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A digital art world The intersection of art, wealth, and technology

While the fine art industry is often viewed as oldguard and slow to change, technology is quickly taking a front seat in its evolution. Today's consumers expect convenience, personalization, and contextual transparency, and the industry is looking to technology to deliver that experience. From art-technology startups (ArtTechs) to traditional incumbents, players are starting to look toward digital business models as a way to win in the contemporary art world.

In a series of recent discussions with industry luminaries, they provided their perspectives on the intersection of art, wealth and technology. From auction houses to startups to wealth managers, numerous leaders representing different aspects of the industry expressed their thoughts: how is technology evolving in the art market? What technologies are changing how art is viewed, purchased, and analyzed? What will the future hold?

Transparent valuation methodologies are increasing transaction comfort and investment opportunities

Traditionally, valuation has been considered more of an art than a science. While historical data points and comparatives are employed, much of the final result lies in the experience of professional appraisers and advisers. The influencing factors (and how they drive an artwork's value) are not always obvious or made clear to art collectors, and this can create friction and market inefficiencies. A handful of industry pioneers are seeking to improve the valuation process through a more structured and transparent methodology. Christopher E. Vroom, CEO of CollectorIQ, Inc. is one of those spearheading the charge. He explains that "by aggregating nearly 100 million distinct attributes covering over \$100 billion in art sales, we're able to assess the value impact of a wide range of selling choices such as auction house or location, time of year and the like while assessing the contribution to value of both primary and secondary object characteristics. Ultimately, structuring data is the key to understanding value." The immediate goal is not necessarily to create a pin-perfect algorithm-based valuation, as this challenge may be too great given the subjective nature of art and the social capital element that drives the underlying value. However, increased transparency into the different components and weighting that determine value could instill more trust in the process, bringing increased comfort to buyers and sellers alike.

The development of more quantitative, transparent methods for valuations has a positive impact for financial services, particularly wealth managers. A key obstacle that high-net-worth clients face is the lack of sophisticated data and sufficient reporting that enables an investmentoriented evaluation. Art collectors are more commonly seeking the same level of sophistication from their auction house as from their investment bank. As pricing becomes more transparent and high-networth consumers get more comfortable with transactions, demand for art-related wealth management services should grow. As it relates to art-secured lending and financing, these algorithmic valuation methodologies could remove human bias / error and enable banks / financial

institutions to better evaluate and monitor their risk pools, driving increased loan volume on more favorable terms.

The establishment and adoption of these valuation methods can also open the door for advanced financial instruments, increasing exposure to art market economics and serving as a barometer for investment choices. Although art indices currently exist, they are not without their criticisms; they are often limited by the quality and availability of data.

Real-time algorithmic valuations could enable a more sophisticated, accurate, and timely index that satisfies the needs of investors. These same algorithms could also potentially drive the development of art exchange traded funds (ETFs), which would provide a financial instrument through which investors can gain exposure to market economics.

Social media as a builder of social capital and platform for art industry professionals

Social media is influencing the creation of art, serving as both subject matter and marketing channel. With exhibits such as *Rain Room*⁹⁸ and *Infinity Mirrors*⁹⁹ drawing massive crowds seeking that perfect photo to post online, the social media "friendliness" of a piece can make a considerable difference to the branding and performance of an artist, gallery, or museum.

Beyond just influencing the types of works created, social media is also serving as a low cost distribution channel for artists. In many ways, it is disintermediating the artist-gallery paradigm by allowing these creatives to showcase their work directly to millions of potential buyers. Joshua Campbell, a Sotheby's Institute of Art alumnus and co-founder of Canvas The development of more quantitative, transparent methods for valuations has a positive impact for financial services, particularly wealth managers.

Collective—a social art-recognition platform and marketing tool for art venues—believes that galleries are realizing social media is the best way to target the middle market, and a lot of the focus is now shifting toward these buyers. "Middle market transactions might not have headliner prices, but the sheer scale and quantity of this market is starting to have a lot of appeal for sellers," said Campbell. Perhaps the most popular platform currently used is Instagram, often viewed as the social media of choice for the art community.

98 Rain Room is an immersive environment piece created by Hannes Koch and Florian Ortkrass of Random International in 2012

99 Infinity Mirrors refers to a number of Yayoi Kusama's infinity mirror installations that have been made available to the public throughout the course of her artistic career

While it may be surprising to those who believe that the profile of an "insider" would suggest a slow or reluctant adoption of social media (due to their typical demographic), current observations suggest the opposite, with a significant number of active art collectors using the app on a consistent basis.

Dan Desmond, of Morgan Stanley's Blue Rider Group, emphasizes the criticality of this development and its importance for wealth managers and financial services professionals who are looking to be well informed on what is happening in contemporary art. To truly develop deep and meaningful relationships with art collectors, it is not enough to merely understand the financial metrics and data of art, but to share an interest in the work itself and the community of artists, curators, scholars, and dealers that are the core of the community. Social media can provide a convenient and valuable channel for advisers to do just that, offering a window into shows happening all over the world.

Technology is transforming "the backbone" of the art ecosystem

From collection management to security to transportation, these ancillary services act as the backbone of the industry, ensuring art is exactly where it needs to be, when it needs to be there, and arriving in the same condition in which it left. While these services are acknowledged as crucial, how they are evolving through technology can frequently be overshadowed by more highprofile industry developments. Adam Fields, CEO of ARTA, highlights that while the industry is often generalized as antiquated and resistant to change, logistics and other ancillary services that enable the daily operations for fine art can be considered even more old-fashioned. For example, electronic payment processing and currency conversion, capabilities that are taken for granted in most other industries, can be considered relatively new developments that many art shippers and service-providers are starting to adopt. Having found success with

directly connecting high quality shippers with customers, ARTA is now turning to APIs that can connect seller and buyer systems directly, bypassing the manual pen-and-paper processes that are typically required to complete a transaction.

Technology is also starting to address the challenges of provenance, tracking, and security, all of which are major risks and concerns. For example, the idea of a unique, reliable, and tamperproof tracker for artwork can have many positive applications: simplified collection management, enhanced security monitoring, improved provenance accuracy, and monitored condition management. With technology like this, institutions and buyers can eliminate many steps that are currently being used to establish provenance and authenticity, and these benefits can ultimately translate into cost savings and improved confidence in the shipping and storage process. A handful of firms are working on solutions to this problem, including Steven and Anne Halliwell (founders of ID4Arts and managing directors of the Art collectors Fund), who believe that technology using RFID transponders could be the solution. These developments will also likely have important implications for wealth management services as the issues of provenance, tracking, and security are solved.

The next frontier in trust and transparency: primary market data

It is widely regarded that one of the most impactful industry developments has been data transparency. While negotiating power and access to art have traditionally been reserved for insiders, improved access and analysis of data has made it easier for a variety of stakeholders to venture into the art world. Secondary market data is readily available, and the understanding of fine art movements and financials has improved drastically as a result, giving art collectors more confidence to engage in transactions. Conversely, a significant percentage of the global market value lies in the primary market, and the data on these transactions is not readily available or understood. Shedding light on this data could have enormous implications, as it provides the last major piece for a complete picture. As Pip Deely of Wolfram Ventures suggests, "What it's going to take to see this change happen is for the holders of primary market data to understand the value of sharing their data." Art insiders inherently want to amass as much primary sales data as possible because they understand the value that this information asymmetry has in both influence and negotiating power. However, Deely believes dealers are starting to understand that their data is not going to stay private forever and it's in their best interest to tell richer stories and better justify their prices.

Although the issue of primary market data opacity is very much alive, the need for transparency is becoming more and more compelling. There is no doubt that technology will play a critical role in unlocking this part of the market, and it will be exciting to see what the future holds.

Technology is here to enable and support businesses, not replace them

While technology may invariably change how business is done, it does not necessarily mean that traditional jobs are at risk. Instead, incumbents will likely have to evolve to adapt to the technology. Those who are willing to transform can learn to engage the market in more compelling ways. For example, an art appraiser can embrace data-driven algorithms and marry them with the traditional appraisal process to provide a more compelling value proposition for a specific price point. They can also play a role in the development and fine-tuning of the algorithms.

The major role of technology within the industry will likely be to reduce friction, improve access, and instill confidence in the underlying processes. Margins for certain businesses and players may suffer as technology eliminates information asymmetries and lowers the barriers for market entry; however, it is important to recognize that the same technology provides opportunity, as it enables more accessibility and comfort in transactions. As Hugo Liu of Artsy articulates: "You shouldn't look at 'ArtTech' as threatening your slice of the pie. You should see it as a way to grow the entire pie overall." The firms that can adopt and adapt will likely be able to tap into a more expansive market than they have ever seen before.

The nucleus of the market adopting technology innovation will continue to expand as prices become more transparent and demand better matches supply. However, there is broad agreement that the art industry has an intangible quality that can never be replaced or coopted by technology. Much of the personal satisfaction and appeal can be derived from the "romance" of the in-person experience, and it's not expected that any of these elements will ever be phased out entirely. Technology can go far in improving the access and convenience of art, but the nuances surrounding the experience of art may never vanish.

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