

Original Paper

An Analysis on the Development of Online Art Sales Industry and the Sustained Competitive Advantages of its Players Based on Porter's Five Forces Model

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Abstract

The rapid growth of online art sales post-2010 necessitates an examination of industry trends and competitive dynamics. This study investigates the current competitive structure, highlighting the need for online art platforms to cultivate trust and innovate technologically to thrive in a crowded market. Adopting a mixed methodology combining The Platform Economy and Long Tail Theory, the research identifies strengths and weaknesses, revealing parallels with e-commerce retail. Industry analysis, employing Porter's Five Forces Model, uncovers competition intensity, while a case study on artnet utilizes the VRIO Model to assess sustainable advantages. Traffic metrics and qualitative insights from an interview with a platform representative supplement quantitative data, informing recommendations for enhancing market efficiency and adaptability. Data was sourced from websites and a questionnaire-based email interview.

Keywords

online art sales industry, Porter's Five Forces, online art platforms, long-tail theory, the platform economy, artnet

1. Introduction

1.1 The Problem of the Appearance of Online Art Sales Industry

In a world where all markets are being revolutionized by information technology and online trading, the art market is no exception. How has the online art businesses transformed the traditional consumerization of art under current era? Will the boundary of the online art marketplace be pushed forward and ultimately move into a retail realm? Buying art online has been increasingly accepted and

conducted by stakeholders in the art industry, but why is this happening, and why now?

To step out from the art field, strongly yearned for the Internet, the rapid growth of e-commerce has been changing tremendously to become a lucrative market. In the meantime, the art market takes a much slower pace to embrace such technology (Iii & Flaherty, 2002). It is because art as a commodity differs very much from others due to high subjectivity and unpredictability. Plus, the value of an artwork cannot be determined at an objective level (Schönfeld & Reinstaller, 2007). Spending on art is considered to be activities of personal discretionary, which is always a decision highly relates to the state of income, the social value, the taste of aesthetic, and personal preference. However, the Internet effects are continuing to be conspicuous and businesses in art industry gradually find it acceptable and beneficial from galleries to museums. Some galleries adopt it as a necessary marketing tool, and museums try to apply the digital tech to improve visitors' online experience.

Not limited to the individuals, the digital technology has spawned a new breed of online art industry and has triggered new tech savvy players to enter in aggressively, among which are the online art platforms. Until this decade, several art industry reports claimed that we were currently witnessing a growing trend of online art sales industry, something we really didn't consider in the early 2000s: The Art Basel and UBS Global Art Market mentioned a growing appetite for online sales. From Hiscox Online Art Trade Report of 2019, it is demonstrated that the sales from the online platforms accounted for about \$4.64 billion in 2018, increased 9.8% in aggregate, compared to a \$3.75 billion in aggregate in 2016. What's more, in five years, the industry revenue increased by 11.3% to \$ 2.2 billion. However, the striking growth rate is largely attributed to major brick-and-mortar auction houses who developed online portals. Still, an influx of the online art platforms, aiming at the opaque and efficiency of the art market, has brought to greater sales volumes and broader sales portfolios during this period.

1.2 Overview on the Current Market Performance of the Online Art Sales Industry

Overall speaking, the online art sales industry is substantially robust and will continue its expansion although threats are happening alongside. Figure 1 shows that, the online art industry performs slightly out compared to the online retail industry. It is evidenced by several strengths of this industry. The industry is at a healthy growth stage of life cycle, with low capital intensity. This was attributed to the relatively low costs required to develop and maintain an e-commerce website, as opposed to traditional brick-and-mortar art business. Credibility and reputation earned by traditional auction houses or galleries are equally applied to their online market.

Plus, still in its infancy stage, the concentration level of products and service is relatively low. As for opportunities, an overarching audience reach make the globalization level of this industry and the technology remain increasingly high. As for consumer side, the spending is expected to increase until the year of 2020, largely prevented by changes in economic and social conditions, as shown in Figure 2. There is also a growing acceptance on consumers purchasing artworks online, due to a shift in online

shopping behaviors. However, weaknesses exist as well. There is relatively low political assistance yet high volatility with this industry.

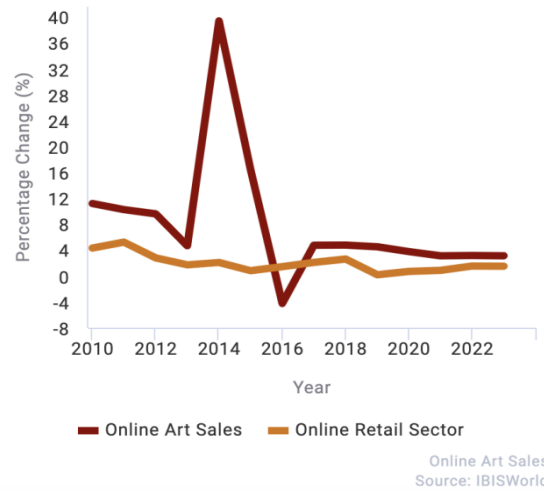


Figure 1. Industry vs. Sector Revenue Growth

Source: IBISWorld (45411a E-Commerce & Online Auctions in the US - MyIBISWorld, n.d.)



Figure 2. Annual Change in Consumer Spending

Source: IBISWorld (45411a E-Commerce & Online Auctions in the US - MyIBISWorld, n.d.)

Even though the development of online art sales industry is in its infancy, players involved have already made progress and generated profits. Many insights through practice are drawn for

advancement. For example, some 64% of online art buyers said brand recognition and client trust are the top 2 barriers to expand the online art marketplace (*Hiscox Online Art Trade Report 2019 | Hiscox UK, 2019*). Correspondingly, as a new attribute to be considered in the ranking methodology of art platforms by Hiscox 2019, the perception and level of consumer trust in the quality of the art sold online is signaled as a critical indicator to measuring online art platforms (*What Does It Take to Be a Top 10 Online Art Platform?, 2017*).

Given those figures and interpretations, it is obvious that the booming trend of the online art market stands out and that the online market size appears to be growing and strong in liquidity. An argument mentioned by Elizabeth O'Meara for the trend of online art business indicates that "Although the online art market is triggered as its present brick-and-mortar iteration, the ambitious newcomers of startups that facilitate the buying, selling or discovery of art online points to a new impulse in the market" (O'Meara, 2014). In the meantime, anecdotal evidence suggests that the art-tech startups have raised more than \$228 million of venture capital (O'Meara, 2014). This has proved again that the great potential for online startups to map out a new business formula to facilitate the art market. Thus, there must be certain driving forces unprecedentedly possessed by those online art platforms that produce their crucial effect on the users and the industry in general, which this thesis will delve into and analyze case by case.

1.3 Categorization of Industrial Participants

As defined by Tanvi Kumar in *Online Art Sales Report*, the online art sales industry has primarily several industry practitioners: online platforms, auction houses, galleries, dealers, and independent artists. There are several business structures of online art sales players: some of them is uniquely developed, and some of them mirroring the real art industry. To compete on the online auction of art-unseen, there are mainly three models holding online art sales—online art auction houses by brick-and-mortar auction houses, online view-rooms by mostly mega galleries, and online-only technology platforms. To respond to the research question, this paper will focus solely on the third type of platforms, the online-only platforms, which is developed without any existing models of auction houses or galleries, but enabling connections with and therefore is the most representative type of technical players among the three. More details on definitions of industry and players involved will be discussed in Chapter 2.

1.4 Statement of Argument

It is critical to understand the booming trend of the online art market and the strategic competitive forces of online-only art platforms. Consumers' need of searching and absorbing information is satisfied by the online art platforms. This equally accumulates the confidence level of users towards those online art platforms and builds their reputations as a portal to buy and sell, and ultimately promotes great market sales. Those logics further paved the way for the research objectives of this

thesis:

Based on a two-level critical analysis, this thesis demonstrates that despite the online art sales industry develops at a robust pace to lead fierce competition, the online art platforms can offer creative technical products and credible information and services to promote great sales, which rely on their sustained competitive advantages of credibility and innovation. To achieve that, the following strategic approaches are used:

- 1) Develop a one-stop-fits-all website to make global art market more efficient and versatile.
- 2) Diversifying art buyers' bases by educating new users as buyers to art collecting.
- 3) Targeting the huge number of niches in the long tail of the art marketplace.
- 4) Improving users' confidence level and trust via the velocity of information and interactive user experience.
- 5) Active product management—to ultimately push back the boundaries confined by the elite and intellect market.

1.5 Significance of Research Angle and Relevance of the Research

There are plenty of research that have been conducted from the demand side of the industry, mentioning the widely read annual reports by Hiscox. Such reports are conducive to the art buyers to know the status quo and future predictions based on the responses of art buyers survey. However, few of research has been performed in terms of the perspective of the supply side (Bogaerts, 2015). Thus, researching the intrinsic characteristics and operation mechanisms of online art platforms per se is essential and beneficial for the following reasons.

Understand the online art platforms is to understand the structural competition within the whole art industry. The proliferation of online art sales platforms has established a new angle of researchers getting access to the data from the primary market (*Artnet - Fact Sheet*, 2009). Such accessibility is always being confined within gallerists and their lists of collectors and buyers before (McNulty & McNulty, 2013). Therefore, online art platforms could be considered as an exceptional destination for researchers to conduct informational research.

To strategically position oneself in this industry, there is a need to understand the competitors and their sustained advantages. The democratization of art market information is substantially realized by online art platforms. At the same time, it will inevitably rule out some of the classical gatekeepers who refused to embrace the trends of digitalization. Those are people used to control the quality of information shared in the marketplace.

Moving on, it stands a significant necessity to bring the online art marketplace into the discussion of general retail e-commerce market. The art market has shown some similarities to the e-commerce retail industry, for the same technical infrastructure, platform economy, and audience reach. However, research on those topics regarding online art marketplace are seldom published. Therefore, applying the

economic notions, e.g. Platform Economy and Long Tail Theory, which is widely used by e-commerce market could shed deeper insights on the immature online art sales industry.

Another takeaway of this thesis focuses more on a conceptual level rather than on an empirical level. It is worth mentioning that the online-only art sales platforms don't represent the entire population of online art and collectible sales businesses, referring to the live auction sales by Christie's, Sotheby's, Phillips, and Bonham's to take bids online as well (*Hiscox Online Art Trade Report 2019 / Hiscox UK*, 2019). Referring Porter's Five Force Model, those auction houses are substitutes of high power. (Porter, 2008) Thus, how the online-only art platforms position uniquely from the online bidding auction platforms will be mentioned.

2. Contextual Background of Online Art Market

Chapter 2 outlines a literature review to substantially support the above position from two steps. The first part is to review on the established research claims related to the core argument of this paper. It will first introduce the definition of the online art industry and its stakeholders. After that, a historical overview will be landed upon the historical process. The second part of the literature review examines the critical role of the online art businesses based on the Platform Economy and Long Tail Theory. Then, it followed by interpretations of what inherent characteristics of online platforms have through the trajectory of its development as a by-product of the Internet and a carrier of Platform Economy. Based on such characteristics, platforms can incorporate the advantages of increased consumer adoption of the Internet.

2.1 Summary on the Reason for the Appearance of Industry

2.1.1 The consumerization of art

Throughout history, art has been engaged within people's life with numerous purposes. Traditional purposes include aesthetic pleasure, embodiment of ancient gods and social positions, interior and exterior decorations, expressions and dissemination of ideas, ideology, etc. (Bourdieu, 1993). Besides all has been mentioned, there stands a unique function of art's consumerization as a means of maximizing the profits of rational individuals (Frey, 2000). It then nurtured stakeholders of the art market—sellers, buyers, presenters, and collectors—which in the meantime was defined as the art market by cultural economics (Velthuis, 2005). However, art has never been discussed within the context of the capital market, claimed by William Grampp in his book *Pricing the Priceless*. He stated that the aesthetic value of the works of art is nothing but a particular form of economic value, but rather, never has there been such an industry (Grampp, 1989). Fair recently, what is being called the Art Industry was in replacing the word "Art World" as appeared in the fall 2019 artnet Intelligent Report. This report not only describe the trends, but also to confirm the transformation of art into a legitimate asset category.

2.1.2 The need of information absorption

Along with this radical transformation of art market, there meets the ever-evolving field of technology, tools, and infrastructural resources - art investment banks, art indices, art consulting firms, art insurance firms. Those are built to satisfy the demands and needs of the art stakeholders to absorb more information (Bogaerts, 2015) and further knowledge to benefit their research and decision-making process. (McNulty & McNulty, 2013) Art market is always characterized as being lack of transparency and information symmetries (McNulty & McNulty, 2013). Thus, based on the inherent obscurities of the art market, a need for art market information disclosure calls for the existence of online art marketplace.

2.1.3 Broad acceptance on the internet technology

Moving on, art market has been moving forward online by the strength of digitalization and the widely used Internet. As a result, the democratization of data has been enabled and further facilitated: information that once was limited to only a select few is now available to everyone; information and participation in the market has been facilitated (Bogaerts, 2015).

In the early 2000s, art e-commerce was something we didn't consider as mature as it stands today. Although it appeared after the twentieth century, it presented a splendid sight until the year of 2013. Most recently, buying art online has been increasingly accepted and conducted by the stakeholders in the art industry. It is also evidenced in the report that there is a growing popularity of online buying habits. This fact mirrors the trend of online shopping as well. A two-third percentage of respondents answered to have purchased other products in a similar price range (*Hiscox Online Art Trade Report 2019 | Hiscox UK*, 2019). Regarding the new generation of art buyers, with 23% among millennials never having bought an artwork in a physical situation before buying online.

2.2 Definition and Stages of Online Art Sales Industry

In recent years, art has been increasingly accepted as a valid and alternative asset class (Coslor & Spaenjers, 2016). This arises needs and demands for art investors to obtain more information. To meet such kind of needs and demands, the supply of art market information starts out to react. Information is produced, presented, and disseminated through all types of access. Art e-commerce platforms refers to the information marketplaces that are built to provide art stakeholders considerable amounts of information and knowledge over time and place on the art market. What's more, they usually sell art online insistently to the consumer via a "click-and-buy" operation mode (Bogaerts, 2015).

Overall, the above roughly maps out what e-commerce platforms of the online art sales industry do. According to the definition by IBISWorld Report, "the online art sales industry is primarily retailing or auctioning original and limited-edition artwork". To provide a complete picture of how those platforms, the following section provide a brief historical overview on the different stages throughout which art online sales developed.

Phase I: Before 1990's

During the 1970s and '80s, art business transformed into a global industry yet was still a marketplace characterized by obscurantism and information asymmetry. As technology is upgrading, the traditional resistance towards online buying pattern have started to fall apart. Industries such as music, luxury goods, book publishing and film were to evolve into digitalization and e-commercialization, and the art market was to follow up on it as well. In 1989, artnet was founded by Hans Neuendorf.

Phase II: 1990's-2000's

In the early 1990s, a collector named Pierre Sernet created an electronic system of production with both images of art and the related prices. With CDs as carriers, subscribers could access the information by installing a software in the CD and connecting their telephone (*The Story of Artnet, Part 2*, 2019). This is the first initiative to break through the traditional art trade process. In the mid-1990s, the revolution of the Internet took off. After that, in the late 1990s, the first online art business emerged marked the start of the online art market. In 1999, the first online auction platform was launched by Sotheby's in partnership with Amazon.

Phase III: 2000's-2010's

Within this period, a significant feature of the online art sales industry is a more blurring boundary between online and offline buying due to interchangeably used channels (*Hiscox Online Art Trade Report 2019 / Hiscox UK*, n.d.). What's more, the main players are gallery websites and online auctions as two dominant destinations to place an online art sale, compared to online-only marketplaces. Specifically, on one hand, at the beginning of the century, advancements in digital technology made alternatively qualified Internet options affordable for galleries, so they began going online (Note 1). On the other hand, online art auctions increased with popularity, leading more buying behaviors of online bidding. Many traditional auction houses are increasingly conscious of the potential of e-commerce as a way of reaching a more broadened field of market. Christie's launched online bidding in 2006 and introduced apps of iPhone and iPad in 2009 and 2010 targeting solely to e-commerce. Following, the apps of Sotheby's online platform was introduced in 2010 as well.

Phase IIII: 2010's-today

The online art marketplaces started to develop differentiated compared to online auction houses. Since 2013, the online art market has witnessed a stage of rapid integration. Several newly added functions of online art platforms came into play, removing trade intermediaries and contract costs. Besides, traditional brick-and-mortar auction houses continued to increase their online presence by holding online-only sales, e.g. sales of Matisse print by Christie's Live in 2012 and sales from Andy Warhol Foundation by Christie's in 2013.

In the meantime, new entrants of online-only auctions by online platforms approached the market and started to secure their shares after the 2010's, naming Artprice (built in 2004), Artnet Auctions (built in

2008), and Paddle 8 (built in 2010) . These online-only platforms target differently - the middle to lower price range of the whole market, usually operating at lower costs of operation.

Meanwhile, another crucial player in the online art market is the independent artists who sell artworks through e-commerce channels. In general, online channels provide a way to sell directly to their audience base. This provides buyers a newly ‘Buy Now’ option as opposed to traditional timed or live auctions offered by brick-and-mortar auction houses (*Hiscox Online Art Trade Report 2019 | Hiscox UK*, n.d.). Moreover, this becomes increasingly favored by consumers statistically reflected by Hiscox report of 2016 indicating for the first time that the popularity of online marketplaces has surpassed that of the online auctions.

In terms of types of medium, paintings and prints are two dominant categories of product bought online (*Hiscox Online Art Trade Report 2019 | Hiscox UK*, n.d.). A strong demand for unique art, e.g., paintings, is of increasingly evident in the online art market, following limited edition works of art, e.g., prints and photography. Drawings, sculpture, and new media art remain the downstream area of the whole online market.

Still, there are challenges facing the online art market. Instead of foreseeing a transformation of the contents in music, film, or book industry, the real challenge would be the capacity of audience reach. To be more specific, how the traditional market integrates with not only its existing customer base but also, or even more significantly, a potential new audience who are digital-natives and wants to trade online.

To conclude, the commercialization of the art market is intrinsically interplayed with the supply of the art market information, as one intrigues the other and is reinforced by it simultaneously.

2.4 Theoretical Application of Long Tail Theory

The framework of Long Tail Theory was initiated by Chris Anderson in *Wired* in 2004 (*The Long Tail | WIRED*, 2004). At present, many scholars have studied the practical application of Long Tail Theory within creative industry, e.g., music, movies, and books publishing, through data researched from online and offline retailers. However, the field of fine art market has not been entirely delved in to.

In relation to the Long Tail Theory, the uncovered aggregate size of the small markets in fine art, that don’t individually perform well for traditional offline auction business, may someday surpass that of the traditional offline auction market. The principle of art market has equally functioned as a Long Tail market, where instead of focusing on a relatively small number of “artworks from well-established artists” at the head of the demand curve, there is still a huge number of niches in the tail—emerging young artists or mediums like limited prints, photography. This where exactly the online art market largely evolves. As shown in the Online Art Sales Report by Tanvi Kumar from IBIS World, the 3 leading mediums of artworks being purchased online in 2018 is Prints (Revenue: \$576.27 m) accounting for 25.8%, Paintings (Revenue: \$551.70 m) for 24.7%, followed by Photography (\$ 437.79

m) for 19.6%. Table 1 below shows the performance of product segments in the online art sales industry, ranking by their revenues in 2018. Another citation from the report stated that “many consumers prefer the online buying experience because they are able to discover unique items”. Plus, apparently, online platforms have no limitation on opening hours and geographic division, which greatly enhance the possibility to fulfill customers’ needs. It allows consumers to extend their devoted capital and time to seek for target artworks.

Table 1. Product & Service Segments of Online Art Sales Industry, as of 2018

| Medium of Product | Rank | Revenue | Proportion |
|---|------|------------------|------------|
| Prints | 1 | \$576.27 Million | 25.8% |
| Paintings | 2 | \$551.70 Million | 24.7% |
| Photography | 3 | \$437.79 Million | 19.6% |
| Drawings | 4 | \$337.27 Million | 15.1% |
| Sculptures | 5 | \$198.79 Million | 8.9% |
| Other Media (jewelry, furniture, video pieces) | 6 | | 5.9% |

Note: the data above is directly cited from www.IvBISWorld.com

One can see how the online art businesses has influenced the consumer’s online spending habits and buying behaviors. There is a shift towards the niches of long tail market, effectively enabled by the Internet. Such shift provides merging artists and young buyers more freedom and profits. Ultimately, it could break down the barriers between the elite and intellect market and broaden the taste of the public. Based on a critical analysis of the framework, this part will propose that the online art market as an example of long-tail market that with the strategic target of the huge number of niches in the long-tail of the art marketplace, it succeeded to reach a broader audience with a lower operation cost.

2.5 Theoretical Application of Platform Economy

The platform economy is economic and social activity facilitated by platforms which are typically online matchmakers or technology frameworks. The most common type is the so-called “digital matchmakers” such as YouTube, Airbnb, Baidu, and Uber (Bogaerts, 2015). Thus, platform companies create value by acting as intermediaries between different players in the market. Firstly, platform companies can only succeed if the different users have confidence in the platform. Because doing business in an honest way is now being rewarded. The confidence comes from several aspects regarding the business the company is running, but all the attributes towards consumer confidence could be categorized as the Unique Selling Point (USP) of the company. Secondly, in the platform economy, competition often makes way for collaboration, which create viable options for a partnership

with another party, for example galleries, artists, as strategic alliances. Thirdly, client trust needs to be emphasized as was cited to be the number-one challenge of 64% of online platforms (*Hiscox Online Art Trade Report 2019 / Hiscox UK*, n.d.). For the fact that there is no official rating system to assess which the most credible sources are, and that it is not that easy to establish the reputation. As a result, the market tends to certify to those who have the longest life. In this way, online-only platforms are all in an unfavored position compared to other online platforms who have the endorsement of bricks-and-mortar auction houses.

2.6 Conclusion on Inherent Characteristics

After examining how the evolutions of the online art market throughout the time somehow mirror the development of general retail e-commerce and the related platform economy, one could find the positive factors as follow: scale economies, digital technology advantages, lower cost of production and distribution, wider aggregation, and cross-category of lots, whereas negative deterrents referring to condition, credit line and authenticity.

3. Industrial-level Analysis on Online Art Sales Industry

3.1 Theoretical Methodology

In Chapter 3, industry-level research on the online art market will be conducted with the application of the Porter's Five Forces Model. The aim is to research on how the five competitive forces underpin profitability in this industry (Porter, 2008). The key driving factors for enhancing the long-term profits of industrial players, in this case the online art platforms, will be concluded at the end of this chapter. The result will form an environmental precondition for the case study on artnet in the following chapter. It will also further guide companies to understand how to position themselves, to exploit shifts in the forces, and to reshape the forces in their favors (Porter, 2008).

The risk of competition varies by industry. Before navigating into each one of the individual online art platforms in this chapter, we need to be fully aware of the external environment of this industry in the first place. How the competition of this industry is shaped is the basic question to be answered in this part. Then, we take a closer look at the external environment through the perspective of each one of the Porter's Five Forces (Porter, 2008).

Here, I apply the Five Competitive Forces Model by Michael E. Porter of Harvard Business School as a framework to assess and to evaluate the competitive situation of this relatively new-born online art industry. The Five Forces Model indicates that competition is attributed to five competitive forces: (1) the threat of new entrants, (2) the power of suppliers, (3) the power of buyer, (4) the threat of substitutes, and (5) the rivalry among existing competitors.(Porter, 2008) Another research by Chakravarthy pointed out that this framework is beneficial when the indicators (factors) discussed are stable and independent (Chakravarthy, 1997).

Furthermore, the model is helpful to design an optimal strategic position through the proceeding analysis on the external environment (Jung, 2009). Thus, through this theoretical framework, one could map out a clear industrial-level structure of the online art industry after understanding how the five forces influence profitability in this industry. Furthermore, market players will find themselves able to develop a long-term strategy and to enhance profitability in responding to the changes in the threats and power of the environment. As Porter's Five Forces Model stated, the strategy aims not only at effective business operation. It is also aimed at achieving a strategic position that is accurate and appropriate by performing differently from rivals or similarly in different ways (Porter, 2008).

3.2 Framework of Porter's Five Forces

This framework is based on the concept that five factors will act to determine the extent of competition and attractiveness of a market. This is conducive to each market players both in understanding the strength of its current strategic position, and the strength of a position that it might aim to move into. The five forces for this model was defined by Porter focusing on all the stakeholders that can impact on firms' prospective profits (Porter, 2008).

The Threat of new entrants: This force assesses on how easy it is for new entrants to enter the existing industry and therefore to compete with incumbents to gain market share. This may place "fierce pressure on the incumbents' prices, costs, and their rate of investment" and further hold down the overall profit potential of this industry (Porter, 2008). Limited to online art industry, such threat could be weakened if the relative entry barriers are high: economies of scale, demand-side benefits of scale, buyers' switching costs, capital requirement, and other incumbency advantages except for size. The last barrier is extremely conspicuous in the online art industry, which will be elaborated on in the later part.

The power of suppliers: This force manages to assess on how easy it is for supplier to charge higher prices, to limit products or services or even to shift among different industrial participants (Porter, 2008). This power is driven by factors like the level of suppliers' concentration compared to the industry they sell to; differentiation of suppliers' product or service; proportion of supplier's source of profit from the industry they sell to.

The power of buyers: This force is to assess on how easy it is for buyers to force down prices, to demand better product or service, and to even play industry participants off against one another (Porter, 2008). This power is clearly identified if the buyers are of price sensitiveness, which means they have negotiated leverage and a lower switching cost from one supplier to the others.

The threat of substitution. This kind of threat is generated by substitute products or services existing in the marketplace. A substitution is one that could offer the same or a similar benefit in a different approach (*Threat Of Substitutes | Porter's Five Forces Model | Cleverism*, n.d.). Such threat of substitution will increase the possibility of buyers shifting away to alternatives and then cause a replacement of the company by its substitutes. This threat could appear once there are available

substitutes, either downstream or indirect products or service, if they threaten the company's core competence and profitability. Several factors contribute to the risk of substitutes are switching costs, product or service price, quality, and performance. Finally, there are ways to mitigate such threat—differentiation on unique product offering, maximization on customer value, and maintenance on brand loyalty.

The rivalry among existing competitions. This force takes several forms including price deduction, new product launches, marketing campaign, and customer service. According to Porter, intensity of the competition and the basis on which they compete are two main drivers to cause such risk (Porter, 2008). On one hand, intensity of the competition is further identified by the sum, size and power of competitors, the speed of industry growth, and specific goals or commitment beyond their business performance. On the other hand, the basis on which the competition is taking place is identified by the price competition. Usually, the product feature, support services, delivery time, or brand reputation will impact on the customer value and lead to price competition.

3.3 Factors Affecting Online Art Industry's Potential Profitability

The threat of new entrants. The threat of newcomers to online art industry is considered relatively low. First is the importance of expertise in the sales of art. As an intermediate between different art stakeholders, the critical role of online art industry is like galleries and auction houses, involving exhibition of artworks (*About / Saatchi Art*, n.d.), introduction new artists, legitimization of artwork transactions (online), and guidance to art research or collection. Entering the art business is highly risky because it entails particular intangible investments, especially the knowledge of the arts (Prinz et al., 2015). As a result, it is relatively hard to launch an art business as a newcomer (Prinz et al., 2015), not to speak of conducting it online.

Another reason for high entry barriers is numerous incumbency advantages that are not available to potential newcomers. Intangible resources of online art business contributed to their advantages are comparably more pervasive than other consumption field. Taking Artsy, “a platform for collecting and discovering art” (*About / Artsy*, n.d.), for instance, a popular iOS app from Artsy secures its position as a tech-art company, (*Artsy/Eigen*, 2015/2020) which attributes to its exclusively proprietary technology. Besides, other sources contributing to incumbency advantages are preferential access to the best qualified artworks, artists, or art dealers, established brand identities and professionalized experiences of art sales.

Also, another reason is that the buyer-side benefits of scale, as known as network effects, is high because buyers trust larger companies more for a crucial product (Porter, 2008). A best example is that online auction participants are discretionarily attracted to Christie's Live or Phillip's because they offer the most qualified lots to the most recognized trading customers.

In all, the barriers to enter this industry is relatively high, and as a result the success of online art

business is hardly affected by the potential new entrants.

The bargaining power of suppliers. Specific to online art industry, suppliers are generally artists, sometimes gallerists, art dealers, museums as well when aiming at the secondary market. Also, other supply industries will also include computer stores. Speaking from the perspective of artists, a study by Smith, Discenza, and Baker stated that the bargaining power of artists was reflected by the “supply of art” and the “reliability of artists” (Smith et al., 2005). Taking art gallerists for instance, the research indicates that as a marketing intermediary, the art business is in an exceptional strong position. Referring to Porter’s framework for suppliers’ capacity, the power of the art business outweighs that of their suppliers, the artists. Artists, particularly the newly emerged or less established artists, highly depend on art market players in their businesses because those businesses help them acquire more exposure and publicity in a more effective and elegant way, in the meantime adequately establishing and publicizing their artworks.

Transactions of artwork was initiated with the artists, and the intrinsic appraisal of it depends on the provenance and condition of artwork, the artist’s reputation, technical skills. Based on that information, art market players may make their decisions to represent it or not, and further provide artists’ credentials and opportunities to build celebrity status. Thus, after stepping-stones are recognized, the artists are at a disadvantage position in forming a base for carrying out art market transactions and will largely rely on all intermediaries helping artists to build their own brand and popularization. Also, the alienation of artists from market tactics holds down their powers relative to the art business players.

However, the power of suppliers significantly raised up when the products offered are highly differentiated by suppliers and the business players are highly segmented, which is correct in terms of the online art industry. A rebuttal was made by Schragger pointing out that in the lower-end art market, the relationships of intermediaries with artists are more stable than with buyers in their system.

Digital technology help booming the advantages of online art platforms than the suppliers because platforms increase participation of individuals and organizations in art transactions. Platforms are considered as effective tools in forming and promoting the brands of artists, e.g., the artists’ profiles and personal websites are featured on the websites of artnet or Artsy. Platforms also help establishing relationships through aggregating clusters of galleries.

To conclude, the online art industry has relatively stable relationships with their suppliers and outweighs in its bargaining power to suppliers.

The bargaining power of buyers. The power of buyers for the online art businesses is considered moderately low. Demand industries include individual buyers, dealers, museums, organizational buyers. The products of online art industry are always unique and differentiated, which as a result makes buyers aware of the fact that they are hardly to find an equivalent product with another vendor. Also, the switching costs are usually high if we take into consideration the necessary procedures to conduct a

transaction of artworks.

The sales of art have proved to be largely interconnected to the state of economy, and the growth of wealth for buyers. The Art Market Report 2018 by Art Basel and UBS mentioned that trends in the growth of art market is closely tied to key economic variables, specifically the growth in wealth (*Download*, n.d.). In Table 2 (from the original report), the correlation between the sales of art and GDP, Wealth HNW Wealth and Wealth is listed correspondingly. GDP is referred as a strong driving factor to trigger buying behaviors in the art market that people with higher income are more likely to have demand for art.



Figure 3. Sales in the Art Market Versus Growth in Wealth, HNW Wealth and DGP (cited from Art Basel & UBS Art Market Report 2018)

Table 2. The Correlation of Global Art Sales versus GDP, HNW Wealth, Wealth (cited from Art Basel & UBS Art Market Report 2018)

| Correlation | 2000-2017 |
|--------------------------------|-----------|
| Global Art Sales v. GDP | 87% |
| Global Art Sales v. HNW Wealth | 75% |
| Global Art Sales v. Wealth | 90% |

Online art buyers are less price sensitive because of the following reasons. Online art buyers are more resilient to whatever an upheaval or a contraction of the art market compared to traditional offline art buyers. The online art market primarily consists of artworks at a lower coverage of the price range, mostly selling for less than \$10,000 based on an Artsy report (Cain & Kaplan, 2016). However, there is

still high-end buyers who have more needs for security and convenience to purchase expensive artworks online. Consequently, actual online art buyers tend to spend a less amount of money on the artworks that sold on online compared to what they buy in a physical gallery or brick-and-mortar auction houses. Also, it is commonly consented that people consuming artworks tend to earn high profits or be cash-rich, who are generally less price sensitive according to Porter (Porter, 2008).

The threat of substitutes. Specifically speaking, online art industry gains a relatively high risk of substitutes, which means that there will be more competition between online marketplace and traditional offline sales. Firstly, there are many potential substitutions for buying artworks online. Fierce competition among the existing art businesses conducting art sales: galleries, art fairs, brick-and-mortar auction houses, just to name a few. What's more, for some consumers buying artworks online simply for following trend blindly, the likelihood of them switching over buying luxury good couldn't be ruled out. Thus, luxury good industry is also a substitute for artworks, which has more historical operating system, large scale economy and transparent pricing.

Compared to the potential substitutes, although online platforms are competitive in conveniences of viewing and audience reach thanks to the Internet, it can be reasonable to argue that gallery websites and auction houses' online bidding channels still have considerably more power and great endeavor to secure or even poach buyers. One research about has stated that as gallery websites have already transformed themselves from mirroring physical spaces into a crucial distribution of services (Bu, 2017), they have almost no short of providing online transactions through which buyers can directly purchase artwork without in-person communication.

The rivalry among existing competitions. As Porter suggests, rivalry usually intensifies naturally throughout the time, slowing down after reached maturity. It is also true for the online art industry as an infant market. However, based on literature referred to in this part, existing rivalry among the competition could be complicated but a positive sum. This is primarily because, as a long-tail marketplace under the Internet, all competitors are allowed to target at different niches of artworks to serve the various needs of customer segments. Besides, all these platforms are designed to be differentiated from one another, 20% of online art platforms are mall-type websites (*A Critical Account of the Current Paradigm for Art Gallery Websites - ProQuest*, n.d.), e.g., Google, eBag, Paddle8. Some platforms are omni-channel space where numerous products and services are offered simultaneously, e.g., artnet, Artst, Satchi Art. Even though the sales through such platforms are largely created by emerging artworks or at a relatively low price, these platforms are moving towards the primary market that galleries aim at.

Another reason is that, based on a research about the sustainability of art galleries, the subjectivity of the art business where artwork is usually considered as "very personal products" (Smith et al., 2005), thus, it could be explained that the online art businesses have been serving diverse but personalized

needs, especially from emerging buyers, sellers, and collectors.

Porter indicated that the intensity of existing competition could positively influence the incumbents by encouraging companies to struggle to surmount their competitors (Porter, 2008). What's more, several researches suggest that the critical point of about existing rivalry is not about competing, but about the desire to be competitive (Bu, 2017). In all, the existing competition is not a principal factor among existing rivals, it is more likely to become a positive catalyst for firms' endeavor to be competitive. Thus, the enlightenment was to figure out the approach by online art platforms to achieving such competitive position, e.g. advertising, proprietary technology, or accumulative experience.

3.4 Conclusion on Factors Underpinning Profitability of the Industry

As Porter declared, the goal of industry-level assessment applying Five Forced Model is not to list pluses or minuses but to perceive an industry as a whole system to identify on the significantly decisive force and the root causes of profitability. Furthermore, after the forces that underpins profitability was recognized, the possible results and reactions to be triggered by any changes in such force will be detected. Those reactions will be the main source for current companies to develop appropriate strategic insights.

In Table 3, conclusions of the industry-level analysis on the online art industry are categorized listing as follows. The general intensity of each force will be declared as strong or weak, and then under each one of the five forces there lists the driving factors that underpin the overall profitability.

Table 3. Driving Forces Analyzed by Porter's Five Forces Model

| Porter's Five Forces | Intensity | Underpinnings of Profitability |
|-----------------------------|------------------|--|
| Threat of New Entrants | Weak | State of Economy Business Taxes/Fee Knowledge & Resource of Art Exclusively Owned Proprietary Technology Transaction Expertise Network Effect |
| Power of Suppliers | Weak | Supply of Art Reliability of Artists |
| Power of Buyers | Weak | State of Economy Discretionary Purchase Provide Confidentiality |
| Threat of Substitutes | Strong | Competition Economy of Scale Game-changing Technology |

| | | |
|---|--------|---|
| | | Brand Identity |
| | | Network Effect |
| | | Transaction Expertise |
| | | Marketing Physical Space via Web |
| Existing Rivalry Among Incumbents (Intensity of Competitive Rivalry) | Strong | Competition Differentiated Service and Product Segmentation on Targets Marketing Platforms via Advertising Online Community Involvement |

3.5 Implications for Strategy

To conclude, this chapter reviews on the external environment of the online art industry. Understanding the external environment is the starting point for generating strategies on a firm level. Overall, the industry structure of online art market, as manifested in the above analysis, determines its long-run profit potential. Based on the Porter's Five Forces analysis, the economic value potential will be slightly bargained away by customers and suppliers, lightly retained by potential new entrants, yet greatly constrained by substitutes, and will be positively intensified by the incumbents in the industry. Thus, keeping this structural base in mind, instead of deviating to any one factor is especially important for strategists to establish a business effectively.

Plus, industry structure will be constantly undergoing moderate adjustment—intensified or stabilized. In real life, companies should already figure out what the anticipated profitability of its industry is and how that will be varying over time. Then, it is time for them to incorporate the industry's structural condition into strategy, and to know the baseline of their strengths and weakness. For example, the online art platforms should pay more attention to how to stand versus the powerful substitutes and rivals and how to leverage the advantages over buyers and suppliers. Plus, it is also remarkably important to position the company to better cope with the current competitive forces, to anticipate changes in the forces, and to shape the balance of forces to formulate a more favorable industry structure. In chapter 4, we will further narrow down our scope into a certain company from online art market to see how the company position itself and exploit those factors and possibilities in practice.

4. Company-level Case Study on Artnet

4.1 Structure of Case Study

This chapter mainly demonstrates a firm-level case study of the leading online marketplace/platform for buying, selling, and researching art—artnet. The goal is to summarize the strategic approaches used

by artnet to leverage its several advantages, which will be identified in the later part. The first part is to build a contextual background and historical review on artnet's establishment. Then, this part will delve into the specific information about the firm's mission, objectives and positionings. Supportive data was retrieved from the data analytical websites.

Following that an internal analysis will be carried out by using the following two frameworks: VRIO framework and website performance metrics. By using the frameworks, we will be able to see what is artnet's sustained competitive resources and capabilities. Moving on, how artnet positions itself into the competitive business environment and how it incorporates its advantages into the strategies to promote long-term profits will be answered. With the external analysis on the competitiveness of artnet's business environment, we will conclude with a discussion on artnet's strategies to leverage unique selling points and to constrain key potential risks to promote more sales.

4.2 Contextualization of Artnet's Establishment

Artnet, founded in 1989 by Hans Neuendorf, is the leading source for buying, selling, and researching on artworks online. In 1999, it became publicly traded as a Berlin-based tech company listed in the Prime Standard segment of the Frankfurt Stock Exchange. Speaking of how this 30-year-old company was initially established and envisioned, we must throw back ourselves to the middle of the last century to the founder's homeland—Germany.

Back to the 1950s and '60s, in Germany, the art world after World War II was turbulent and swirling from the defeat. During that time, the class of German Industriousness was about to recover, and many people began to earn with a stable growing income of wealth. Thus, an increase of young collectors crazy for the art came into play (*The Story of Artnet*, 2019). Due to the victory of England and America, artworks collected from around the world are unprecedentedly clustered in those places. Of course, this matter was spontaneously enjoyed a rejuvenated attraction from native German collectors, one of them namely the collector Hans Neuendorf (*The Story of Artnet*, 2019).

Another significant engine for artnet is the founder himself, who has been considered to be an incredible entrepreneur throughout his unusual energetic career (*The Story of Artnet, Part 2*, 2019). The wreckage scene amid World War II in Germany was when and where brought up the founder Hans Neuendorf, illustrated within one of his interviews (*The Story of Artnet, Part 2*, 2019). His first entrepreneurial attempt of trading was with the German soldiers to exchange small wooden stuff, and he bought his first painting at 18 (*The Story of Artnet, Part 2*, 2019).

At the time after WWII, Neuendorf was already a player in the primary art market, a young dealer in his twenties and the owner of an expanding gallery in Germany. It was the exact time for something novel and fresh bringing such globally dynamic currents back into Germany and selling them to domestic collectors.

Moving forwards to the 1960s and '80s, art business transformed into a global industry yet is still a marketplace characterized by obscurantism and information asymmetry, mentioned by Neuendorf in his recent interview to celebrate the 30th Anniversary of artnet in 2019 (*The Story of Artnet*, 2019). From a sociocultural aspect, modernization of the art market was also established during that time.

Then, in 1967, the Pop Art Show was presented in Cologne for the first time by him and Rudolf Zwirner, featuring Warhol, Rauschenberg, Lichtenstein etc. This Cologne art fair was primarily designed to present exhibitions of the above artists to cultivate their relationships with important clients. It is at the first Pop Art Show in Cologne that Neuendorf had the original envision to set up a price database, one of the product pillars at artnet (*The Story of Artnet*, 2019).

At the art fair, Neuendorf identified that the pricing information is of remarkably statistical significance to people. In terms of sellers, it would be beneficial for them to know what their collection is worth. Whereas in terms of the buyers, it is equally helpful for them to know how much they need to pay (*The Story of Artnet*, 2019). Therefore, to him, there is a universal need for disclosing one set of pricing in the market, and that need is intensified by increased transaction on the art.

4.3 Missions, Objectives and Positioning

As the first art business to shift to online, artnet has always been considered as a leading provider of auctions, information, and analytics online. It is also the unique dedicated online platform for fine art. Its mission is encroached at the beginning of every annual report. In the Annual Report of 2018, the core statement mentioned that its mission is to enhance the reliability of information provided and transparency of market to art collectors (*Annual-Report-2018 (3).Pdf*, n.d.). Thus, a fundamental objective of this company is to build client trust by providing reliable sources to promote its overall sales. Correspondingly, the report of Online Art Sales in the US by IBISWorld mentioned that as this market growing popular, the company should establish stable relationships with customers and bolster its credibility by offering quality products (*OD5070 Online Art Sales - MyIBISWorld*, n.d.). This enables the notion of client trust building become the very foundation of all the company development. Another main objective is to overcome inefficiencies in the art market by using technology.

Artnet positions itself strongly in the online art sales industry through two angles: the online one-stop-fits-all platform and the data analytics provider. Besides, it solidifies its position by offering a much broader portfolio of products and services than other competitors. The versatile product portfolio consists of 4 pillars, as shown in Table 4: Price Database, Gallery Networking, artnet Auctions, artnet News.

Table 4. Products Portfolio of artnet (Artnet - Fact Sheet, 2009)

| Products | Launch Year | Description |
|--------------------|-------------|---|
| Price Database | 1989 | Providing archives of auction results for appraisers, dealers, and collectors. As the oldest and most comprehensive archive of international art auction data, with all lots vetted by experienced multilingual Price Database specialists; |
| Gallery Networking | 1995 | allowing gallerists to build global visibility and to promote their artists to global online audience; |
| artnet Auction | 2008 | providing a convenient and cost-effective way to buy and sell art online; advantages are accessible prices and fast turnaround; |
| artnet News | 2014 | The world's leading 24-hour digital news provider to guide the coverage and analysis of the trends, events, and people. |

4.4 Internal Analysis Using VRIO Framework

The VRIO framework is a strategic analysis tool to address the iconic capabilities and resources of the company developed to surpass the other competitors in the long-term (Rothaermel, 2013). According to the definition of VRIO framework, such sustained competitive advantages could be detected by 4 components of attributes—value, rarity, imitability, and organization. Based on Porter's Five Forces, brand identity is a potential core competence for players in this industry. Also, in this case, the goal of artnet is to deliver an all-in-one platform to buy, sell, and research art. The core competences are identified as brand identity, innovative tech products. Questions to be explored could be whether if those resources are valuable, rare, costly to imitate, results are shown in the Table 5 based on whether if artnet is organized to capture the value of those resources (Jurevicius, 2013). Supportive evidence are provided by quantified data and interview questions. The resource or capability that fulfill all four requirements will underpin sustained competitive advantage for artnet.

Table 5. The VRIO Analysis of Artnet

| Resources and Capabilities | Valuable? | Rare? | Costly to imitate? | Capable of exploiting? | Competitive Implications |
|----------------------------|-----------|-------|--------------------|------------------------|-----------------------------------|
| Brand Identity | Yes | Yes | Yes | Yes | Sustainable Competitive Advantage |
| Innovative Tech Product | Yes | Yes | Neutral | Yes | Temporary Competitive Advantage |

Brand Identity is the primary sustained competitive advantage. Artnet is of the most unparcellled longevity of operation as a dedicated online art platform. It is valuable because artnet uses brand image to hire and retain talents. Identity is costly to imitate because artnet has earned “a reputation for quality and reliability” right from its establishment. Plus, the identity of public trading company places a sense of confidence and credibility of the firm on all shareholders and extensive users. Artnet’s unique selling points as a one-stop shop for art stakeholders is identified in the interview. This is why the brand identity of artnet is unique.

Innovative Tech Products is considered as a temporary competitive advantage. Artnet uses such ability to develop the one-step-fits-all platform and the rest of its products. The platform essentially contributes to attracting audiences and generating sales constantly. Analysis on its performance will be provided in the following part.

Although it’s of high value and low imitability, there are several competitors’ products existing in the market that are similar, e.g., mutualart.com, Artsy.net. Still, artnet is organized to capture value from this capability.

4.5 Internal Analysis on “One-stop-fits-all” Website Traffic Performance

As online-only art platforms, site traffic analysis is of the greatest significance to those internet companies. It is because any downturn in those numbers of visitors could reflect or lead to a lack of attraction for the site and a reduced revenue for the products. Most online platforms continuously monitor, record, and analyze their traffic to each site using similar pattern. The site traffic was evaluated on a daily, weekly, or monthly basis to digest information about the performance of each product segment. Table 6 below shows the number of visitors attracted to artnet from 2016 to 2018.

Table 6. Number of Visitors Attracted to Artnet from 2016 to 2018 (Average per Month)

| | 2016 | 2017 | 2018 | 2019 |
|-------------------------------|-------------|-------------|-----------|--------------|
| Numbers of visitors per month | 2.2 million | 2.6 million | 3 million | 3.55 million |

Note: the number was directly cited from the artnet Annual Report 2018

As consumers visit websites to consume digital contents, therefore analyzing website visitors and growth rate is essential in map out the websites’ overall digital presence and performance. Hereby, a comparison between artnet and its competitor Artsy (Note 2) on the traffic and engagement metrics for their sites will display as follow. Figure 4 and Figure 5 compare the visits flow of artnet.com and Artsy.net on both desktop and mobile web in the last 6-month base. Plus, Table 7 shows the relative indicators and metrics followed with evaluation on their performances respectively.

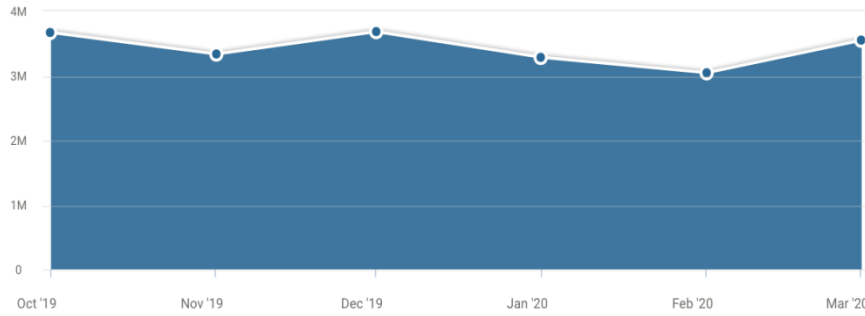


Figure 4. Total Visits Flow of artnet on Desktop & Mobile Web in the Last 6 Months, as of March 2020

Source: www.similarweb.com

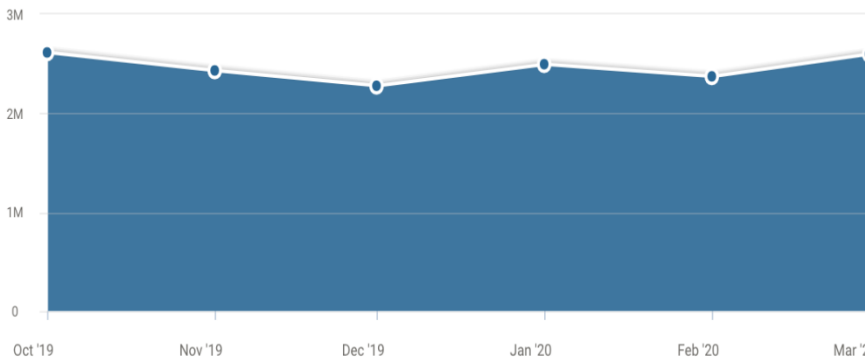


Figure 5. Total Visits Flow of Artsy on Desktop & Mobile Web in the Last 6 Months, as of March 2020

Source: www.similarweb.com

Table 7. Total Traffic Overview and Engagement Metrics Compared between Artnet and Artsy

| | Artnet.com | Artsy.net |
|----------------------------|--------------|--------------|
| Total Visits | 3.55 million | 2.60 million |
| Total Visits Growth Rate | Up by 16.59% | Up by 9.53% |
| Average Visit Duration | 00:01:36 | 00:02:19 |
| Pages per Visit | 2.27 | 2.96 |
| Bounce Rate | 69.81% | 64.93% |
| Average Visits per Visitor | 1.6 | 1.2 |

Source: www.similarweb.com

Overviewed the stats of each indicator above, one may notice that artnet surpasses Artsy in the total visits, the growth rate, and the average visits per visitor. It shows a steadily increased consumers base and a strong performance on the returned visitors. However, Artsy has a better performance on the average visit duration and pages per visit, which might potentially signify that the contents offered by Artsy is more versatile and comprehensive to read and digest. Artnet reaches a slightly high rate than artsy for the bounce rate. Bounce rate assesses the percentage of visitors to websites who exist the site after browsing only one page without triggering any other actions. It is hard to tell who's better based on the bounce rate, because both websites are multi-functioned to serve visitors with different expectations. Some needs are fulfilled at the gateway already, e.g., instantly reading news abstract and events banners. Whereas other needs for reading full articles or registration to auctions will need to visit the rest of the site. In this case, artnet offers all types of contents for which single-page sessions might be expected. Table 8-10 below show several differences in audience demographics concerning artnet, Artsy and the general US Internet.

Table 8. Gender Division of Audience Demographics Compared among Artnet, Artsy, and US Internet

| | | artnet.com | Artsy.net | US Internet |
|--------|--------|------------|-----------|-------------|
| Gender | Male | 46% | 55% | 50% |
| | Female | 54% | 45% | 50% |

Table 9. Household Income of Audience Demographics Compared among Artnet, Artsy, and US Internet, as of Feb 2020 (Kantar, n.d.)

| Household Income | artnet.com | Artsy.net | US Internet |
|--------------------|------------|-----------|-------------|
| Under \$25K | 5% | 8% | 8% |
| \$25K - \$39,999 | 5% | 8% | 9% |
| \$40K - \$59,999 | 9% | 22% | 14% |
| \$60K - \$74,999 | 7% | 8% | 10% |
| \$75K - \$99,999 | 9% | 14% | 16% |
| \$100K - \$149,999 | 25% | 28% | 21% |
| \$150K - \$199,999 | 16% | 16% | 10% |
| \$200,000+ | 24% | 7% | 12% |

Table 10. Age Division of Audience Demographics Compared among artnet, Artsy, and US Internet, as of Feb 2020 (Kantar, n.d.)

| Age | artnet.com | Artsy.net | US Internet |
|---------------|------------|-----------|-------------|
| People: 2-12 | 0% | 0 | 9% |
| People: 13-17 | 2% | 2% | 7% |
| People: 18-24 | 9% | 14% | 11% |
| People: 25-34 | 22% | 29% | 16% |
| People: 35-44 | 9% | 7% | 15% |
| People: 45-54 | 26% | 10% | 15% |
| People: 55-64 | 10% | 18% | 13% |
| People: 65+ | 23% | 20% | 14% |

From an industry-level perspective, one demographical feature of the online art audience is a slight aggregation on higher household income people, with over \$100K. Specifically for artnet and Artsy:

- 1) Artnet has more power to attract people in a higher household income.
- 2) Artnet attracts more people in an older age, whereas Artsy attracts considerably portion of people aged between 18-35.
- 3) Artsy was strongly tailored to young people, through dynamic narratives and affordable price, while artnet secured its reputation for accumulative expertise, and the recent strategic shift to offering more high-quality lots.

Specifically, online art platforms have no limits on geographical divisions. As for artnet, China's market is of high potential for development and capitalization. Thus, artnet strategically grow its presence on the WeChat, the leading social media platform in China, as its gateway to Asia market. Artnet grow its number of followers by 50%. Since the product features was successfully iterated that users could registrar to artnet auction directly through WeChat platform, over 1000 new registrations on its Auction came through WeChat.

Search Engine Optimization is another indicator to evaluate the site's performance. Stats in the Figure 6 below shows a remarkably large proportion of 99.57% organic keywords which bring free desktop traffic to artnet. Top 5 organic keywords are "artnet", "the parsonage garden at neunen in spring 1884", "annie leibovitz", "raquelle azran", and "artnet news". This great performance on organic traffic proves a high quality and contents of artnet' websites. It is because the organic traffic is of the most valuable traffic source produced by google algorithms. From one hand, google directs the most trusted site with the highest amount of traffic for people. From the other hand, ranking system of google is of high rigorous calculation, ranking in the top results points that that the contents are high quality.

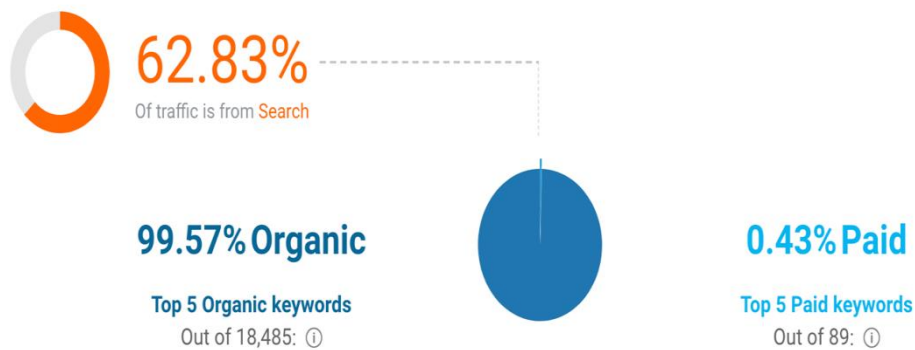


Figure 6. Organic Search versus Paid Search

Source: www.similarweb.com

A two-thirds of artnet advertising revenue attributed to the artnet News, increased by 41% to 2.7 million USD. It is mainly triggered by high demand for luxury brands seeking for ad space on the website. This competitive power in advertising is correspondingly evidenced by the topics users who visit the artnet also interested in.

4.5 Conclusion on Strategic Approaches

The overall market performance of artnet grows steadily. The total revenue reached \$20.8 million in 2017, increased by 8% compared to the previous year. In 2018, the revenue grew by 4% to a record of \$21.6 million, as compared to 2017 (*Annual-Report-2018 (3).Pdf*, n.d.). Besides, several strategic approaches were conducted by artnet.

Building awareness of brand identity is of high significance to outweigh in the online art sales market suggested from previous analysis. Artnet builds its brand attraction especially to high-end advertisers by using high-quality original contents to shape conversations (*Annual-Report-2018 (3).Pdf*, n.d.). There is an increasing demand of luxury brands seeking for ad space on artnet News which significantly drives up the revenue of advertisement.

Enhanced credibility promotes sales. This is statistically evidenced in the increase of the average value of art sales for artnet by 17% to \$ 14.1K in 2018, as compared to 2017. Plus, another supportive data is that the value of pieces bought over \$75K at artnet increases by 7% as well (*Annual-Report-2018 (3).Pdf*, n.d.). Artnet also exemplify its brand identity and reputation to source many high-quality lots to trade them in an agile and flexible manner, e.g., The Hambleton sales in 2018.

Shifting to delivering more high-quality lots. Starting from 2018, artnet Auctions gradually shift from affordable and mid-tier lots to more high-pricing offerings. Actions appeared to be profitable for its first time in 2018, although there is a decrease in transaction volume by 2%, due to possible run-off low quality consignments. Also, the sell-through rate by both volume (12%) and value (12%) has increased

in 2018. This also confirms the increased acceptance on transactions of high-value artworks online. Profit margins also increased to 7.8% as a result in 2018. Quality of data greatly contributed to build the client trust.

Social media presence drives online traffic tremendously. This strategy generated since social media is of great importance for consumers to view and discover art now. Online art sales report by IBISWorld indicates that the established platforms have the same established social media metrics (*OD5070 Online Art Sales - MyIBISWorld*, n.d.). Stats shows that the second large destination website from artnet is Instagram, increased by 108%. As a referral site to share traffic and influences, 8.63% of traffic is diverted to Instagram from artnet.

Compliance Management System designed to benefit an open communication and a trusting base with all employees and clients. For example, my interviewee mentioned through email that the employees could provide anonymous information, as known as “ticket”, about possible misconduct at any time through an internal control system.

Also, other Strategic approaches include investment in talent and technology, broad products development brings synergies with artnet and high-quality user-generated contents help build client trust.

4.6 Discussion

What makes artnet a leading online art sales player? Based on the VRIO analysis, its sustained competitive advantages of brand identity and innovative tech products contributes to its positioning. Analysis on the website performances of artnet and Artsy evidenced the strong audience reach and how the website serves as an omni-source for the art stakeholders and an educational tool for those who are interested in learning art. The platform’s success lies largely on its sustained competitive advantages to provide consumers with novel solutions and credible products and services. Products help provide transparency, insights, flexible transactions, and liquidity. Thus, innovation and credibility stay strategic importance throughout the company development.

Moving on, strategic approaches by artnet is initiated to overcome the potential risks, which are identified as following: uncertain economic trends of art market; government policy, e.g., interests and tariff rates; the financial market stress due to geographical and healthy tensions, e.g., COVID-19 in 2020; well-funded and aggressive competitors. Despite the uncertainty of state of economy, a growing number of high-net-worth individuals in international markets is an opportunity for all platforms to expand further. Those competitive advantages and strategic approached by artnet are geared to generate stable growth and to secure market value over the long term.

5. Conclusion

5.1 Summary

This chapter discusses and concludes the result based on the industry-level analysis from Chapter 3, and the company-level internal analysis from Chapter 4. To a certain degree, the current research seems to imply that the online art sales industry is in its substantially robust developing stage and will continue its expansion although some threats are happening in this industry.

As shown in the Table 3, Porter's model provides us with an industry-level overview on the competitive forces in the online art industry. The root causes of profitability are listed. Competition in the online art sales industry largely depends on the quality and variety of contents offered, including artworks and information. There is an increasing high barrier to entry. Whereas the threat of substitutes and existing competitors remain high. Supplier' and buyers' power are weak. The goal of industry-level is to perceive the whole picture of an industry to identify root causes of profitability. As a result, important capability of being competitive include: to manage inventory of artworks, to adopt new technology, to have a trusted brand image, and to secure a loyal client base. Those capabilities will be the main source for current companies to develop appropriate strategic approaches.

Moving on to practical competitive strategies, Chapter 4 explored into a company perspective to see how to generate strategic approaches after assessing on external environment. Taking artnet for instance, its sustained competitive advantages are mainly the brand identity and the innovative tech products. To leverage those advantages, several strategic approaches are initiated to promote more sales.

To apply this logic broadly, industry players need to establish certain sustained competitive advantages and generate strategic approaches based on that. Elements to trigger such advantages was identified as: up-to-date and user-friendly platform design, reliable and trustworthy products, secure and fast payment transaction. Referring to artnet, the most aggressive but effective strategy is to shift from affordable lots to high-quality lots. Remembering artnet has such long-life reputation and strong customer base, it is reasonable for it to achieve a fruitful success. But always keep in mind what is the target customer segments, then design the strategies accordingly.

To summarize, the online art sales industry develops at a robust speed. Both existing rivalry and substitutes contribute to an increasing fierce competition. Consumer perceived "Reputation of the online sellers" and Information about the art" as the top 2 importance factors when it comes to buying online. To stand out from the market, the online art platforms must identify their own sustained competitive advantages. Based on such capability and sources, platforms would generate strategic approaches to a revolutionary one-size-fits-all approach to benefit art stakeholders and to make global art market deliver creative solutions and trustworthy products and services.

5.2 Extra Implications for Sustainable Development

The additional implications for sustainable development based on research are concluded as follows:

- Invested on talent and technology. It is proved that many industrial incumbents are acquiring blockchain, database and machine-learning technology with their businesses. Thus, it is not a competition about service and products, but a competition about technological advances.
- Being prepared to face more entrants as more aggressive startups will be expected to enter this industry, driving more fierce competition and lowering profit margins.
- Building awareness of brand identity is the key point. Leveraging more advantages of high-quality user generated contents, e.g., opinions and debate on up-to-date events, people, and trends in the industry.
- Established partnership with art business agencies, e.g. appraisal firms, law firms, art assurance firms etc.
- Scratched or endorse the reputation of traditional houses, established collectors and galleries through partnership or networking.
- Cultivating of the next generation of art buyers at the website, making it as portal site for the growth of them

5.3 Limitations

There are several limitations to this research which might restrict the robustness of the conclusions. This research exhibits the following limitations:

- The online art sales industry is currently developing in its infancy stage, which prevents the opportunity to apply for a standardized model designed specifically for this industry. Adequate alternation and adjustment are requested for this theoretical framework.
- Besides mentioned Porter's Five Forces model, as permanent factors of a certain industry's structure, three more factors would be considered to consider, specifically catering to the changeable context of art services company: Industry Growth Rates, Government Intervention, and Technological Innovation.
- To make the interview easier and safer for respondents, specific questions concerning percentage increases or decreases about KPIs, and fiscal change were not asked.
- To measure the performance of website, indicators like CPM, impressions and visibility are not able to retrieve due to a requirement of confidentiality to protect from competitors.
- Only one platform was investigated in a deeply manner. It would be beneficial to give more case studies to see the differences between each of the platforms because the industry is not mature yet.
- Due to the lack of relative market share information about each product from several competitors, an internal analysis of BCG Product Portfolio to identify the functionality of production package fails to be carried out.

5.4 Future Research Suggestions

Pieces of suggestions for future research on related topics are noted as follows:

- A shortage of the external analysis on online art sales industry on a country-based differentiation provide more opportunity for future study.
- A further analysis on the similarity and differences between the general e-commerce industry and online art sales industry create more room for future investigation. For example, general e-commerce highly depends on the client trust to generate sales, which has already proved to attributed substantially to the user generated contents on their websites, e.g., rates and reviews. Thus, an evaluation on the success of user generated contents within a context of the online art platforms could be interesting to investigate.

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Notes

Note 1. “The Story of Artnet, Part 2: How Founder Hans Neuendorf Helped Invent the Art Fair in a More ‘Innocent’ Time”, *artnet News*, October 9, 2019, <https://news.artnet.com/the-big-interview/hans-neuendorf-story-of-artnet-interview-part-2-1664434>

Note 2. Artsy is a leading online platform featuring galleries, museum collections, foundations, art fairs

and benefit auctions online. It has the largest database for contemporary art, holding 800,000 images of art, architecture, and design by more than 80 K artists, spanning from pre-modern, modern, and contemporary art. About | Artsy. (n.d.). Retrieved April 11, 2020, from <https://www.artsy.net/about>