



GLOBALXPLORER®



The GlobalXplorer^o Blockchain White Paper is meant to describe the currently anticipated plans of GlobalXplorer (“GX”) for developing a new blockchain and token mechanism (“Token”) that will be used on the portal sponsored by GlobalXplorer^o (“Portal”). Nothing in this document should be treated or read as a guarantee or promise of how GlobalXplorer’s business, the Portal, or the Tokens will develop, or of the utility or value of the Portal or the Tokens. This White Paper outlines GlobalXplorer’s current plans, which remain in development and could change at its discretion, and the success of which will depend on many factors outside GlobalXplorer’s control, including market-based factors and factors within the software, cybersecurity, cryptoasset and antiquities trade industries, among others.

An updated version can be obtained by contacting our Blockchain Team Lead, Jennifer Wolfe at jennifer@globalexplorer.org.

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ABSTRACT.

GLOBALXPLORER^o aims to build an autonomous, transparent and decentralized portal for the registration of physical antiquities and distribution of their associated cultural heritage data through digital assets known as Smart AntiquitiesTM.

Nations, their heritage institutions, and rightful owners, will be able to monitor the whereabouts of their antiquities, manage the journeys of these valuable assets through time, and empower citizens to liberate the use of their associated cultural data in all types of digital content.

The result will be a robust ecosystem of new functions and tools, supported by smart contracts, that enables cultural heritage data as a value-add to services across all sectors of society.

Over time, we envision the GX^o Blockchain could grow into a Bloomberg-like collectors portal, self-regulating global research library, and popular creators tool to produce, share and distribute content, services and products that are derived from Smart Antiquities.

The GlobalXplorer^o Team

INTRODUCTION.

The GX° Blockchain is both a global registry for antiquities and an Ethereum-based marketplace for the sustainable distribution of an antiquity's cultural data, via a digital asset called a Smart Antiquity™, which itself can be curated and collected.

Along with establishing indisputable provenance, its protocol encourages a new valuation system for antiquities, based on the amplification of cultural data vs. the scarcity of a physical object. The aim is to revolutionize how the world's antiquities are valued, stored and collected and their associated cultural heritage data is stored, shared and utilized, paving the way for a powerful new antiquities economy.

It first secures the provenance of an antiquity via a Token-Curated Registry (TCR) and then releases a linked digital asset, or 'Smart Antiquity', which contains all of the antiquity's non-proprietary cultural data. This can then be synthesized with other Smart Antiquity's cultural data as well as integrated into data from other disciplines, such as engineering, robotics, artificial intelligence, law, health, design, architecture, film and fashion, among others, thereby innovating new proprietary data for paid distribution.

The GX° Blockchain presents a future for the antiquities market that is based on an ecosystem of researchers, curators, scientists, creators and developers building products and services using cultural heritage data, effectively '*using our past to develop our future*' – a core vision of GlobalXplorer's founder, Dr. Sarah Parcak.

For antiquity owners, it is a powerful tool for establishing indisputable provenance and enhancing their investment in a digital world; for governments it provides greater archaeological and anthropological context for their nation's heritage, safeguards their assets and takes a strong stance against looting and the illegal trade of their antiquities; for archaeologists it generates indelible time stamps on their lifelong research and allows them to generate direct investment in their explorations; for curators and creators it allows them to build their own licensable intellectual property atop an antiquity's cultural data, uniting their work with a Smart Antiquity(s) forever, increasing the value of that Smart Antiquity(s), which in turn increases the physical antiquity's value as well.

Activities on the GX° Blockchain will be supported by the Ethereum blockchain and a community of citizen archaeologists, authenticators, researchers, creators, and cultural curators, who work together to prioritize collections and the types of data shared on the network and managed by an Ethereum -based token, GXT.

The Challenge.

The world's artifacts are a nonrenewable cultural resource. When illegally looted, they cannot be traced to their rightful place of origin and without their historical context are destined to forever remain 'beautiful but dumb'. This renders them valuable only to the private collector, not our *collected humanity*. Once their value to society has been destroyed or lost, it cannot be regained.

Antiquities have both cultural and economic value, and these are inextricably linked. The global antiquities trade moves billions of dollars in antiquities and artifacts around the world each year, from their countries of origin to museums, auctions and private collections. Most nations have attempted to control the trade legally, through regulations that allow for careful excavation and scholarly evaluation, to ensure provenance is established and a proper valuation is made. However, these laws tend to incentivize illegal trading because of the complex system that must be navigated to add an antiquity into the legal market.

Looting is driven by market demand. Source countries are often archaeologically rich but economically poor, and often in conflict. For those on the 'front lines' of looting—usually locals who are merely trying to meet their family's needs for food and shelter—the antiquities hold no real value in their everyday life, so it is simply easier and quicker to deliver an artifact to the illegal trade in a quick exchange for local currency because *there is no equally easy incentive for them to participate in the legal antiquities trade* in this same manner.

If the antiquities trade can turn a blind eye to provenance and still generate profit, collectors will keep coming back for more and the supply side will continue to embrace looting as a means of addressing the classic and increasing imbalance between rich and poor.

And museums and governments lose, as do collectors. 95-99% of the final price of a looted artifact is typically pocketed by middleman and dealers, denying governments, their heritage institutions, and their citizens the right to directly benefit from the value of their cultural assets. Even when looted antiquities are recovered, they face difficulties with provenance, making it nearly impossible for authorities to pursue prosecution, museums to obtain the verification needed to include them in a collection, and collectors able to gain an accurate value. The repatriation of looted artifacts is a lengthy and expensive process, making it cost-prohibitive for governments to bring their antiquities home for the cultural and economic benefit of their own citizens, leading to antiquity 'orphans' left behind in various locations around the world.

Most importantly, the loss of cultural heritage data from the looting of antiquities is an ongoing loss to society as a whole; looting destroys our ability to fully understand and reconstruct our shared past, robbing us of contextual information that can help us *collectively shape our future*.

This is not just a loss to our humanity; we have entered a remarkable time period in human history where the rise of crowd culture and new technologies are enabling scientific progress at unprecedented speeds. Just as citizen science has helped map the brain and identify galaxies in space, it can also greatly impact archaeology's ability to preserve our collective humanity, but only if accurate cultural heritage data exists for the crowd to collect, analyze and synthesize.

A Citizen Solution.

Blockchain technology and smart contracts open up many possibilities for the establishment of provenance for antiquities and the distribution of their associated cultural heritage data for the good of society. Blockchain can establish an immutable record for the discovery, excavation, ownership and even curation of an antiquity. Not only can it record and update an antiquity's whereabouts, it can record each time its cultural heritage data is synthesized with various forms of intellectual property.

The GX° Blockchain introduces three scalable technologies capable of amplifying citizen exploration in search of unfound ancient sites and the artifacts they contain, provides decentralized registration and authentication of antiquities, and offers a robust, cross-disciplinary research-driven marketplace for the transfer of cultural heritage data into other disciplines:

First, **GX° Smart Contracts for Citizen Archaeologists** enable any individual to participate in the search, documentation and interpretation of ancient sites and the antiquities they contain, and to be rewarded for their citizen archaeology assistance to archaeology teams. GlobalXplorer's army of 76,000+ citizen archaeologists around the world can also get involved; with the integration of invisible artifact tagging and our new mobile app, citizen teams can tag and establish provenance right at the site. Second, the **GX° Antiquities Registry** documents and ensures the authenticity of all antiquities, offering a safe and transparent decentralized directory for anyone looking to establish provenance of an artifact or antiquity. Third, the **GX° Cultural Heritage Data Hub** provides decentralized, open data to anyone looking to utilize cultural heritage data as a value add in the creation of research, products or services.

Key Elements of the GX° Blockchain (more detail to come):

Citizen Expeditions.

Antiquities Vault.

Smart Antiquities (digital assets).

Heritage-Links.

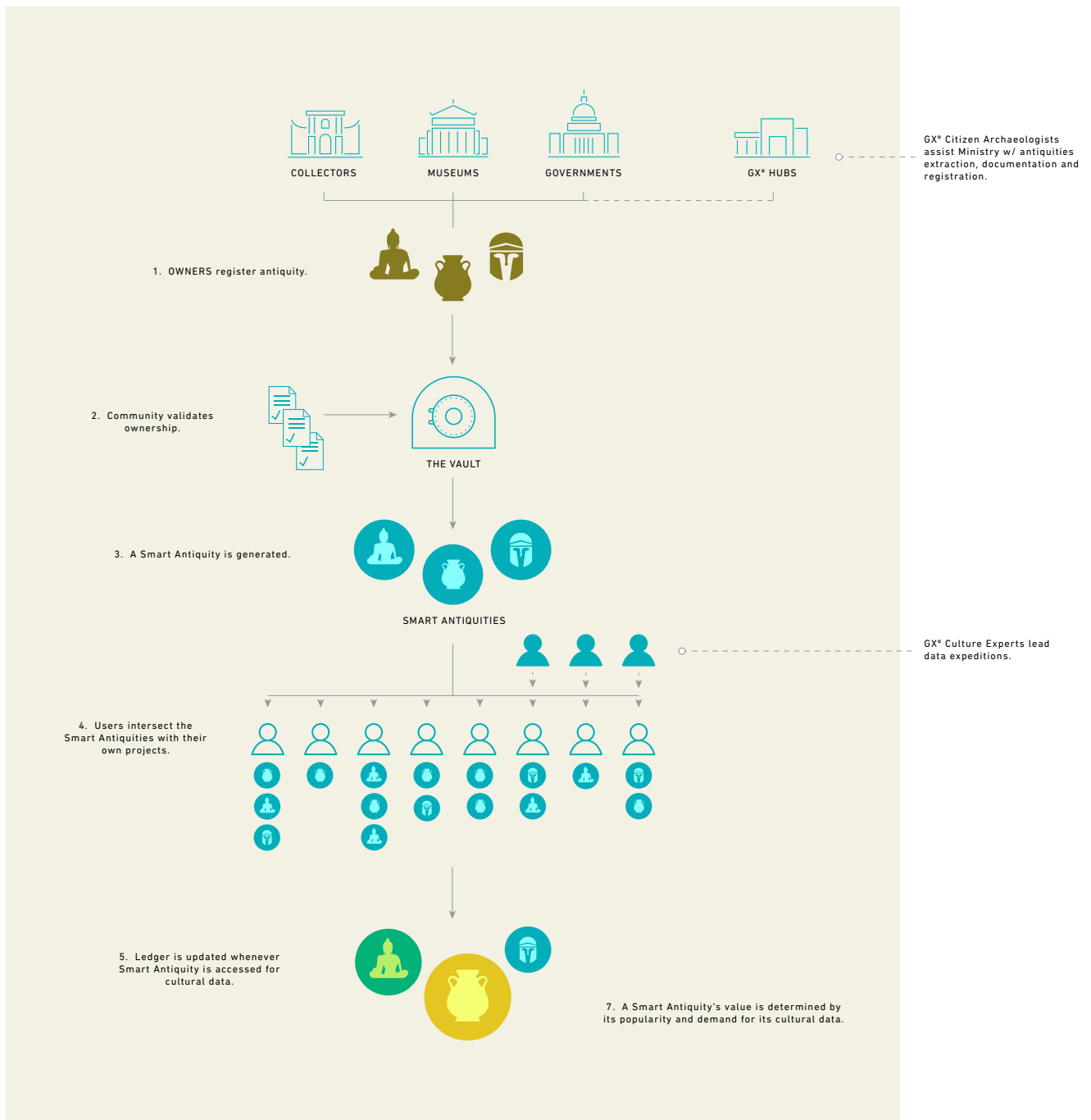
Cultural Data Hub. *'Antiquities in Motion' (AIM)*

Partner Toolkit.

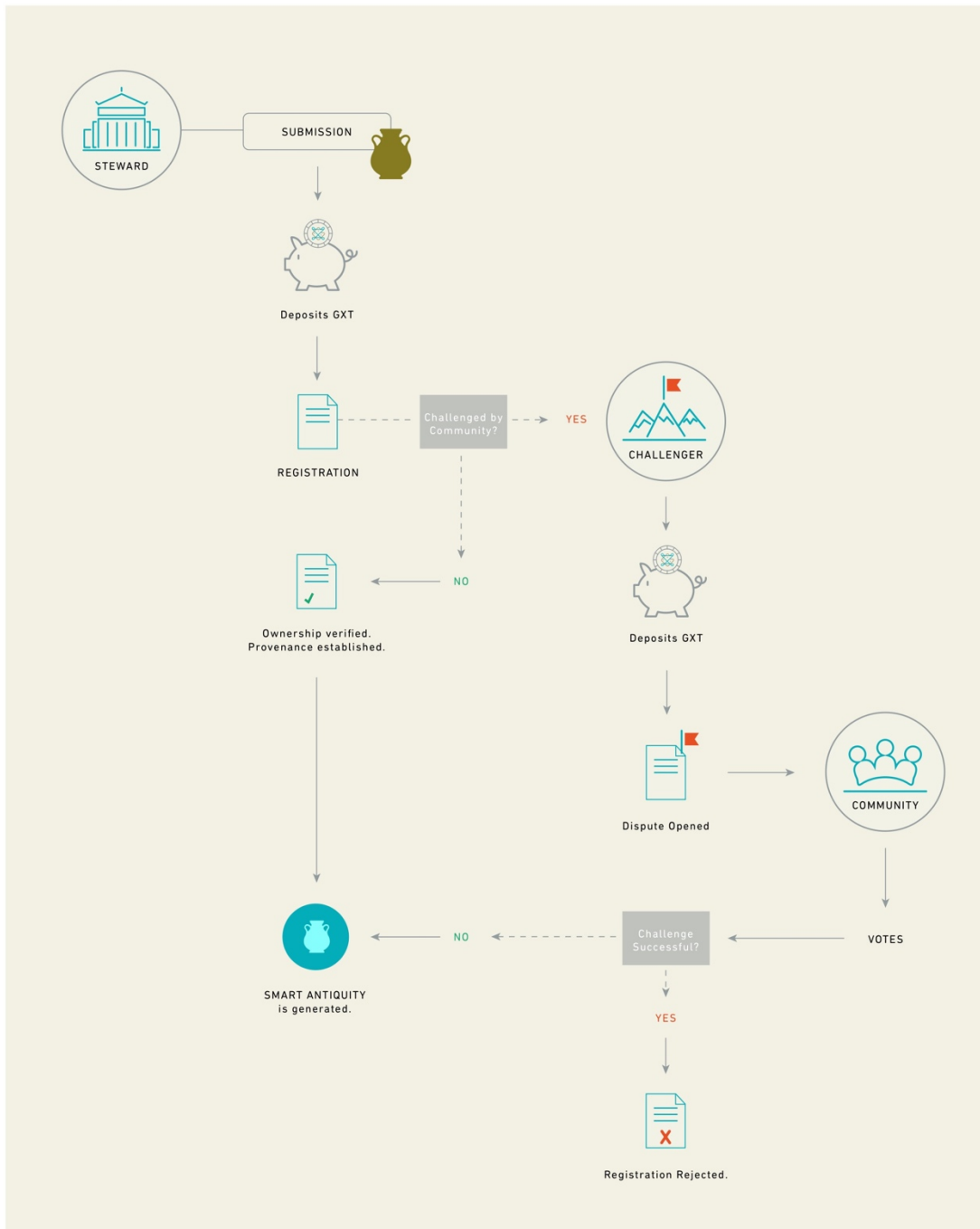
A Sustainable Revenue Model.

Instead of pursuing an ICO, the GX° Blockchain operates on a sustainable revenue model. We receive a small percentage (3.75%) of each transaction conducted on our platform.

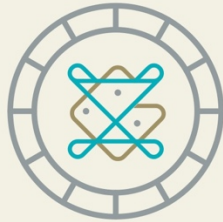
GX° BLOCKCHAIN : : OVERVIEW



GX° ANTIQUITIES REGISTRY



GX° TOKEN



		TRANSACTION CURRENCIES
USERS	Access to Community's Content	
CURATORS / CREATORS	Access to Smart Antiquities	
COMMUNITY EXPERTS	Governance of Ownership & Data	



NATIONAL CURRENCY

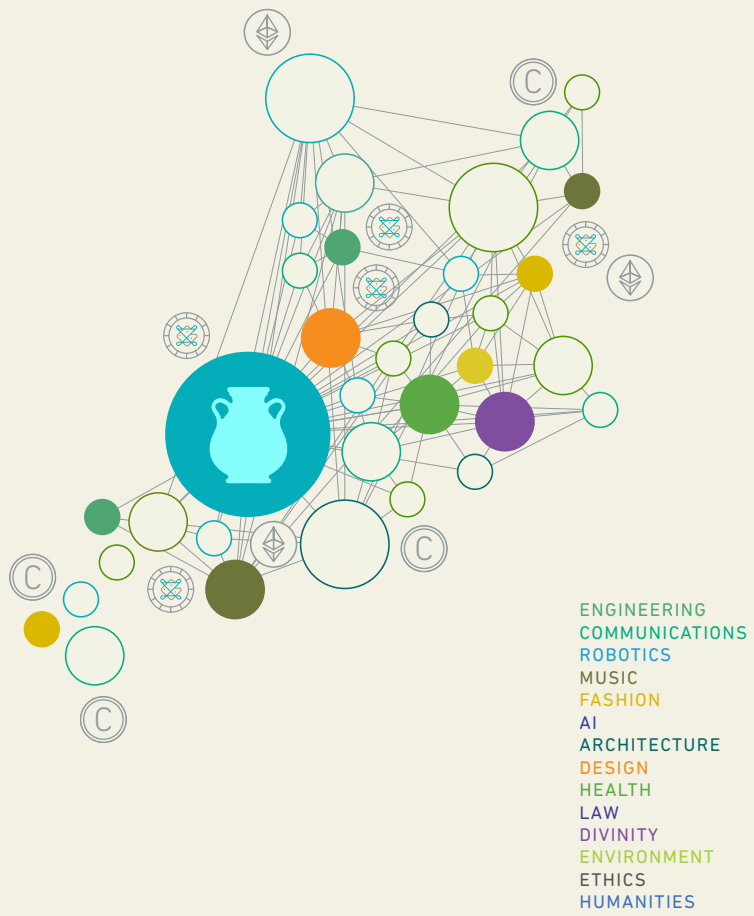


ETHEREUM



GX° TOKEN

SMART ANTIQUITY



The GlobalXplorer^o Blockchain Team.

Jennifer Wolfe

Director of Design + Development. Blockchain Lead.

Working at the intersections of design and science, Jennifer is passionate about blockchain technology and its ability to build social movements, decentralize philanthropy, and bring transparency to social platforms. As a co-organizer of Maker Faire Africa, she helped lead the Maker Movement across the continent from 2009 – 2015. She has been a speaker, advisor and curator of exhibits on the Maker Movement internationally, including the Istanbul Design Biennial, New Museum's "IdeasCity", Lime Wharf in London, and Afrofuture Milan. In 2014, after President Obama chose Maker Faire Africa as one of his 'Top 50 Initiatives' for the global maker movement, she was a guest speaker at the First Presidential Summit for the President's YALI Fellows and advised the U.S. State Department on curation of a program for visiting Makers from the Middle East.

She's also been the Design Coach to the TED Fellows since 2012, advising them on storytelling, the application of design 'best practices' to strengthen their initiatives, and development strategies to grow their organizations.

Jennifer is both the designer and strategist of the GX^o Antiquities Registry and oversees the entirety of the project's development.

Dr. Sarah Parcak

GX^o Founder + Egyptologist

Considered the "Indiana Jones of the Skies", Sarah continually pushes forward her field of archaeology with the ultimate goal to completely reinvent it for the next 100 years. She holds degrees from Yale (BA) and Cambridge University (M.Phil and PhD), is a Fellow of the Society of Antiquaries (an elected position), a National Geographic Fellow, a 2014 TED Senior Fellow and winner of the 2016 TED Prize.

Sarah serves as the founding director of the Laboratory for Global Observation at the University of Alabama at Birmingham, where she is an Associate Professor in the Department of Anthropology. She is also the CEO of SpectralGlobe technologies (SpectralGlobe.com), a company which specializes in using remote sensing technologies to provide innovative landscape solutions.

Her work has been featured on the BBC, Discovery Channel and PBS Nova and she's advised NASA, The U.S. State Dept. and multiple governments around the globe. Her first book on the field of satellite archaeology was published in 2014. Her second book, on how our past informs our future, will be published next year.

Chase Childs

Executive Director & Archaeology Tech Lead

Chase studied Philosophy and Egyptology at the University of Cambridge before embarking on his career as a project director for at-risk archaeological sites in Egypt and Sudan. He's since become one of the world's leading satellite archaeologists and experts in satellite remote sensing techniques for crowd exploration. Accomplishments aside, Chase first and foremost considers himself an explorer, driven to find and protect humanity's vulnerable past for the good of our collective future. His most important professional mission? To help build platforms and tools that ensure future generations can be explorers, too.

Anica Mann-Kapur

GX° India Country Lead, Heritage Advisor

Anica studied at SOAS London and Kyoto University before earning her Masters of Philosophy in Sanskrit and Classical Indian Languages at the University of Oxford. She has been a Research Associate at the Jindal School of Liberal Arts & Humanities, an Art Advisor at the Delhi Art Gallery, and a YES Global Institute Fellow.

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