The Need for a Comprehensive, Coordinated,
Pro-Growth Approach to Developing Blockchain
Technology in the United States



ABOUT THE CHAMBER OF DIGITAL COMMERCE

The Chamber of Digital Commerce is the world's largest blockchain trade association. Our mission is to promote the acceptance and use of digital assets and blockchain-based technologies. We represent over 200 members including global IT consultancies, large financial institutions, accounting firms, multinational technology companies, elite law firms, insurance corporations, investment firms, and leading edge startups in the blockchain space. Through education and advocacy, the Chamber and its members are encouraging the development of responsible legislation to support blockchain technologies that results in an environment that fosters innovation, jobs, and investment.

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I. THE IMPORTANCE OF BLOCKCHAIN

Blockchain technology offers immense possibilities for business, government, and consumers. These include the opportunity for extraordinary economic growth and a safer and more secure Internet. Its ability to improve processes, increase cost-efficiency, and promote transparency in numerous industries is reforming the ways in which companies conduct business. For example, it can provide services and access to those that currently do not have them - the unbanked and underbanked - through faster and cheaper remittances and digital identity solutions. Its potential, however, is being felt in many industries beyond financial services, such as healthcare, supply chain management, energy, transportation, insurance, voting, and many others.

Blockchain technology is a distributed ledger or record of transactions that enables the execution of smart contracts. It serves as the foundation upon which many applications can be built, much like how the Internet underpins multiple use-cases such as e-mail, e-commerce, and business processes. Its characteristics enable faster, more efficient transactions, eliminating the need for multiple intermediaries and the possibility for inadvertent or manual errors across numerous locations or geographies. Blockchain is a cryptographically secure platform ideal for storing assets and ownership information and will serve as the foundation or "rails" for other technologies, like the Internet of things ("IoT") and artificial intelligence. It is clear that blockchain is a revolutionary breakthrough technology, allowing us to create infrastructure towards an Internet of value (or "for intelligent value transfer networks.").

While technological progress is clear, it does not automatically follow that America will maintain its preeminence in the blockchain sector. Already, major industrialized nations are making significant advances in promoting and adopting this technology, making a hard run to be the leaders, and obtain the economic value, of this industry. Blockchain technology has enormous potential for innovation and economic growth, but this potential will not be realized in the United States without the widespread support of policymakers.

II. THE IMPORTANCE OF GOVERNMENT SUPPORT

Many businesses and consumers are still wary of conducting business or transactions using blockchain because of the lack of a predictable legal environment governing activities involving the technology. In the current blockchain ecosystem, the development of digital tokens that can represent numerous things, from a currency, to a commodity, a security, title to property, identity, provenance, and many others, has created the need to interpret existing laws that may no longer adequately govern the new features of this technology. As we continue to develop these technologies worldwide, we have seen that government policies have a profound effect on the development of blockchain in that location. Many countries are capitalizing on this opportunity and promoting policies that encourage adoption, while others are not as supportive. It is imperative that governments recognize publicly the benefits of this technology in order to engage businesses (and government) to enable innovation.

This paper serves as a call to action for governments and sets forth our two-part plan to promote the adoption and use of blockchain technology through public statements and support as well as a coordinated agency approach.

Most public statements regarding virtual currencies in particular have been in the form of advisories, warnings, and enforcement actions. While these endeavors are necessary to ensure the orderly functioning of business and markets and must continue, they should not be the only statement from government leadership. We need a clearly articulated statement of support for the private sector and its ability and need to grow blockchain technology for the benefit of government, business, and consumers. This statement and associated action can take the form of an official summit convening both public and private stakeholders to consider the top issues of the day, as well as an Executive Order declaring that government agencies must coordinate on policy and take into consideration the need to develop this technology when developing guidance, regulations, and regulatory actions.

When taking these actions, government stakeholders must take into consideration the following principles to guide efforts to support blockchain technology. We note that while this document is focused on the U.S. government, it can be applied globally given the borderless nature of this technology.

III. GUIDING PRINCIPLES FOR GOVERNMENT

A. ENCOURAGE DEVELOPMENT BY THE PRIVATE SECTOR. The private sector was a leader in developing the Internet in the 1990s and 2000s and should continue to be so today. The United States was built on entrepreneurship and innovation, and we should encourage and support these qualities as we head into the next generation of technological development.

B. ADOPT A LIGHT TOUCH REGULATORY APPROACH WHILE THE INDUSTRY ESTABLISHES KEY INNOVATIONS, BRINGING ENFORCEMENT ACTIONS AGAINST CLEAR VIOLATIONS OF LAW.

Regulation that is too restrictive or does not take into account the potential for future innovations will stymie the growth of this industry and scuttle government efforts to remain a leader in, and keep pace with, technological development.

C. POLICY AND REGULATION SHOULD BE CLEAR AND ESTABLISHED PRIOR TO ENFORCEMENT. Industry must have clearly articulated and binding statements from regulators regarding the application of law to blockchain-based applications and tokens before bringing enforcement actions. Public statements, whether through the press or formal speeches, are helpful but are not official statements of application by the agency. If an agency intends to enforce its laws in new and innovative ways, it must first notify industry stakeholders of its intent to do so and the way in which existing law applies.

D. ANY REGULATION SHOULD BE BASED ON THE FUNCTION PERFORMED, NOT THE TECHNOLOGY.

Virtual currency and digital asset-related statutes and regulations should emphasize function. New rules and statutes should not be based on the type of technology itself but, rather, the use or activity involving the technology.

E. PREVENT REGULATORY PATCHWORK. State and federal government entities should cooperate in their policymaking efforts to prevent a patchwork of regulations and statutes related to similar functions. The most

enduring example of a 50 state (and territories) patchwork of regulations occurs with state money transmitter laws. Companies involved in virtual currency activities are multi-jurisdictional by virtue of the fact that they operate on the Internet. The costs associated with an inconsistent and varied multi-state licensure system - both in application process and in ongoing maintenance and examinations - substantially undermines the efficiencies blockchain technology provides.

F. ANY NECESSARY REGULATION OR LAW SHOULD BE CLEAR, PREDICTABLE, AND DEVELOPED WITH FUTURE INNOVATIONS IN MIND. Technology changes rapidly. As such, laws and regulations should be drafted with the intent to endure future iterations and not focus solely on one technology or application. For example, the Electronic Signatures in Global and National Commerce Act (ESIGN Act) and state Uniform Electronic Transactions Acts (UETA) were written to validate electronic signatures and records and to be agnostic to the technology used. The same principles should be considered when developing future rules.

G. STUDY AND UNDERSTAND THE UNIQUE ATTRIBUTES OF BLOCKCHAIN TECHNOLOGY AND DIGITAL TOKENS. Blockchain platforms can be complex. Government stakeholders must take the time to learn how it works, its strengths and weaknesses, and how those attributes can create new mechanisms for enabling the provision of products and services by governments and businesses, as well as enabling better access to consumers.

H. ESTABLISH AN OFFICE THAT COORDINATES U.S. BLOCKCHAIN STRATEGY GOING FORWARD. Given the multi-tiered and multi-stakeholder structure of U.S. financial services regulation, a coordinated approach across agencies is necessary to ensure streamlined regulation and growth of the industry. Not only would this office work to determine applications of blockchain that could cut costs for taxpayers, it could also provide a gateway for entrepreneurs to best understand the laws surrounding blockchain and virtual currencies. Such an office can better develop blockchain-based economic development and activity and coordinate the U.S. government's policies going forward.

IV. BLOCKCHAIN APPLICATIONS IN GOVERNMENT AND INDUSTRY

The following are key areas in which blockchain technology can impact the activities of government, industry, and consumers.

CYBER SECURITY, CYBER RESILIENCE, AND CRITICAL INFRASTRUCTURE

Blockchain technology can serve a foundational role in protecting the nation's critical infrastructure, and it can dramatically enhance cyber resilience. Unlike the Internet, which was created without fundamental security mechanisms, blockchain is secure by design with cryptographic public key infrastructure at its core. In a blockchain system, simple passwords - which are the biggest weaknesses in current systems - are eliminated. This is just one of many benefits of blockchain where there are no single points of failure or central systems to attack.

FINANCIAL SERVICES

Blockchain technology can create new efficiencies and cost savings in cross border payments, thereby increasing access to financial services for the unbanked and underbanked. In trade finance, it can increase speed and reduce costs in the issuance of letters of credit, processing of trade payments, and transferring of assets. Blockchain technology, smart contracts, and virtual currencies can establish new levels of control, and substantial benefits, for the owners of securities through enhanced issuing, tracking, trading, and settlement capabilities.

DIGITAL IDENTITY AND PRIVACY

Blockchain technology can provide new methods of securing identity information, thereby increasing participation in the digital economy by all citizens. One of the principal roles of government is the establishment of identity through driver's licenses, birth certificates, social security numbers, etc. One of blockchain's most innovative, and potentially impactful, use cases is directly tied to the establishment of identity. Lawmakers should begin exploring, and potentially implementing, blockchain-based identification systems. These systems can streamline government services and reduce the costs to taxpayers. Additionally, lawmakers should reach out and cooperate with entrepreneurs that are already making progress in this area.

HEALTHCARE

Many of the problems surrounding the transfer, storage, and access of healthcare information can be solved using blockchain technology. There are a variety of regulatory and legal requirements on entities within the healthcare system. For an early stage business, or businesses exploring innovative technologies and their potential benefits in healthcare, these laws can be burdensome and prevent further development in the healthcare field. Policymakers should set up agency portals that provide companies with the necessary resources to establish businesses or new use-cases, such as information on their regulatory obligations. This form of cooperation may benefit the healthcare system, reducing inefficiencies and cost.

INSURANCE

A blockchain can streamline overall functions, recordkeeping, and the claims process through a combination of smart contracts and Internet-of-things enabled devices. First, blockchains enable efficient and effective recordkeeping and information sharing among stakeholders within an insurance model. Moreover, smart contracts can streamline the claims process and user experience. Using automotive insurance as an example, a smart contract can be executed to record the policy, driving record, and report of all drivers that have purchased the policy. Using IoT enabled devices, establishing vehicle self-awareness, the vehicle can assess its own damage using sensors and can execute initial insurance claims and police reports. This removes the duplicative work that is required by various agents within the insurance entity itself, saving money and time.

SMART CONTRACTS

Smart contracts have enormous economic potential due to their frictionless nature. Smart contracts can increase the speed of transactions, executing them almost instantaneously. A seemingly limitless number of miniature transactions can take place, on a rapid basis, through smart contracts. For example, a standardized swap transaction documentation may be represented by a smart contract that, among other things, automates the exchange of margin payments among counterparties and reports transaction data to regulators. This utility can be used to create disintermediated business processes: where payments across entire supply chains are streamlined, and equity holders or employees are compensated automatically upon the occurrence of certain events. The potential economic gain can be furthered with the addition of other types of new technologies, such as IoT-enabled devices. For example, an IoT device, such as a smart-meter on a home, could record and log the usage of electricity. If the home is generating excess energy from a solar panel, the IoT device can automatically execute smart contracts to sell the unused energy to the grid.

SUPPLY CHAIN

In the context of global supply chains, blockchain technology could provide businesses and individuals with an increased ability to track a product's entire path from manufacturer to consumer. The opportunities that blockchain can provide for the supply chain are not limited to one entity or activity. Business processes can achieve cost-reduction and higher levels of efficiency through a streamlined supply chain. Consumers will be able to better determine the quality, safety, and legality of their purchases. Lawmakers can harness this information to more effectively enforce and prevent child labor, forced labor, counterfeit goods, poor working conditions, or other criminal activities. Of particular note is the impact on food safety tracking. Less of the food supply would have to be destroyed if the source of food contamination can be more accurately pinpointed as the first signs of contamination arise. A blockchain-based supply chain would allow for this level of accurate tracking.

MEDIA

Combating waste, fraud, and abuse is a challenge for many industries, including the advertising industry. In 2019 alone, advertising fraud is estimated to cost the advertising industry more than \$18 billion. By 2022, it will hit a staggering \$44 billion. Fraud has become the single biggest cost to many advertisers. Blockchain technology can alleviate advertising fraud by providing advertisers with reporting and verification tools to streamline operations. This technology is already in operation, reducing fraud and cutting intermediary costs from high double-digit percentages of every ad dollar, and delivering more value for the publisher and advertiser.

INTELLECTUAL PROPERTY

While the blockchain industry has a very strong open source community, there are those companies that have chosen to protect their intellectual property. Blockchain can help secure intellectual property, track supply chain and provenance (thus identifying counterfeit goods), and maintain trade secrets. It can also create value in companies that choose to employ IP protection strategies. The issue has taken on global significance - for example, data from WIPO shows that 843 blockchain-related patents were filed between 2013 and 2017.



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