

Digital Governance

For the next generation of Real Estate

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Solutions for Digital Governance

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The Internet has entered it's next act, the secure exchange of sensitive information and digital content between trading partners.

Market forces and regulations are causing enterprises and industries to design, develop and deploy new business rules and capabilities to ensure more effective governance of digital content.

Secure Content serves associations, government, financial services, real estate and pharmaceuticals.

Changes in digital governance are occurring everywhere, but especially in the real estate industry.

The value of rich, underutilized and unsecured content is at the heart of conflicts occurring between real estate practitioners, and with third parties that want the content that real estate brokers are struggling to control.

Our Perspective:

Market power flows from the capability to control information through business architectures, or “info-structures” that control the exchange of digital information between trading partners.

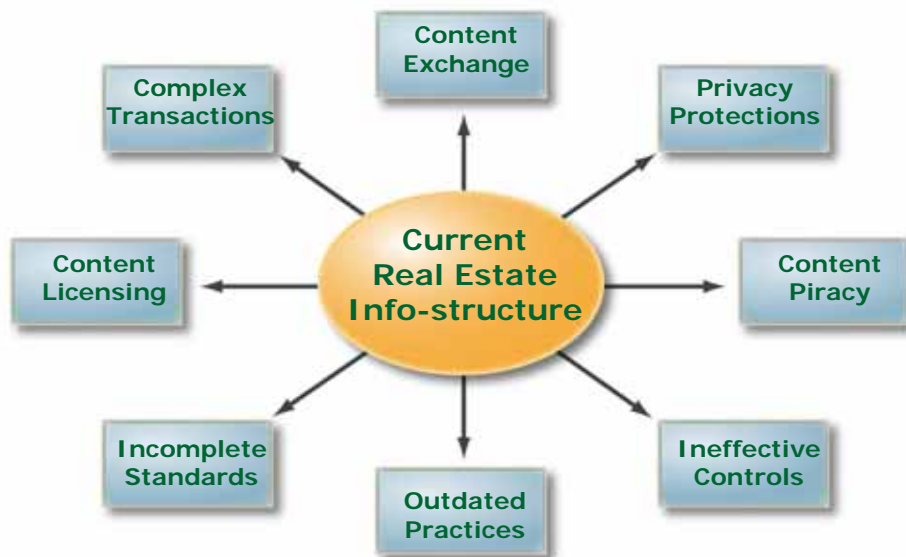
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Entertainment, publishing, financial services and healthcare have already come to grips with the strategic importance of controlling their digital content. Integrating value chains, streamlining channels of distribution and monetizing the value of intellectual property is increasingly dependent on designing and implementing new structures for governing the exchange of digital content and sensitive information between trading partners.

The business architectures that control and secure content and provide the connective tissue to manage transactions and other forms of content exchange are called info-structures.

Info-structures provide the business, management, operation and technology capabilities for effective digital governance. They are industry assets that enable new business models and create new sources of market power for the organizations that set the rules and promote adoption.

Realtor Digital Governance Issues:



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The real estate industry's existing info-structure was established in the 1970's when the local Multiple Listings Service (MLS) was the only point of digital aggregation. The data never moved and books were the consumer presentation medium. The practices and policies established at that time no longer reflect the realities of real estate in the 21st century.

Today the MLS may be the 3rd point of aggregation, the data is mobile, there are thousands of points of presentation, and content is made available for commercial purposes beyond advertising. Information obtained from consumers is being commercialized after the sale with little regard for disclosure or privacy considerations. Brokers incur cost and legal liabilities to create the information, but their rights are not always protected, and they receive little consideration from third parties who obtain their data. Listings have been commoditized and ad-hoc distribution is further eroding their value. Third parties are charging referral fees, in essence an import/export tax on individual Realtors® resulting from the inability of the industry to regulate and protect its information.

The stress in the system has reached a breaking point and a new system is rapidly emerging from an adjacent industry...financial and mortgage services.

The Strategic Trends:

- The future profits of real estate brokers are being “hollowed out” as third parties gain control of real estate listing content
- Family feuds have exposed digital fault lines in content exchange and other practices
- Federal regulation of digital governance and probably real estate is likely
- Banks are systematically taking control of the real estate value chain through an emerging info-structure

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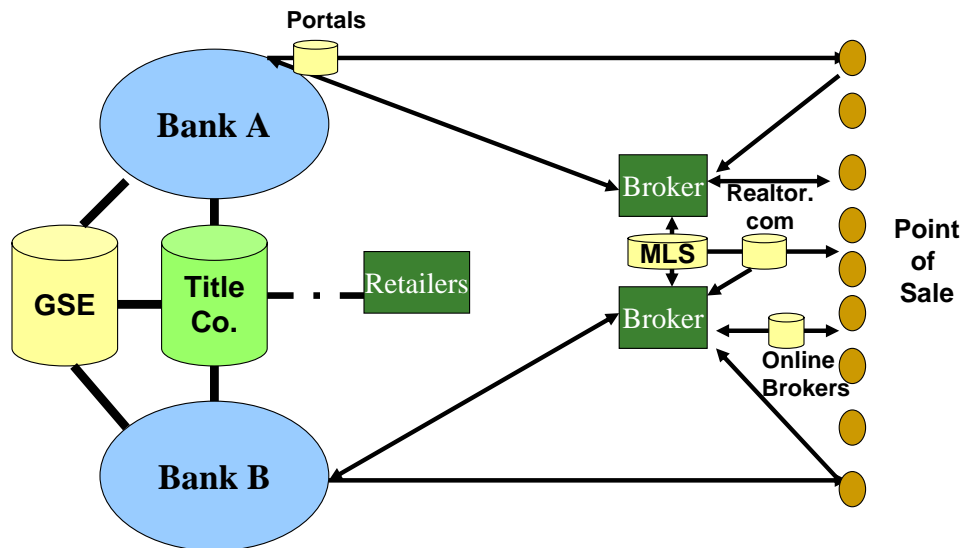
The strategic trends in real estate point toward disruptive changes ahead.

Brokers have lost control of the information component of their business, opening the industry to internal conflicts and competition from third parties. The issues are systemic, well understood by content predators, and not easily resolved from within.

The costs are already being reflected in higher operational costs, eroding margins and depressed valuations. Brokers understand that like most enterprises the digital component of their business may be worth 3-4X the value of the mature business.

This value and perhaps more will be realized by the partners of the brokers, the banks, who will incorporate broker operations into a new info-structure that has been developed and will emerge in 2005.

The Emerging Real Estate Info-structure:



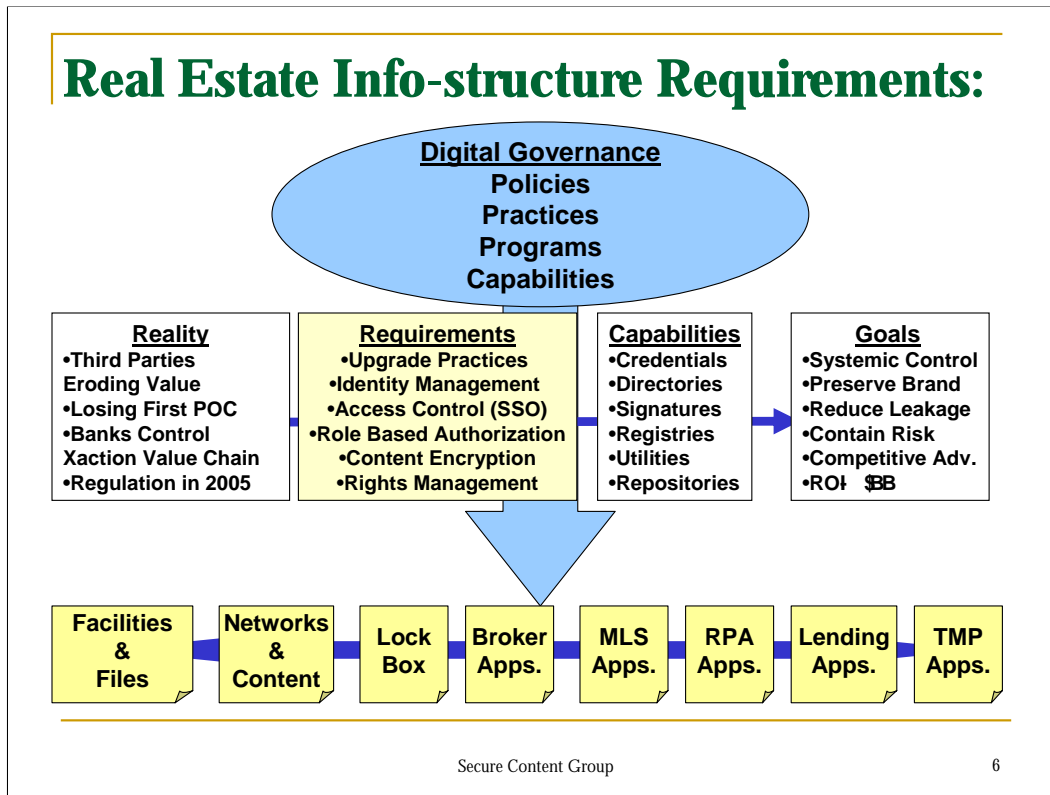
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Similar to the info-structure that has created a revolution in consumer credit; the real estate info-structure will control the packaging and flows of real estate content along a chain of custody from the real estate brokerage to lenders and government entities. It includes:

- Government Sponsored Enterprises (GSE'S) who dominate the secondary mortgage market and have developed the technical standards and supporting services for a secure, paperless mortgage transaction.
- Banks and other lenders who have developed the management practices and controls to maintain the security of consumer and trading partner content, and comply with a rapidly growing set of regulations. Lenders recognize the value of the rich information real estate brokers collect and covet their position at the point of sale.
- Title companies that are positioned to integrate, aggregate, package and resell highly valuable transaction content, becoming the equivalents of credit bureaus for real estate.
- Portals that are packaging several types of financial, credit and real estate content to capture consumer attention at the point of sale, refer consumers to affiliates and extract bounties and other fees from the transaction and the information it generates.
- Real estate brokers that are being enlisted by lenders and title companies into joint ventures and other partnerships, permitting these entities to take control of the broker content that flows through the entire value chain and beyond.
- Online brokers that are inserting themselves between consumers and other brokers who have made substantial investments to capture, package and publish inventory listings and other forms of real estate content.
- Realtor.com, a national aggregation of listings content used for advertising purposes sourced from brokers through 900 local multiple listing services (MLSs).
- MLSs, that publish local real estate inventory and trading information to brokers and other members, and provide other value added services and controls for local markets.

Real Estate Info-structure Requirements:



New market realities have forced a re-examination of the policies, practices, risk mitigation programs and capabilities to deliver effective digital governance across facilities, networks, content and applications of organized real estate.

Several requirements have emerged starting with upgraded practices that incorporate identity management, access controls, role based authorization and rights management. Each of these needs must be addressed for practitioners to develop or participate in the next generation of paperless transactions and other digital real estate capabilities.

The goal is systemic control of the digital content of brokers. Broker brands will be enhanced, the internal leakage of listing information will be reduced, liability and public relations risks will be contained and practitioners will have a sustainable competitive advantage versus third parties.

The return on investment will be measured in \$B in operating profits and improved broker valuations.

A Pre-Regulation Environment?

Realtors have operated in an environment of self-regulation with respect to information security, privacy protection, data rights and electronic transactions.

Realtors are facing increased complexity and cost if they are to pre-empt or deflect the next wave of digital governance legislation.

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Market forces in real estate are building in parallel with a growing trend toward federal and state digital governance legislation.

Financial services and healthcare have already faced industry specific information standards and security legislation. Many states have passed privacy legislation that expose real estate brokers and MLSs to penalties.

Home ownership's role as an engine of economic growth, the importance of the transaction to consumers and the public policy need to improve digital governance across key sectors make digital regulation of real estate more and more likely.

Real estate is clearly operating in a pre-regulation environment.

Principles for Digital Governance: **Created by the National Association of Realtors®**

- Customer trust is critical to REALTOR® success. REALTORS® must inform customers how the information they provide will be used and protected.
- The business and personal information of customers and trading partners must be protected.
- REALTORS® must take active measures to preserve the confidentiality and integrity of valuable information.
- Brokers own the information created within their business. REALTORS® must protect and enforce their rights to intellectual property and ensure authorized access and use.
- The broad adoption of information and transaction standards will improve the service, quality and efficiency for our customers.
- Creating an industry infrastructure to protect information will enable a more efficient market and better protect the privacy of consumers and the rights of REALTORS®.

Everything in the real estate industry is in motion around information, and entrenched systems and orthodoxies are threatening to impose limits on the growth of brokers.

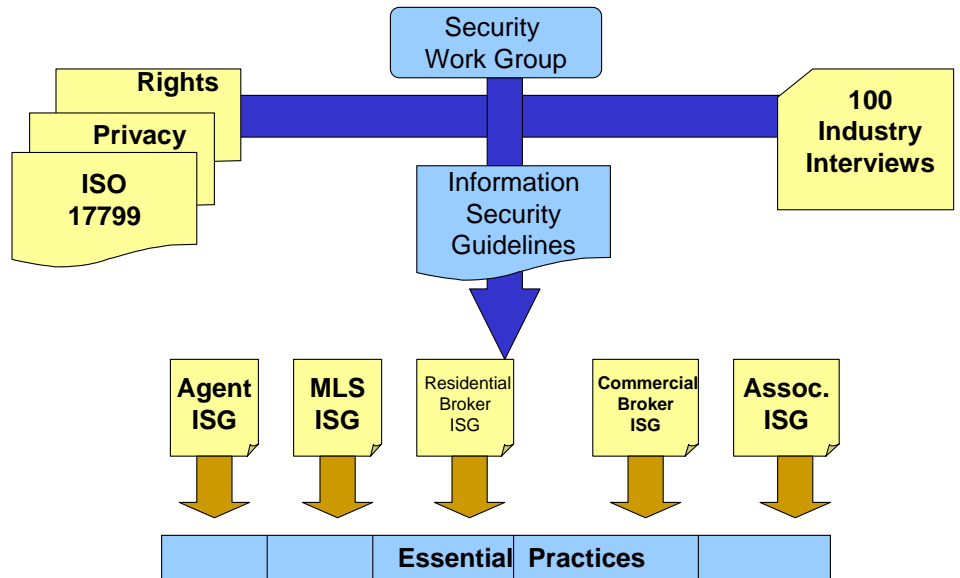
The Leadership Team of the National Association of Realtors® took a critical first step toward digital self-regulation by creating Information Protection Principles to guide the activities of their 1M members.

These address a broad range of management actions that brokers and agents should undertake to protect their interests and the collective interests of the profession.

Clearly these describe the new ideal for the next generation of information management that must deal with issues of security, privacy and rights.

These Principles were then followed with specific operational guidance.

Practices for Digital Governance:



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The Information Security Guidelines were created by a Security Work Group commissioned by the association to define information security, privacy and rights best practices for real estate.

The ISG was then packaged into five separate abstracts according to the specific needs of five key member constituencies.

These abstracted guidelines were further summarized into a set of 10 essential practices. Once adopted, Web Services technologies can then be applied to cement existing electronic relationship, change competitive dynamics and exert control of real estate information.

Residential Broker Essential Practices:

- Enter into **confidentiality and intellectual property agreements** that specify broker ownership, rights and consideration for all information, pictures and other intellectual property of the brokerage.
- Apply **copyright protections** for all information created, integrated, compiled and published by the brokerage.
- Categorize and **label all company sensitive information** as either confidential or secret.
- Develop and publish **Acceptable Use Guidelines** to establish the approved practices for using information, accessing information systems, and ensuring compliance with applicable laws and regulations.
- Define the **process for establishing the identity** of an individual based on the sensitivity of the information that they will have access to, or potential risk to employees and contractors.
- Establish the company's "**Standard of Care**" that will be applied to all consumer personal information and trading partner business information.
- Specify **company procedures**, like encryption, to protect company and consumer information from unauthorized access, alteration, destruction, modification or disclosure of data.
- Develop and implement **Business Continuity Plans**.
- Establish a **training and education program** for staff and third parties that use, administer and maintain sensitive information and systems.
- Conduct an **independent review of information controls** periodically to determine compliance with the organization's security policies and practices. This review should be performed by an external organization not responsible for implementing and maintaining information security controls.

The Essential Practices for residential brokers illustrate the focus and the scope of the guidelines.

Rather than being technical in nature, they primarily address management considerations, especially agreements, standards, labeling and education.

Brokers, as the basic business unit of the industry, are where the fixes have to begin. These improvements will flow upstream to the MLSs and other aggregators, and downstream to agents, eventually enabling paperless real estate transactions and other systemic benefits.

Programs for Digital Governance:

- Standards of Care
- External Audit
- Remediation
- Certification
- Underwriting



Adoption requires credible programs to help brokers, MLSs and associations develop implementation models and community standards of care.

External assessments of broker and MLS operations will set a baseline for measuring continuous improvement and remediation efforts.

Certification tied to discrete insurance benefits will bound liability and reduce costs.

The Realtor Secure Program is the first such program that when adopted begin to build a new framework for digital self regulation and capabilities.

Credentials are an example of a capability that brokers, MLSs and associations will eventually embrace to open the door to a new set of capabilities that will transform the practice of real estate.

Capabilities for Digital Governance:

Facilities & Files	Access to Facilities Access to Secure Areas	Assoc. Apps.	Open Sensitive Content Transmit Sensitive Content
Networks & Content	Access to Networks Encrypt Sensitive Content	Lock Box	Access to Properties Audit and Reporting
Broker Apps.	Capture Sensitive Content Access to CRM-Reporting Open Sensitive Content	Smart Credential Agent Name (Picture ?) Professional Certifications Brokerage Affiliation State License Digital Certificate? PIN/PW Activated Distribution Options (MLS, Assoc, Broker Bank)	
MLS Apps.	Access to MLS Open Sensitive Content Authorize RPA Distribution		
TMP Apps.	Open Sensitive Content Digitally Sign Transaction Transmit Sensitive Content		

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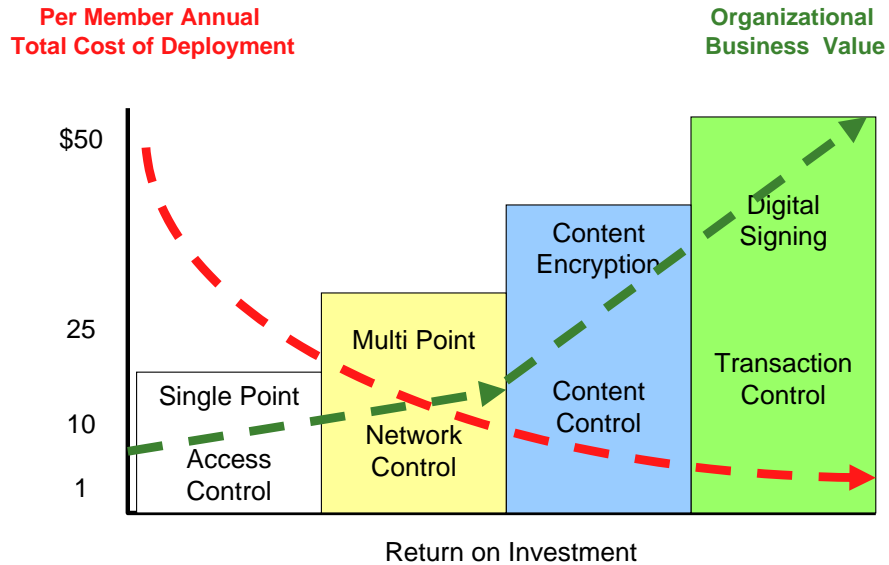
The foundation of effective digital governance is the assurance of the identity of trading partners and customers. The issuance of credentials that provides access and authorization to facilities, information and applications is a vital capability that can enhance the current info-structure and enable real estate practitioners to engage the emerging info-structure.

The technology of smart credentials offers brokers and MLSs a wide range of options depending on the reach and range of the credential.

The distribution of credentials is a critical consideration. Effective vetting, issuance, management and revocation processes are required to bound risk of the credential being used in a fraudulent manner.

It should be noted that banks have established these procedures and are widely distributing credentials in other industries.

Evaluating Credential Options:



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Credentials can serve many purposes from opening a door to signing a transaction document.

The return on an investment in credentials varies depending on the technology selected and the reach and range of applications that recognize the credential.

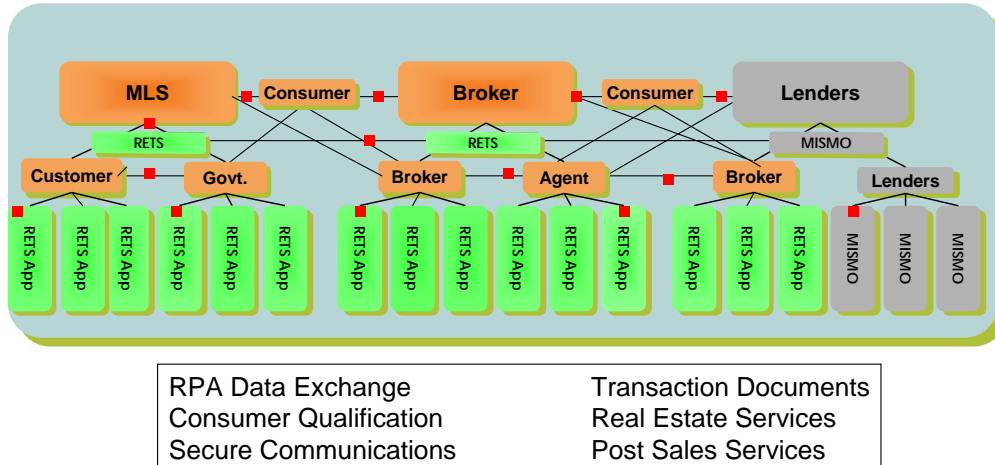
Single Sign On applications utilize common access controls across multiple points. Authorization within the application is tied to specific permissions assigned to the credential.

A major requirement for real estate is the encryption of sensitive content. Credentials could include a digital certificate that permits the user to unlock and view this content. That same certificate (or credential) could be used to sign or approve transactions or other forms of agreements.

Naturally the broader the utility of the credential, the lower the per member cost of deployment and the higher the organizational value of the credential.

The Goal is Integrated Operations:

■ Credentials



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The Real estate industry is highly dependent on the exchange of property advertising, transaction documents and files. Increasingly rights to this content needs to be recognized and sensitive content transmitted and handled in a secure manner.

The protocols to ensure that this can be accomplished are being developed by the Real Estate Transaction Standards (RETS) and the Mortgage Industry Standards Maintenance Organization (MISMO). The MISMO standards organization is developing a comprehensive set of specifications for the lending process based on Web Services and WS-Security. The RETS standards organization is moving to Web Services as it defines the next version of RETS and is beginning to confront the security standards issue.

The next generation of real estate services will be based on these standards and will require a significant investment from real estate brokers and MLSs who hope to participate in paperless real estate transactions.

The credentials and information flows that define these interactions are the strategic battleground for control of the real estate value chain.

Solutions for Digital Governance:

- **Strategy Evaluation:**
Threats and Opportunities
- **Requirements Definition:**
Management and Technology
- **Policy Development:**
Principles and Rules
- **Practices Development:**
Security, Privacy and Rights
- **Capabilities Design:**
Identity and Transactions
- **Mitigation Services:**
Risk and Liability
- **Integration Services:**
Standards and Deployment



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Until real estate brokers begin to create new info-structures, the Internet will remain a frontier town, and market power will continue to migrate to lenders, portals and other entities where content is protected and rules of content exchange are enforced.

The Secure Content Group assists industries and enterprises with projects along the Digital Governance continuum that extends from Strategy Evaluation through Integration Services.

In concert with our delivery partners we provide our clients with solutions for the secure and trusted exchange of all forms of digital content.