awareness and reach new buyers (see *Figure 2*).

Users and dealers and artists are drawn to the simplicity and visual nature of Instagram,



and its mobile functionality (app, stories, and live feeds) make it a powerful tool to advertise on the move. A few apps have been created specifically for the art market (e.g Etsy, Saatchi App), but they don't have nearly as much power as Instagram and it's 1 billion users and are much less effective at helping dealers reach new audiences.

Figure 2. Preferred Social Media for the art market (i.e buyers & sellers) in 2017. Source: ArtTactic

While Social Media is clearly gaining traction in the online art market, many art buyers say they are not influenced by it when purchasing art, which means that there are other marketing channels that are still preferred. It is important to note that the new generation of art buyers, people under 35 who are entering the market, have an affinity for social media, and sellers who want to reach this growing audience will need to advertise on social media.

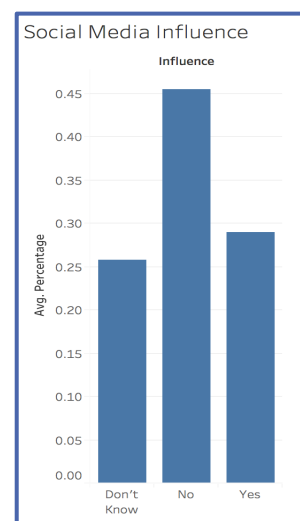


Figure 3. Influence of Social Media when purchasing art (2017). source: ArtTactic

2.2.4 Buyer Expectations

Art buyers expect certain benefits or advantages when buying art from physical spaces, and most successful galleries and auction houses comply with these demands. These include certain costs being covered by the gallery/auction house, early access to pieces, invitations to exclusive events to name a few. The same applies to online art retailers; buyers have certain expectations when buying online and failing to meet these demands results in lower sales. *Figure 4* shows the most sought-after attributes for online art buyers. Over 90% of respondents

are interested in the quality of the art, particularly whether the quality is superior or equal to the art bought offline. Many buyers claim price transparency as the second most important attribute that online retailers need to have. They demand clear pricing and the possibility to

consult previous prices. Transparency is an essential tool in building confidence when buying art online. Amongst the main expectations, another less obvious essential attribute to build confidence is background information about the art and the

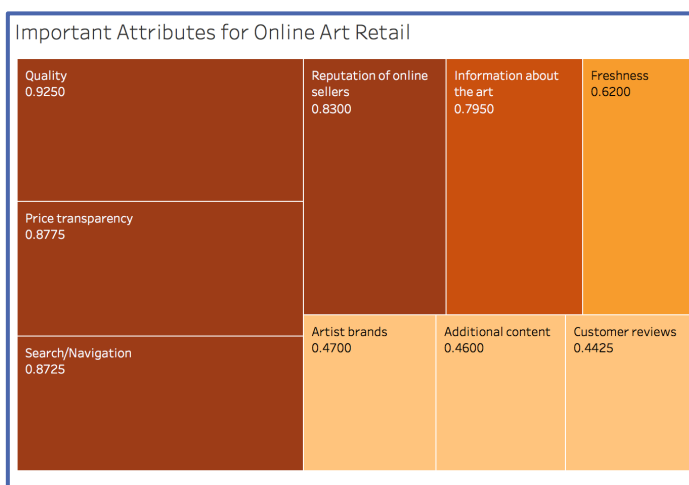


Figure 4. Most important assessment criteria for users when buying art online. source: AriTactic

artists. Finally, shipping costs and complicated logistics tend turn buyers away, with 48% of online platforms claiming them as their current key challenges. With Amazon Prime pushing logistics and fulfilment to new levels, the expectations of online consumers grow rapidly; over 70% of online art buyers say that a return guarantee would encourage them to buy art online.

2.2.5 Generation Y (20-35 years old)

A new generation of younger art buyers is surfacing in the art industry. Being more digitally-inclined, they are a particularly attractive segment for online art retailers. Among younger art buyers, referred to as *Generation Y*, 14% said they preferred the online experience, and 40% said they had no preference. Furthermore, 19% said their first buying experience was online. This suggest that they are less dependent on auction houses or physical galleries as their main source to buy art, and that they have no particular preference for online platforms or

physical galleries; an omni-channel experience is required to cater to the needs of this growing segment.

A distinguishing factor of this segment is that they are more loyal to platforms than other buyer segments; 80% of Generation Y respondents said they bought from 1 to 3 platforms, compared to 62% of other buyers who said they bought from 3 to 5 platforms, and 67% of Generation Y buyers feel an element of loyalty towards the companies they have bought from.

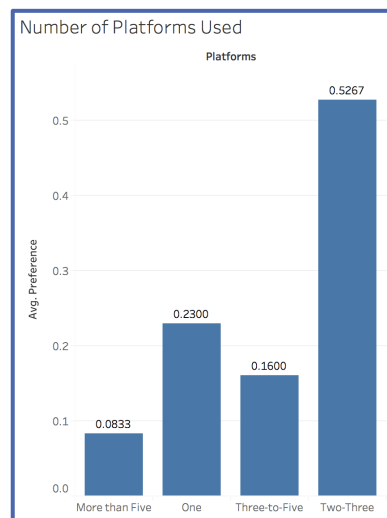


Figure 5. Number of platforms used when buying art online (2018). source: ArtTactic

2.2.6 Key Findings

The online art market analysis provided insightful information about the current condition and trends of the market. Below are the key findings that shaped Spectandum's online channel strategy:

- a. There is very little loyalty in online art retail: in 2015 experts predicted the art market would consolidate. In 2018 it is clear that the opposite has happened; there are more platforms than before, and buyers have no particular affinity towards certain platforms. they buy from whichever platform meets their current needs. This makes it very difficult to build a loyal community; a strong brand identity is required to stand out.
- b. While an increasing number of buyers are buying art online, physical galleries and auction houses are still the preferred place to buy art. Offering an omni-channel experience with a physical gallery/auction house and a digital solution is key to satisfy the current buyers' needs.
- c. The new generation of art buyers have a preference for online art retail and are more influenced by social media. These buyers tend to be more loyal and buy frequently, making them a lucrative segment for online art retailers. However, it is important to note that *Baby Boomers*, people above the age of 60, although tend to buy more expensive art online, and

will more frequently purchase pieces above £10,000. Although Baby Boomers are less tech-savvy, they buy art online, and efforts need to be made to attract their business.

- d. New art buyers are more influenced by emotions or financial gain when purchasing art. As such, art companies should focus on those aspects when describing their pieces. Content creation is an effective way to appeal to buyers' emotions, and financial projections or distinguished provenance help establish financial guarantees.
- e. In 2014, experts predicted the market would consolidate into a handful of Amazon-like platforms, with global auction houses like *Saatchi* or *Sotheby's* taking the bulk of the market share. In 2018 it is clear that the market has not consolidated; every year newcomers emerge and find a segment of the market to serve. The market is segmented according to tastes, geographic locations, and prices (Mutual Art, 2018); U.S buyers tend to buy pieces up to \$ 500 on *Live Auctioneer* and pieces up to \$ 5000 on *Invaluable*. Most of the French market buys online art on French platforms *Drouot*, *AuctionFr*, and *Interencheres*. German buyers mostly buy art online on *Lot-tissimo*. All these different platforms have adapted to the tastes of their clientele. For example, U.S buyers prefer Central African art, while French collectors prefer West African Art, and Germans enjoy collecting Grassland Beaded Art. As a result, *Live Auctioneer* and *Invaluable* don't sell many Grassland Beaded Art. Rather than consolidating, it looks like the market will further grow into specific segments catering to the specific needs of collectors.

3. SPECTANDUM: STRATEGY & PRODUCT DESIGN

3.1 Product Design: The Design Thinking Process

Spectandum's online sales channels were built following the Design Thinking method. Design Thinking, which was already being conceptualized during the 1950s in Harold van Doren's *Industrial Design – A Practical Guide to Product Design and Development* and was first adapted for business purposes by IDEO design consultancy founder David M. Kelley in

1991, is a problem-solving approach that has been used in creative industries for decades. It encompasses context exploration, problem finding and framing, ideation, modelling, testing, and evaluating.

The methodology involves contextualizing the issue, which is to determine which features of the physical art dealer are important to online art buyers, and how to translate them to the digital model; this requires an understanding of what great face-to-face retail looks like and what features customers value when buying art:

1. A great salesperson is able to present relevant information based on a consumer's questions and preferences.
2. The information presented is easy to understand and adapted to the customer's knowledge.
3. The salesperson has sales tools and deep knowledge to assist decision-making and introduces this information at the right time

Due to time and technical constraints, not all of the Design Thinking steps were implemented.

The following steps describe my approach to the problem:

- **Empathize:** Speaking to dealers and collectors, listening to their needs and issues, and using market research to support their claims.
- **Ideate:** Good ideas often starts with pen and paper. Attempting to solve problems as if it were the first time they occurred for anyone has been proven to generate original and unique ideas (Stanford d.school, 2010).
- **Execute:** Building the services following the guidelines set out during the ideation process. All ideas could not be implemented due to budgetary constraints; ideas were classified and implemented according to their urgency and estimated short-term impact.

3.2 The Omni-Channel Strategy

In June 2018 Spectandum had no online sales channels; Mr. Kuypers sold his pieces to his network of particulars which he had developed over years by going to exhibitions and art fairs. While he had tried to sell his art online through various popular platforms such as *Ebay* or *CataWiki*, he never saw a lot of success on these platforms.

He was aware that there was potential to selling art online, he himself bought a lot of his pieces online, but could not seem to attract a steady customer base and sell consistently sell his art at its proper value. Mr. Kuypers always sought after unique and valuable pieces and was under the impression that the online art community was interested in the same, which is why he was often disappointed to find out that his pieces did not sell because of their high reserve prices, and he had to lower his prices to sell his pieces.

Following an in-depth study of the online art market, a broad strategy for Spectandum's online sales was established; the online market is divided into clear price segments, with a majority of buyers clustered in the lower price ranges. Online art collectors are interested in the potential value of pieces, and as such look for cheaper pieces that can increase in price. Furthermore, the online market is accessible to all, not just the upper-class elite or eager collectors; these new buyers are less interested in the piece's origin or provenance and are more interested in aesthetics and the decorative value of pieces.

Mr. Kuypers had rooms full of less valuable, decorative pieces that were sold to him in lots (he would buy a lot for a particular piece which he knew to be worth a lot and kept the rest of the lot which was not worth much). In order to cater to the online market's clear segments, Spectandum's online sales channels were split into separate brands: Spectandum would become an online catalogue and dealership to sell valuable pieces starting at 3000 € (these pieces had a proven provenance and were referenced in old travel journals) and would cater to more established collectors and musea. Ripple would cater to lower-end, decorative art collectors by organizing branded auctions on various online platforms; selling pieces up to

2500 €. While similar marketing tactics were employed for both brands, it was absolutely key to keep them and their respective communities separate.

The first step in implementing Spectandum's online sales channels was building a website. *Wix*, a low-code SAAS platform, was chosen to build the first version of the website; although not ideal in terms of performance and control, low-code platforms allow businesses to quickly build, publish, and advertise a working product. The Spectandum website would become a platform to display the current pieces on sale and would be updated with new pieces on a monthly basis. At first, it was designed to be an online catalogue which displayed pieces without price; collectors could get in touch through the website via e-mail, where the item in question would automatically be referenced in the email title.

Ripple was more straightforward; a few online auction platforms were selected to create branded auctions; for a fee, art sellers can set up a branded auction and get access to an auction house's customer base. The first Ripple auction took place on September 7th on two platforms (*Live Auctioneer, Invaluable*). The auction went well, and Ripple sold over 60% of its items, many of which at a higher price than anticipated; this confirmed that segregating brands according to segments was the right choice. A few auctions later, the goal is now to hold an online auction with Ripple every month so as to generate a consistent revenue stream through online sales.

While a few minor changes have been made to the way Ripple operates (an agent was hired to make photos and take care of shipping), it has already turned into a fairly consistent operation. One technology that is now being tested is a program that is capable of monitoring the different online auction houses on which Ripple is present simultaneously, and to update the other platforms as soon as one platform has the highest bid; this aggregates the bidders from all the platforms Ripple is on and makes the bidder pool bigger.

The main challenge remains with Spectandum and how the company can we sell high-end art online. The company's strategy to improve sales involves the following changes to the website's marketing and sales strategy:

- a. Customer profiles: allowing customers to build profiles which give them access to premium content such as saving items, being notified when items are being sold, and early access to new items and content. In the next version of the website, expected to launch mid-February, customers will be able to create a profile for free. Customers with profiles will be able to save items to a Wishlist and be notified when said item is being queried for by other buyers, have early access to new pieces before they are displayed on the website, as well as access to the discussion live streams. It will allow Spectandum to gather more valuable data about their customers and get a better overview over what

their interests are: which items they like, what price range they are interested in, what subjects they find interesting, etc. With this information, Spectandum will be able to send personalized newsletters that speak to the different segments within their customer base.

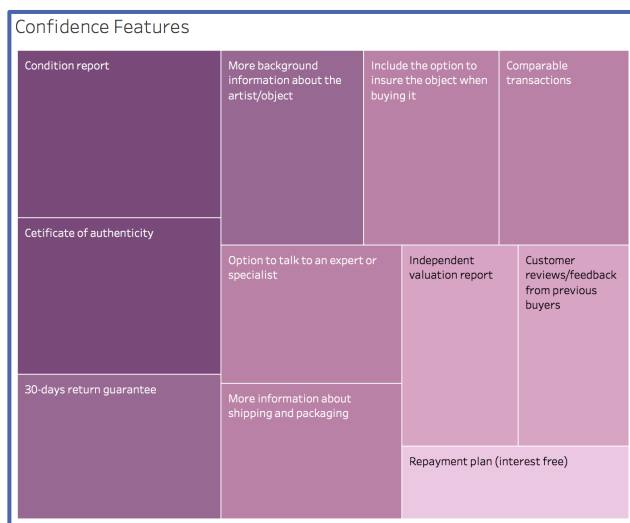


Figure 6. Important features as voted by online art buyers (percentage of votes).

- b. Price transparency: displaying the prices on the website and justifying it in the description through journal references and provenance. The next version of Spectandum will also display the selling prices of the items on display. While it doesn't seem to be an issue for established physical galleries and auction houses, price transparency is an important factor for online art buyers. The current system, which does not display prices, allows customers to contact Spectandum via email to request

prices. This method is inefficient and often leaves customers discouraged as they are uncertain about whether they receive the same price as others. Displaying prices and providing justifications for that price by describing the piece's provenance through journal references, lab tests, and certificates provides certainty to the buyer (Thompson, 2010).

- c. Content creation: consistent blog posts by field experts covering a wide range of topics related to the art sold. Panel discussions with field experts (live streamed). Creating attractive and engaging content for customers and visitors is crucial to maintain traffic on the website. Spectandum presents curated content relating to the art it sells under various media formats: blog posts, short-films, and panel discussions. Its goal is to publish a monthly essay, written by a field expert, regarding a topic related the pieces on the website. Content will range from opinions, historical pieces, critiques, technique descriptions. A Youtube channel and Instagram page have been opened in order to promote Spectandum's curated content.
- d. Return Policy: Many buyers say that the cost of shipping is one of their main challenges when buying art online. For smaller pieces (under 15kg); allowing people to buy them and keep them for a short period of time. Their payment would remain in escrow during that period. If they are unhappy with the piece, they can send it back and only pay 10% of the price, the rest is refunded. This would help establish more trust (see *Figure 6*).
- e. Bridging the online with the physical: As part of the omni-channel strategy, Spectandum will hire sales agents to meet with clients and potential clients in Europe, the U.S, and China. These agents will act as representatives of Spectandum across the world and will become points of liaison between local galleries, buyers, sellers, and Spectandum.
- f. Partnerships: Working with galleries, content creators and museums will. Allow Spectandum to reach a broader audience and to establish itself as a reference for certain

fields of art. A partnership with Afrikaris, a modern and contemporary African art retailer that works closely with its artists, is currently being negotiated. The goal is to open a collection of Contemporary African Art on Spectandum and advertise selected works for African artists, so as to attract Contemporary Art collectors to the website.

4. TECHNICAL OVERVIEW OF SPECTANDUM'S ONLINE SALES CHANNELS

4.1 Website

The website was built using Wix, a cloud-based web development platform that allows users to create HTML5 and mobile sites using drag-and-drop tools. Wix offers ready-made website templates that can be customized and uses a subscription-based business model, where users pay a monthly fee for a yearly contract. The subscription gives access to all of the technologies that can be integrated into a Wix website (i.e database, cloud storage for media, SEO tools, online payment, domain name) as well as technical support from their staff. Wix is a viable option for small businesses and basic catalogue-style websites and is a perfect solution for prototyping and bringing a product to market quickly, which is why the platform was chosen to build the first version of the Spectandum website. However, a Wix website doesn't scale well and becomes slow when it reaches a certain number of users, this is mainly due to its modular nature and its choice of cloud storage. It also poses challenges for websites that want to include more functionality such as live-streams or customer profiles. Furthermore, since it uses pre-made templates, it is difficult to create a strong brand identity since many Wix websites look alike. For these reasons, the third version of the Spectandum website will be built in-house using JavaScript; this will allow Spectandum to have full control over the design and functionality of its website and will cut costs in the long term.

4.2 Database Design

Websites need databases to store the data displayed to the users (e.g photos, videos, titles, descriptions, blog posts, etc.) as well as the data generated by the users (e.g newsletter signups, e-mail addresses, customer profile information, etc.). This data needs to be stored and

organised efficiently for the website to run smoothly and for the data to be retrieved easily. In order to achieve this, the database must be organized following the 3 normalization rules (NF), established by Edgar F. Codd in 1970:

1NF: One value per field (e.g name of user needs to be split into First Name and Last Name).

2NF: Non-primary key fields must be dependent on the primary key. No duplicated data over multiple rows.

3NF: Should not have transitive dependency between fields.

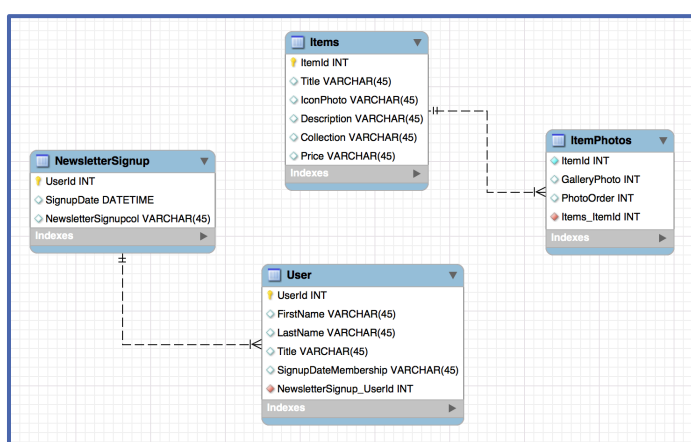


Figure 7. Spectandum's Relational Database (MySQLWorkbench)

The database needs to adhere to all three rules simultaneously to be considered efficient. Figure X shows a diagram of how the database for Spectandum's website was designed.

4.3 Dynamic Pages & Wix Coding

The use of databases to store the data displayed on the website is useful because it reduces the number of pages on the website by using dynamic pages, consequently improving the loading speed of the website. Dynamic pages hold empty boxes, each connected to a specific column of a database table. Depending on the URL where the user comes from, the boxes on the dynamic page are filled with the relevant data retrieved from the database. Appendix 1 shows the dynamic product page as it is, with empty boxes connected to specific columns, and Appendix 2 shows how those columns are filled with the relevant content about a piece according to where on the website the user is coming from (i.e which piece he clicked on).

A useful feature of Wix is their new coding option; in addition to the drag-and-drop functionality, users can now write JavaScript code on their website to improve, alter, or add features. Furthermore, it allows users to connect their Wix website to other technologies using

their Application Programming Interface (API). For example, Spectandum’s website is connected to SendGrid, an e-mail marketing tool for small and large businesses; data on Spectandum can now be retrieved to build e-mailing campaigns through SendGrid. JavaScript was also used to create a dynamic contact form on every product page to reference the product that the user wanted to inquire about. This way, when users contact Spectandum regarding a particular piece, Spectandum will know exactly which piece is being referenced. Appendix 3 shows how this feature works.

4.4 Dashboard

A great business dashboard combines high-performance and ease of use to let anybody get data-driven answers to their deeper questions. The dashboard was built in Tableau, and is connected directly to the

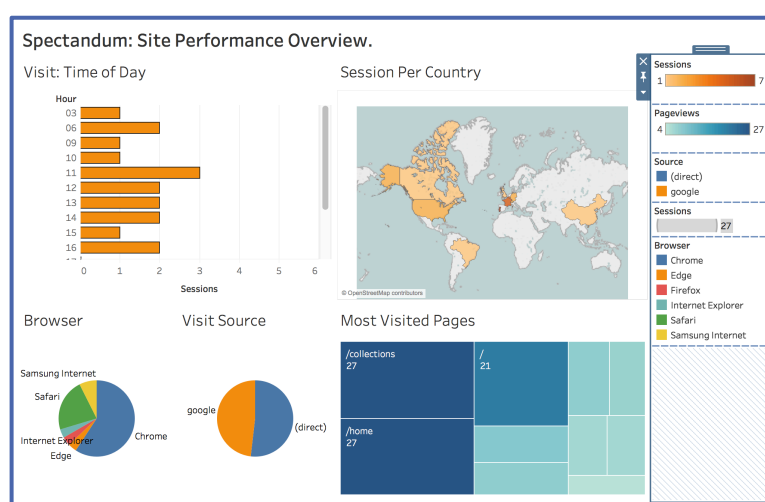


Figure 8. Spectandum Website Dashboard (Tableau)

Google Analytics platform, which is connected to the Website. While the analysis can be done by using only Google Analytics, Tableau is a more powerful tool and allows for more customization. The dashboard has been shared across the company through Tableau’s online services, which create a live webpage accessible for viewing to all users who hold an access code.

5. CONCLUSIONS

The online art retail market is growing rapidly and is showing no signs of consolidation. Online sales channels have made the market more accessible to newcomers who are easily reachable through popular Social Media platforms. However, while traditional art buyers were interested in provenance, historic value, and social utility, newcomers’ buying decisions

are guided by emotional value and financial potential. This means that art needs to be marketed differently online. Certain challenges arise for companies attempting to sell art online, notably low customer loyalty due to the low switching costs incurred by consumers who can easily access different platforms, logistical challenges due to high expectations on consumers part, and pricing challenges due to lack of trust, with the majority of pieces sold online being below \$5000. A new customer segment, *Generation Y*, of young tech-savvy art collectors between the ages of 20 and 35 is growing; these collectors seem more loyal and are easily accessible through Social Media, making them a key target market for online art retailers. It is important to note that while online sales channels are becoming essential for galleries and retailers, buyers expect an omni-channels experience that combines physical and digital space. To appeal to the widest audience possible, retailers need to implement both physical and digital sales channels.

The market research for this study justified Spectandum's motivation to enter the online art retail space and established clear guidelines that would help shape the company's strategy and product. Separating the brand according to the market's price segments and using different sales strategies for each segment has proven to increase sales. With the first version of the website live, several features are scheduled to be included in the second version due in February 2019. These features, designed according the insights drawn from the market research include customer profiles for better data collection and a more tailored experience, price transparency as well as clear justification for prices in the forms of lab tests, certificates, and journals, a return policy to allow buyers to examine the piece physically, and sales agents to approach galleries and museums across the world in person. A Tableau dashboard has been created and shared across the company to give an overview of how the website is performing compared to the previous month. This dashboard, which is directly connected to the website, can be used to gain insights on which type of content to schedule for the coming months, or

how users behave in different continents of the world. It is a powerful tool to monitor performance and to continuously improve on the design of the product.

In conclusion, Spectandum now has several online sales channels that are tailored according to the market's segments and the type of art that the company sells. Throughout 2019 the company will implement its newly developed strategy and will monitor its performance throughout the year. While the online art market presents many challenges and is a difficult industry to break into, the most important factor remains the quality of the seller's art and Spectandum's collection has been attested to be one of high quality; after the new features are implemented in February 2019, Spectandum will become a strong contender in the online art retail space.



Figure 9. Screenshot of Dr. Louis Auzoux Gorilla Restoration. Promotional video is available on Spectandum's Youtube Channel. Full documentary will be released early 2019

Links to the interactive Market Analysis and Website Performance Dashboard are available below.

Access has been given to Prof. Rita Cunha and Prof. Miguel Neto. Please contact the author (Julian Kuypers) to request access. More details are provided in the Analysis Overview (Appendix 2) file.

Please copy/paste the links below in your browser to access the online Workbooks:

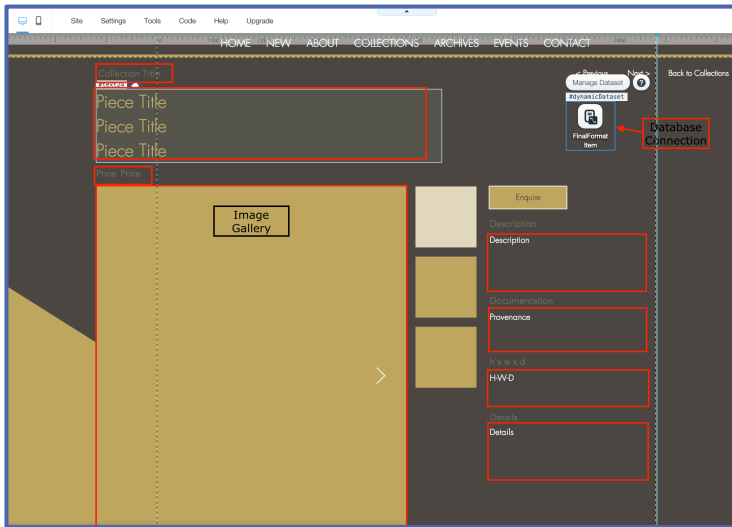
Link: **Art Market Analysis** - <https://tabsoft.co/2R8gOYZ>

Link: **Spectandum Website Performance** - <https://tabsoft.co/2SJ0CtS>

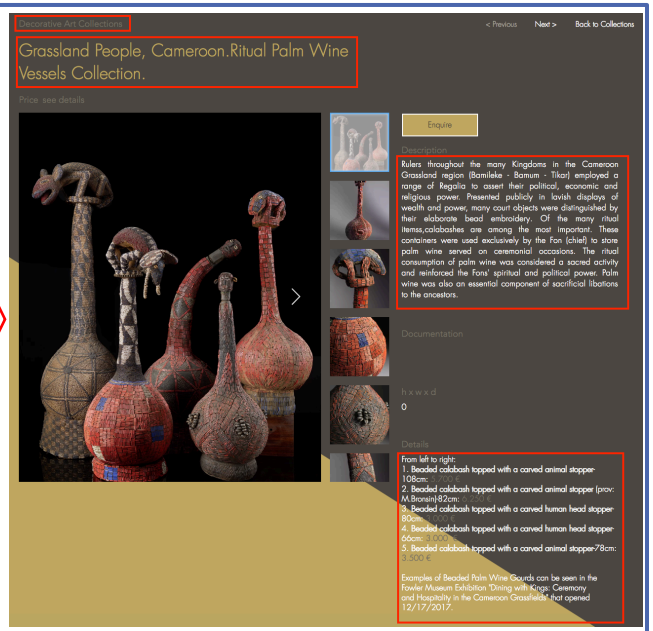
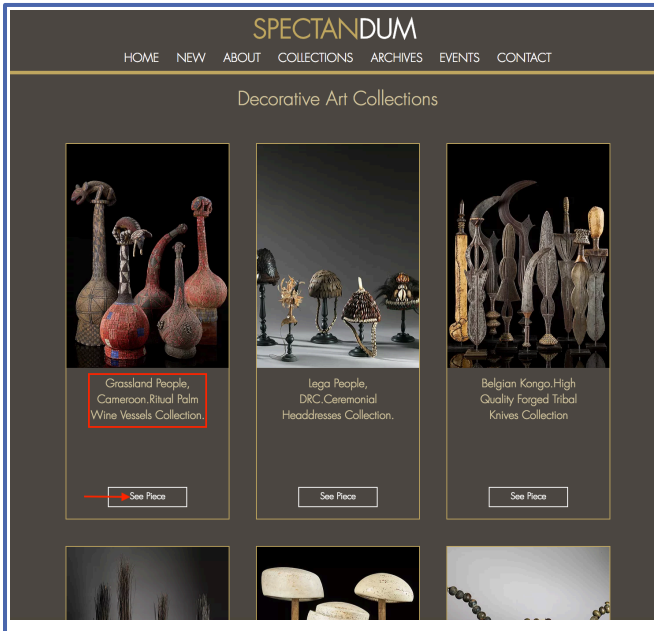
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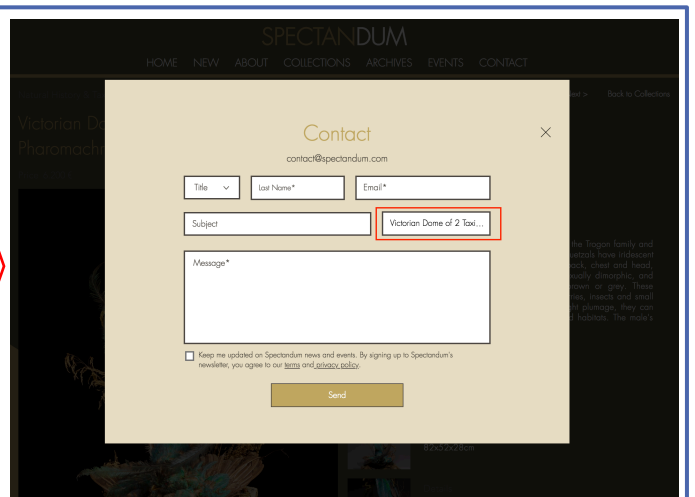
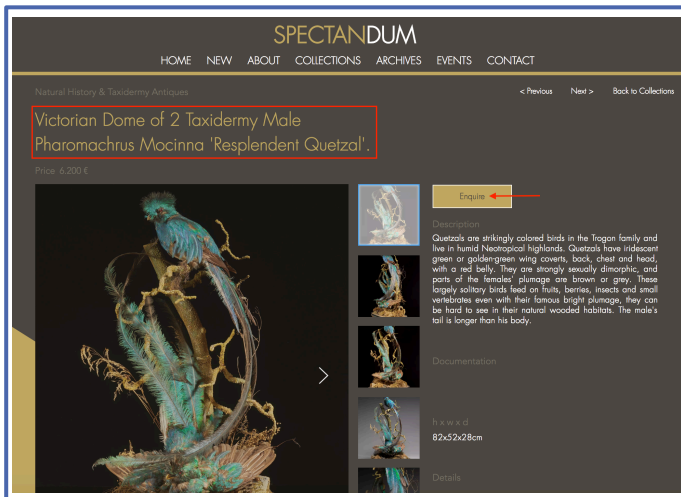
7. APPENDIX



Appendix 1. Dynamic Product Page. Each red square is connected to a column in the 'Items' database.



Appendix 2. Showcase of Dynamic page function. Red squares from Appendix 1 are filled with relevant data from database according to the URL selected by the user.



Appendix 3. Wix Code example. Dynamic contact form to reference the piece enquired about by the user.