Transactions in the twenty-first century are no longer restricted to just transactions of goods. The digital age has brought with it a boom in transactions in information, and licensing of information assets is often seen as the best way to permit and control the use of the information in question by mutual agreement. However, given the rapidity of technological advances and the corresponding changes in the nature of licensing transactions, an economy is not best served by a static legal system that continues to treat information licensing in the same manner as a hire, rent or lease of goods. This article therefore examines the nature of licences as well as the market and legal rationales behind licensing in an effort to depict the impact of these transactions and the importance of having dynamic legal systems enforcing and protecting them.

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I. INTRODUCTION

Modern information processing and communications systems have fundamentally changed the ways in which we interact and do business, and even the subject matter of substantial parts of modern commerce. With these changes have come corresponding changes and diversification in the transactional frameworks in which commerce occurs, both in mass-market environments and in environments involving more tailored transactions between two or more businesses. Commercial practice is a fluid and evolving phenomenon, and both commercial practice and the law related to it have adapted to the new technologies and new opportunities grounded in them.

This paper focuses on one form of that adaptation: licensing transactions. Licensing of information assets has been a commercial practice for generations. Modern information industries and their related technology, however, have vastly expanded the use of licensing, brought licensing transactions into the mass-market environment, and expanded the types of assets to which licensing concepts are applied. Throughout the world, licence agreements have become an important aspect of modern practice and reality. The reason is simple: the structure of a licence and its focus allows commercial practice to tailor assets to markets and the interests of the parties therein in ways that suit both sides of a deal, which could not as readily be attained under other forms of traditional commerce. In both law and practice, it is important to accommodate and provide support for this type of commercial relationship. The law and policy issues associated with licensing in the international environment, even as between developed and developing countries, are not issues of taking advantage or withholding assets, but of enabling and supporting transactions in which assets and rights are made available in ways tailored to both current and future needs.

I will not survey in detail the broad area of the law associated with licensing here – that is a task for a different venue.¹ My focus here is primarily on the digital or computer information industries (including the software and online information industries) and on licensing as an aspect of broad marketplaces that often include consumer licensees, since digital industries initiated the

modern explosion of licensing practice in broad or mass-market practice. The value of this transactional framework can now be seen in how it has spread throughout the economy, even in industries that seemingly focus on transactions in ordinary goods, but are actually grounded in more sophisticated matrices of intellectual property rights.2

Licensing is, and has always been, an important means of allocating rights or their use in respect to intellectual property and ownership of other sources of control over informational assets and intellectual property rights. This type of transaction has been an integral part of the information industry almost since the origins of information as a form of commercial value and a focus of commerce. The expansion of this format into broader mass markets corresponded with the explosion of growth in software and other digital industries, creating the most vibrant, competitive and rapidly growing sector of commerce in the global economy.

Although some academics argue that licensing contracts, along with strong intellectual property rights, create risks of suppressing innovation and the availability of information,3 the digital information industries and their licensing practices have had a startling positive impact on consumer services, opportunities and products. Consumer choices have expanded, along with the richness of the consumer marketplace. There has been an explosion in the availability of information, in the options by which consumers obtain information, and in the types of information or functionality they acquire. In short, this is not an era in which the use and availability of information has been restricted or constrained, but an era in which the opposite has occurred.


Stagnant markets and economies are characterized by rigidity. Dynamic markets are characterized by vibrant change and fluidity in market and business structure. The digital information economy epitomises a dynamic market, as does the increasing use of licensing arrangements tailored to particular market demand. It is important that this dynamic market not be constrained for policy reasons based on preconceived notions grounded in the economy of the pre-information age.

II. WHAT IS A LICENCE?

There are numerous ways to answer this question. Fundamentally, however, for our purposes, a licence is a contract that sets out a limited or conditional grant or permission to use an informational or other asset. While most licences deal with numerous other issues (as do most sales agreements), the core of a licence delineates limited rights or permissions in the licensee to use information that is otherwise controlled by the licensor.

Licences have long been used in commerce, both with respect to information that is covered by valid intellectual property rights and with respect to information that is not (such as mere data). What is new in modern commerce, however, is that licensing has come to dominate several aspects of commerce and that licence arrangements are used extensively in the mass market, including in transactions involving consumers. This reflects a market-supported decision to use contractual arrangements to apportion, by granting or withholding, rights given to the transferee to use information or related products.

4 Some, especially in the open-source software community, argue that at least some licenses are non-contractual permissions to use an intellectual property asset subject to limits or conditions. See Raymond T. Nimmer, The Law of Computer Technology, ch. 11 (1997, 2006 Supp.). That type of relationship can be created, but in general commercial contexts where a transaction occurs because of an agreement and typically involves an exchange, the mere permissive image is typically submerged in the contractual relationship itself. Indeed, there is both historical and recent authority in the United States to the effect that, if the license is not contractual, its limitations are ineffective, at least in some cases. See, e.g., Jazz Photo Corp. v. U.S., 439 F.3d 1344 (Fed. Cir. 2006).

In intellectual property practice, a licence is often described as being no more than a mere ‘covenant not to sue’ for conduct that would otherwise infringe the intellectual property of the licensor. The connotations of this characterisation are numerous, but the most important is that it suggests that the licensor gives no implicit promise that the licensed subject matter will be effective. For any such obligations or promises to arise for either party in a normal non-exclusive licence, there must be an affirmative undertaking to that effect. Indeed, from this perspective, even seemingly express terms may not be enough to eliminate aspects of the covenant-not-to-sue characterisation.

While this concept shapes the law and practice in the United States, many licence agreements go beyond that and expressly or implicitly state various commitments made by both the licensor and the licensee. In this more complex commercial context, however, the core focus on limited rights or permissions in the use of information or intellectual property distinguishes a licence from other types of transaction. In the United States, the Uniform Computer Information Transactions Act defines a ‘license’ as:

a contract that authorizes access to, or use, distribution, performance, modification, or reproduction of, information or informational rights, but expressly limits the access or uses authorized or expressly grants fewer than all rights in the information, whether or not the transferee has title to a licensed copy. The term includes an access contract.

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7 For a discussion of the distinction between an exclusive and a non-exclusive license, see Raymond T. Nimmer & Jeff C. Dodd, Modern Licensing Law, ch. 5 (2006).

8 See Spindelfabrik Suessen-Schurr v. Schubert & Salzer, 829 F.2d 1075, 1081 (Fed. Cir. 1987), cert. denied 484 U.S. 1063 (1988) (“[A] patent license agreement is in essence nothing more than a promise by the licensor not to sue the licensee [even] if [the promise is] couched in terms of ‘[L]icensee is given the right to make, use, or sell X.’”).

9 U.C.I.T.A. § 102(a)(1). The reference to an ‘access contract’ picks up the variety of contractual relationships in which the essence of the arrangement is to allow the licensee access to an online or similar asset. See U.C.I.T.A. § 102(a)(1).
If one were forced to draw an analogy to the world of goods, a licence resembles a lease more than a sale.10 The person who acquires the licensed information (or the leased car) does not own that information, but has certain rights to possess and use it. Those rights are defined by the contract. The analogy between a licence and a lease breaks down, not because of the similarity of a licence and a sale, but because the subject matter of a licence is intangible and because a greater array of use-related provisions are common in licensing (either increasing or decreasing the licensee's permission to use the information).

One issue that has arisen as licensing transactions have proliferated in broader markets, including in consumer transactions, concerns the extent to which a limited view of qualitative or other assurances implicitly given to a licensee should continue to prevail in these markets and for new products. One difficulty in answering this question involves the fact, discussed below, that the subject matter of a licence differs fundamentally from the subject matter of other mass-market and similar transactions: licences deal with information, not goods. As a consequence, different expectations are reasonable and different obligations should be invoked in the absence of express language setting out the obligations in a particular transaction.

III. CONTEXT: TRANSACTIONS IN INFORMATION, NOT GOODS

A licence deals with rights or privileges to use information and not with goods. In its simplest form, even in the mass market, the contract does not primarily concern what one can do with the plastic diskette on which information may have been delivered, but with whether the licensee can copy, modify or distribute the copyrighted or other information contained on the diskette. (The distinction between the tangible material and the information and associated rights is specifically recognised in U.S. copyright law.) The software and other information industries do not deal in goods and their focus

10 In U.S. law, the difference between a sale and a lease of goods lies in the fact that a sale conveys title to the goods, while a lease merely conveys a right to possession of the goods for a particular time. See U.C.C. § 2-106 (“A 'sale' consists in the passing of title from the seller to the buyer for a price.”); U.C.C. § 2A-103(1)(p) (“ 'Lease' means a transfer of the right to possession and use of goods for a period in return for consideration.”).
is not on transactions in tangible property. They deal in information and focus on transactions in intangibles. The primary value sought and obtained by the consumer or business licensee lies in the intangibles and in the contractual right that the transferee obtains to use them. The tangible items do not define the product, even when the transaction involves delivery of the information in the form of a copy of it.

In the U.S. and elsewhere, consumer protection laws have generally focused on tangible products and associated services, or on credit and monetary transactions.\(^1\) The focus on goods was not a random decision. In the U.S., Congress did so because the then-proven abuses with which it dealt concerned sales of manufactured consumer goods and the warranties associated with them. The legal policies and social balance associated with consumer protection change when one moves to information and services contracts. We traditionally treat providers of information differently from the way in which we treat sellers of goods: the information providers are less subject to liability for defects (i.e. errors in the information) unless provable fault is involved.\(^12\) This distinction is not made because of arbitrary tradition, but rather because what the information and services industries provide is different from goods, and retaining it as a central feature of commerce and culture requires a more protective approach.

The fundamentals of an economy do not often change, but when change occurs there is a predictable response from some brought up in the former economy that the new economy should be viewed solely in terms of the past and that change should be reversed or restrained by law in order to retain the formerly comfortable patterns of economic exchange. Such a response is both wrong and impractical. In fact, one of the leading documents on contract law in the United States, the Uniform Commercial Code, states as one of its primary purposes that it “must be liberally construed and applied to promote its underlying purposes and policies, which are: [...] to permit the continued expansion of commercial practices through custom, usage, and agreement of the parties”.\(^13\) The contrary view is quite incorrect. It either argues (or assumes) that nothing


\(^{13}\) U.C.C. § 1-103 (a)(2) [emphasis added].
has changed when, in fact, very much has changed, or it ultimately argues that law should act to preserve old economic patterns, rather than allow the economy to embrace new patterns. Like those who argue for restricting the ability to license in the mass market, it argues from a position of fear even though we are in a world of growth and expansion where the positive benefits of change for everyone, including consumers, are demonstrated on a daily basis.

Over sixty years ago, Karl Llewellyn denounced the lawyers and legislators of that time in the U.S. who thought in terms of the prior economy, rather than focusing rationally on the new economy. He was describing a change in the U.S. from an agrarian economy to a manufactured, mass-produced goods economy. Over several decades, his arguments eventually resulted in adoption of U.C.C. Article 2 on the sale of goods, a creature of the goods economy and a statute consciously tailored to deal with transactions involving the sale of manufactured goods. Were he alive today, Llewellyn would argue just as strongly against any belief that the digital information commerce of today should be treated under rules developed decades ago for sales of goods.

The change experienced in the modern economy is even more profound than the shift from an agrarian to a manufactured goods economy. Much of our current global economy is dominated by transactions in intangibles, services, information, knowledge and digital systems. Viewing word-processing software as equivalent to a toaster, a transaction for a multimedia product as equivalent to the purchase of a refrigerator, or an online access contract for research information as equivalent to buying a book – in fact, equating most other digital information or services contracts to purchasing manufactured hard goods – is a fundamental mistake. The transactions differ in many fundamental ways and call into play entirely different social values, marketplace dynamics and opportunities for a vibrant, diversified and responsive consumer marketplace that enhances opportunities and benefits for everyone.

In the U.S., except for some software licences, most licences are routinely dealt with under laws separate and apart from the law of goods for the purposes of general contract law. While some U.S. courts have held that software licences should be handled under contract law relating to the sale of goods, most of

14 See Karl Llewellyn, The First Struggle to Unhorse Sales, 52 HARV. L. REV. 873, 880 (1939).
these decisions involve cases where goods (not software) predominated in the overall transaction. \textsuperscript{15} The courts in those cases used standard rules to hold that the entire transaction (including the software) should be brought into Article 2 because goods dominated that transaction. In contrast, in cases dealing with software alone, the decisions split in terms of what law governs. More importantly, after years of independent debate and discussion involving diverse constituencies and interest groups, three different uniform state law projects have concluded that software and other information are not goods:

- **U.C.C.** Article 9 treats software and intellectual property rights as a general intangible.\textsuperscript{16} Article 9 has been adopted throughout the United States.

- Proposed revisions of **U.C.C.** Article 2 treat information as being different from goods.\textsuperscript{17}

- **U.C.I.T.A.** develops a separate body of contract law applicable to transactions in computer information. **U.C.I.T.A.** has been adopted in two states.

When one considers all three projects and the massive, diverse public involvement and detailed consideration of policy that has gone into them, the judgement of the various committees drafting these statutes establishes an impressive and uniform conclusion: transactions concerning computer information are not transactions in goods. Both a major uniform state law in the United States and significant federal case law and legislation acknowledge that computer software is properly characterised as ‘information’.\textsuperscript{18}

\textsuperscript{15} See, e.g., **BMC Indus., Inc. v. Barth Indus., Inc.**, 160 F.3d 1322 (11th Cir. 1998) (contract to “design, fabricate, debug/test and supervise field installation and start up of equipment to automate [production of eyeglass lenses]” was more a contract for goods than one for services); **Neilson Business Equip. Ctr., Inc. v. Italo V. M onteleone, M.D., P.A.**, 524 A.2d 1172 (Del. 1987) (turnkey hardware and software system was contract for goods); **Advent Sys., Ltd. v. Unisys Corp.**, 925 F.2d 670 (3d Cir. 1991) (article 2 applied to a software distribution contract). C.f. **Architectronics, Inc. v. Control Sys., Inc.**, 935 F. Supp. 425 (S.D.N.Y. 1996) (predominant purpose of software license was the intellectual property rights, not goods); **Fink v. DeClassis**, 745 F. Supp. 509, 515 (N.D. Ill. 1990) (trademarks, tradenames, advertising, artwork, customer lists, sales records, unfulfilled sales orders, goodwill and licenses are not "goods").

\textsuperscript{16} U.C.C. § 9-102(a)(42).

\textsuperscript{17} U.C.C. § 2-103(k).

\textsuperscript{18} See, e.g., **Electronic Signatures in Commerce Act (E-Sign)**, 15 U.S.C.A. § 7006(7); **Uniform Electronic Transactions Act § 2(10)** (1999) (“‘Information’ means data, text, images, sounds, codes, computer
IV. THE RATIONALE FOR LICENSING

The subject-matter focus of a licence is different from that of a sale of goods. The point of this paper, however, is not to continually state the obvious (that information is not goods), but to discuss the question of why licensing exists and what rationales support its explosive growth into a major factor in the global economy.

One might begin by asking: “What is the rationale for characterising a transaction as a licence?” However, while some phrase the issue this way, the word ‘characterising’ connotes an artificiality and lack of substance that is not present in fact. It thus illustrates a substantively important and common mistake. The question implies that licensing (a major type of modern transaction) differs from transactions in the prior economy (e.g. copies sold to customer) merely because of a ‘characterisation’. That is not true. In fact, licences differ from sales in fundamental ways. The choice of a licence rather than a sales model reflects judgments about how best to commercially distribute digital and other information in the current economy in light of market interests, legal risks, and other factors.

There are several ways to understand the rationale for choosing to license rather than sell (or give away) copies. We will discuss two of these.

One concerns an economic or market rationale for licensing. Licensing provides significant diversification in the market that goes well beyond the opportunities involved in mere sales of copies. Some describe this as mass customisation. Others describe the licence as the informational product itself. Under any terminology, this refers to a characteristic of digital and online information systems that helps shape vibrant markets, the achievement of which

programs, software, databases, or the like.


often requires contractual licence provisions. I will discuss this in greater detail below, but one way of seeing the significance is to compare two hypothetical licences: in one, the licensee obtains a copy of the software with a right to make and use copies for its personal use so long as only one copy is in use at any time. In the other, the transferee acquires the same software under a licence that allows it to make copies for all ten thousand of its retail stores and to use the copies in all of the stores. In each case, the software is identical, but the contract terms for and the value of the two transactions are entirely different. The difference resides in the terms of the licence. The licence, in effect, defines the product.

A second way to understand the rationale for choosing to license focuses on the rationale in law for licensing. One part of this lies in simple contract law: the right to agree to terms and to promises that define the scope of conduct expected or permitted with respect to a particular subject matter. In addition, the legal rationale includes the right of an owner of property (including of a patent or a copyright) or other value to shape the terms and the extent to which it makes that value available to others by contract. Unlike in goods, in reference to information, mere possession of a copy, access to a system, or knowledge of a fact does not necessarily give a person full rights to use the copy, exploit the system, or disclose the fact. The information transferor often retains dominant rights to use copyrighted, patented or other value. A licence provides a contractual basis by which the transferor and transferee establish to what extent those rights are granted or withheld.

A. The Market Rationale: Diversity and Tailoring

When we look at modern commerce in information, one clear fact emerges: the information economy entails a burgeoning diversity in what information and services can be obtained by consumers and by businesses, and how they can be obtained. These new services, resources, business models, functionality, and the like reflect vibrant competition and a dynamic open market. There is an expanding and shifting array of options, products and services. Businesses that have a chance of surviving in the modern economy must understand and react to this.21

On what basis are these diverse products and services differentiated? There are numerous answers, but one important part of the overall answer is that the differentiation is often based on contracts and that these contracts often involve a licence.

As a practical matter, of course, the basis for being able to make a differentiation lies in the response of the market. Sustainable distinctions in information products ultimately depend on whether the products attract a positive market response. In the information economy, the fact that the value does not lie in tangible assets amplifies the capability to tailor products by contract because doing so does not necessarily require physical modifications. An automobile, once built, can be significantly modified for distribution only with substantial, costly and skilled effort. A computer database, on the other hand, ordinarily carries within it the ability to be altered with relative ease to react to a different market (or individual) demand either by contract or by technological means.

There are many different ways on which information or information-based services are differentiated in the information economy. Some lie in the nature of the information. However, even for identical information, differentiation occurs through contractual terms, technology controls, and the ability to deliver similar information in different ways that fit different value configurations. The difference between the books I purchase that summarise an area of law and the online services that are updated continually and available under a licence is vast and fundamental. I may still buy books, but the online licence gives an entirely different functionality as an information product. The difference between word-processing software and the typewriter I once used is equally, if

23 Technological controls shape the scope and nature of uses of, or access to copyrighted and other types of information products. This was recognised in the Digital Millennium Copyright Act with the exception of some uses that qualify as fair use under applicable copyright law. See 17 U .S.C. § 1201 (1998). See also Davidson & Assoc. v. Jung, 422 F.3d 630 (8th Cir. 2005) (combination of technology and contract limits use of Internet version of game); Storage Technology Corp. v. Custom Hardware Engineering & Consulting, Inc., 2005 WL 3411773 (Fed. Cir. 2005) (combination of contract and technology limit access to diagnostic software; but no DMCA violation in circumventing the technology).
not more, fundamental. For the same word-processing software, the difference between acquiring a copy for personal use in a single desktop and acquiring a copy for use throughout a seven-hundred-lawyer firm is just as fundamental. That latter difference often rests entirely on the terms of the licence.24

1. The Myth and Limits of the Idea of ‘First Sale’

It would take a stark leap of intentional disregard to ignore the fact that the information economy is different from the goods-based economy. Similarly, the contemporary information market vastly differs from the pre-digital information world. It is much more diverse and much more active. The availability of information and functionality is much more extensive. Consumers and businesses clearly benefit from this. In this new environment, it is clear that any legal response to it cannot simply transport old ideas to new commerce, hoping to force it back into old moulds allegedly dominated by sales of copies of books, records, and the like. Even more importantly, the law should not do so even if it could do so.

Even though it is transformed in character in many respects, the contemporary economy still comprises numerous markets. Thus, publishers often still sell books and magazines today not because the law mandates that they do so, but because of a marketing choice made by owners of copyrighted works in that marketplace. The fact that some mass-market distribution of DVDs involves a sale of a copy similarly results from a marketplace choice and not a legal mandate. No rule in copyright or patent law requires intellectual property owners of works reproduced in books, videocassettes, or diskettes solely to sell copies, rather than distributing them in other ways, including by licence.

Some might argue that distribution methods from the older era were good enough then and they should be kept or mandated for all transactions today. However, this entirely fails to account for the diversity of the modern information market and ignores the huge social and economic benefits that diversity has produced and continues to produce.

24 See, e.g. Wall Data Inc. v. Los Angeles County Sheriff’s Department, 447 F.3d 769 (9th Cir. 2006) (where the licence limits the number of copies or sites, the creation of copies in more sites is infringement).
In any event, any assertion that the sole manner in which information was made available in the mass market to consumers in the 1960s and 1970s was through so-called ‘first sales’ of copies is an over-simplification. Even before the advent of Internet systems, a broad variety of different distribution systems existed. Should we retreat from or stifle expanding diversity? We should not. Even if we assumed that all mass-market information transactions were first sales before the emergence of the digital industries, does that mean that we should mandate that this be the sole model available in the future? A gain, the answer is no.

In many criticisms of mass-market licensing as a commercial model, the critics’ preferred alternative and ideal model involves sales of copies governed by intellectual property ‘first sale’ doctrine. However, this is simply a judicial or a legislative statement of limited protections from claims of infringement that a buyer receives if the rights-owner chooses to authorise unrestricted sales of copies of its work.25 U.S. courts have consistently held that the doctrine does not apply when the rights-owner explicitly restricts the terms under which a transfer of a copy or of a patented machine can occur and does so in a manner inconsistent with the idea that it authorised a simple sale.26 A sale is a relatively sterile transaction of fixed contours that, in the diverse marketplace for digital information, does not accommodate the numerous ways of doing business and the numerous ways in which productive markets are beneficial to consumers and business.

There is an underlying element of confusion associated with the aura that some, for political reasons, construct around the idea of first sale. That aura implies that first sale is grounded in concepts related to First Amendment free

26 See, e.g. DSC Communications Corp. v. Pulse Communications, Inc., 170 F.3d 1354 (Fed. Cir. 1999); Mallinckrodt, Inc. v. Medipart, Inc., 976 F.2d 700 (Fed. Cir. 1992). The latter case dealt with application in patent law of a doctrine similar to the ‘first sale’ doctrine in copyright law. In patent law, the concept refers to ‘exhaustion’ of the patent rights by an authorised first sale. However, the conceptual premise and the court’s approach in each case is consistent. By authorising only a restricted or limited transfer of rights, the copyright or patent owner and the transferee are not governed by first sale concepts as a matter of property rights law. See also LG Electronics, Inc. v. Bizcom Electronics, Inc., 453 F.3d 1364 (Fed. Cir. 2006); Jazz Photo Corp. v. U.S., 439 F.3d 1344 (Fed. Cir. 2006); Monsanto Co. v. McFarling, 363 F.3d 1336 (Fed. Cir. 2004); Arizona Cartridge Remanufacturers Ass’n v. Lexmark Int’l, Inc., 2005 WL 2077641 (9th Cir. 2005).
speech, while licensing is inconsistent with those concepts. In fact, the ‘first sale’ concept only provides that a buyer can distribute a copy (or do other designated acts) without infringing the copyright or an applicable patent. It is quite clear that freedom of speech provides a background in which the information economy functions in the United States. In cases of allegedly abusive governmental regulation, First Amendment concepts provide constitutional restrictions or indirectly define independent public policy restrictions on contract terms. That is not a feature of ‘first sale’ doctrine, but a feature of U.S. law in general. Whether a term in a particular contract is invalid under the First Amendment or fundamental public policy of a state has nothing to do with whether there was a ‘first sale’ or a licence. Indeed, courts that have addressed the issue routinely conclude that contractual terms can waive first sale and associated rights, including the privilege to engage in fair use such as reverse engineering of computer software.

2. Licences Creating Differentiated Markets

Especially when intellectual property rights are involved, virtually all commercial transactions in information entail restrictions on the transferee’s use of the information rather than conveying an unlimited right of use. In fact, a first sale, even when it occurs, does not give the transferee full rights in the information. It does not transfer the copyright to the buyer. The copyright or patent owner still controls the vast majority of all rights to use the intangible work. An unrestricted first sale merely gives the buyer of a book the ability to use the information in ways that do not involve making copies or otherwise infringe the copyright, and the right to resell the book if the buyer chooses. A similar doctrine gives the owner of a copy of a computer program limited rights with respect to that copy and limited copies made from it.

27 For a detailed discussion, see the comments to U.C.I.T.A. § 105(b). U.C.I.T.A. is the first uniform law in the U.S. that expressly recognizes the power of a court to invalidate a contract term if the court finds that the term offends fundamental public policy and that this policy clearly outweighs the policy of enforcing contracts.
28 See, e.g. Davidson & Assocs. v. Jung, 422 F.3d 630 (8th Cir. 2005) (shrink-wrap license waived fair use rights and was not preempted).
In this context, a licence, when compared with a first sale, merely entails a transactional decision to place different restrictions on the transferee than would occur under a first sale. Are there cases in the mass market where it might be desirable and important to alter these rights by contract? Clearly, the answer is yes. Just as clearly, licence agreements are the manner in which a different permitted range of uses can be efficiently established in mass markets and elsewhere. These differences established by contract may increase or decrease what the transferee purchases and receives in contrast to a simple sale.

By way of illustration, consider the following:

Illustration 1: Consumer Product. A publisher creates a digital work that appeals to consumers and to commercial entities. Rather than distributing the work online via an access licence, the publisher distributes it in copies in a retail market. The work contained in each copy is identical. Some, however, are subject to a licence that restricts use to ‘consumer purposes’, while others are subject to a licence that permits commercial use. The consumer licenses are made available for $10, while the commercial licences cost $10,000. As the Seventh Circuit Court of Appeals emphasised in ProCD, Inc. v. Zeidenberg, being able to make this type of price and product differentiation creates huge benefits in the marketplace and directly benefits consumers. Under this arrangement, a consumer can obtain an attractive information product for a fraction of the cost it would otherwise be required to pay. Yet, a mere first sale would not involve contractual differentiation based on the type of use. A single or set price would be charged since all products would have the same use conditions. As a result, consumers would pay a substantially higher price, subsidising commercial users. The licence here efficiently establishes a basis to differentiate prices based on type of intended use, in a manner that clearly benefits consumers.

One might express concern about consumer fraud (paying $10,000 for a work that is subject to a consumer-use-only licence). That risk is like any risk of fraud in the modern marketplace and is met by various statutes, regulations and common law rules giving remedies for fraud. Also, when U.C.I.T.A. is adopted nationally, it provides a direct response to this problem. Under U.C.I.T.A. § 209, the terms of a mass market licence cannot alter the terms expressly agreed to between the parties. An agreement to provide a commercial use licence is not overridden by a consumer use licence. 86 F.3d 1447 (7th Cir. 1996).
Of course, the publisher could offer a different product. It could strip out the 'commercial' features of the product and offer to consumers a minimal version at a low price, with functions limited to those perceived as conducive to typical consumer use, i.e. limited functions that justify the low price. Yet that would create a market differentiated by the actual functionality of the software, bringing into play all of the inefficiencies associated with similar differentiation in sales of goods. It would also yield a result that is exactly what most consumers do not want: for example, a survey reported in the July 2000 issue of PC Magazine revealed that the respondents preferred more advanced tools to simpler and less feature-rich alternatives. The licence allows publishers to offer supply feature-rich products to consumers, differentiating between customers and pricing based on contractual use restrictions.

Consider another illustration that carries a certain fondness for those in legal or other educational fields:

Illustration 2: Database software. The publisher develops database processing software. It distributes the software: (1) by allowing it to be accessed and downloaded from the publisher’s website, or (2) through distributors who distribute the software in copies. In both contexts, some distributions are licensed for ‘educational use only’, while others permit ‘commercial or any other use’. The license fee for educational use is $1000, while the general (commercial) use license fee is $75,000. The software is identical in both cases.

A gain, differentiation based on the terms of the licence enables a price differentiation that permits the publisher to respond separately to two active markets and, in consequence, allows end users to acquire software capability tailored to their needs. In fact, major online databases have made this distinction for years, with huge cost savings to educational users. On the other hand, a simple first sale would not entail restrictions. A change to a first sale would alter both the marketplace and the price of the software. The ability to enforce the use restriction comes from both contract law and intellectual property law. As the court in Adobe Systems Inc. v. One Stop Micro, Inc.33 observed, if a person

33 84 F. Supp. 2d 1086 (ND Cal. 2000) (distribution agreement held to be a licence, rather than a sale conveying ownership).
acquires software under an educational-use restriction, but violates that restriction in making or distributing copies of the software, copyright infringement occurs. In addition, there is a breach of contract if the person breaching the restriction is bound by the contract.

3. Licences that Create Products and Expand Rights

The foregoing illustrations involve licences that restrict the end user's rights to use in a manner that prevents uses permitted in an unconditional sale. In my view, these restrictions do not harm the market for information. In fact, they clearly contribute to establishing a vibrant and diverse market. They take an otherwise monolithic environment and provide a diversity of value and functionality tailored to particular consumer or business markets.

Yet, there is a more important reality: while some mass-market licences give less authority to a transferee to use the information than would a first sale, many mass-market licences give greater rights than would pass to the buyer at a first sale. Unlike what might be the practice with mass-market contracts for the sale of goods which focus on narrowing warranties, a mass-market licence defines the product. Depending on the market being targeted by the publisher, those product definitions may, and often do, exceed the authority given to a buyer at a first sale.

To see this side of licensing, consider the following:

Illustration 3: Word-processing software. The publisher distributes a word-processing program through retail stores. In some cases, the program is subject to a licence that allows the program to be copied into and used only in a single user machine owned by the licensee, and that allows making a back-up copy or selling the licence if the licensee transfers all its copies. In other cases, the program is subject to a licence that permits use of the software in a computer network with copies sufficient for use by persons at the site up to a total of one thousand simultaneous users. The program is identical in all cases, but the site licence costs $2000 and the single-user fee is $200.

The rights under the site licence far exceed the rights that a buyer at a first sale would obtain. The single user licence parallels the terms of a first sale. The
site licence, on the other hand, entails an efficient means of contracting beyond the terms of a first sale and, of course, an efficient response to a commercial market via retail outlets. Under that licence, the licensee obtains rights to make many more copies than would be permitted in a sale.\textsuperscript{34}

There are many instances of licences in the mass market that give greater rights to the licensee. The buyer at a first sale does not have the right to make and distribute copies or to publicly display the work without risk of infringement. Some such uses might be treated as fair uses that, in the event of litigation, would not infringe the copyright, but the licence makes clear the enhanced rights of the licensee. In many cases, however, the product would have no value unless the expanded rights could be granted. In effect, the licence creates a new product and, in practice, creates new fields of commerce.\textsuperscript{35}

4. \textbf{Mass Customisation}

The digital information marketplace enables mass customisation of products through the terms of their licences. Mass customisation means that a product is distributed on a mass basis but is still customised to particular users. In such a scenario, a digital information provider may be able to publish a single work (either online or in copies), but customise it to fit narrow markets or market niches without changing the work itself. As we have seen, that capacity flows from the licence. For example, the difference between a single-user word-processing program and a 100-person product rests in the terms of use in the licence. In both cases, the program itself is identical. What differs is the scope of authorised use.

Consumers benefit from such market differentiation, as do commercial entities. In the world of goods, in contrast, the difference between a commercial-use product and a personal-use product will often lie in the physical character of the product itself. If, for example, I acquire a coffee-maker for my apartment, I am very likely to buy a physically different product than if I were to acquire a coffee-maker for use in my restaurant. The difference in physical character presents a sharp difference in the marketing channel and in the opportunities

\begin{itemize}
\item \textsuperscript{34} See, e.g., \textit{Wall Data Inc. v. Los Angeles County Sheriff’s Department}, 447 F.3d 769 (9th Cir. 2006).
\item \textsuperscript{35} See \textit{Green Book Int’l Corp. v. Inunity Corp.}, 2 F. Supp.2d 112 (D. Mass. 1998).
\end{itemize}
that can be readily provided in the mass-market. That does not mean that commercial coffee-makers are never distributed in the mass market, but it does mean that there are various costs and other consequences of a decision to do so.

The licence, then, often defines the product in the digital information industries. This makes the importance of the mass-market licence much greater for all parties than the far less significant warranties that some manufacturers use in mass-market sales of manufactured goods. In all of the illustrations we discussed above, the licence arises between the publisher (e.g. copyright or patent owner) and the licensee, rather than between the end user and a retailer. In fact, if there is a retailer involved, its rights to distribute the product are often limited. The retailer does not own the informational rights in the work and cannot grant a licence to use it except as permitted by the rights owner.36

In some cases, the mass-market licensee deals directly online with the publisher. In current commerce, however, there are many cases where the end user does not deal directly with the publisher but obtains the software from a computer manufacturer or from a retail store. Here, achieving the market benefits of licensing requires that a means exist by which the licensee and the publisher establish a contractual relationship – which has historically been the function of the so-called ‘shrink wrap’ licence. The terms of the licence run directly from the licensor to the licensee, and that licence implements the various market effects we noted above and establishes the right to use, whether in a broader or a narrower manner than would be allowed under a first sale.

B. The Legal Rationale for Licensing

What legal rationale exists for licensing transactions in the information industries?

Actually, there are many rationales. Most are grounded ultimately in the role of contract in a free-market economy. One party owns or controls something

of value; another party may desire to acquire access to, or use of, that valuable subject matter. The terms of any transaction that ensues are shaped by the market and by the individual choices of the parties; they are implemented by the contract. The rationale for enforcing that contract in law rests simply in the assumption of a market economy supported by numerous individual contracts.

Assuming that a licence contract is formed, is further legal justification required for enforcing the licensing contract? No. Most reported decisions in U.S. case law enforce mass-market and other digital information licences. The few that do not do so typically refuse enforcement because in the particular case, contractual assent was not properly obtained. A the Seventh Circuit C ourt of A ppeals suggested when presented with this question: a contract is a contract, and the U.S. System of law assumes that contracts should be enforced in the absence of fraud, duress, criminality, unconscionability or similar problems. Licences of digital information serve many positive functions and there is no basis in policy to preclude them.

Yet, if one needed a further rationale to support the practice of licensing, in the vast majority of cases that rationale can readily be found in the property rights that law gives to licensors under copyright, patent, other intellectual property law, and other law relating to the control of access to computer and other systems owned by a party. Unlike with goods, when one deals with information and rights in it, the mere fact of possession of a copy does not necessarily give the possessor broad rights in that copy. Rather, the person who owns the intellectual property right or who controls the system to which access...
was conditionally given retains broad rights as a matter of property law to control
the other person’s activities regarding the information. In effect, all mass-market
transactions involving information are conditional or limited in the sense that
the transferee receives less than all rights to use the information. A licence is a
contract that deals directly with that conditional or limited rights aspect of the
deal and, as we have seen before, either expands or contracts the transferee’s
rights when compared to a transaction where the provider merely sells a copy.

In federal copyright law, for example, the owner of the copyright has various
exclusive rights. The basis for a licensing arrangement thus rests in part on the
licensor’s right to transfer, license, or withhold any of these rights, in whole or
in part, as a part of the commercial deal in which it engages. The circumstance
is like that of an owner of a desk who has the right to sell it, lease it, allow use
of it, or simply to not transfer or allow access to it at all.

In online licences, one basis for licensing stems from the online provider’s
right to control access to and use of the computer system that holds the
information, and from a desire to use contractual terms to allocate rights of
access and use associated with building different informational products
associated with that system and the information it contains. This right does not
necessarily depend on intellectual property interests. It comes from control of
the system and the fact that unauthorised use is an illegal act.\textsuperscript{40}

By contractually regulating use, copying, and quality commitments, these
contracts allow providers to make available a resource that had never before
existed in the mass market. The consumer benefits are enormous. Contracting
for access to digital information resources in the mass market accounts for billions
of dollars of commerce annually as well as a massive expansion in information
readily available to consumers. It is a form of mass-market commerce that could
not exist in paper-based media or in sales of goods that cannot be accessed and
used by remote electronics.

Because of its commercial and social significance, it is not surprising that
reported cases in the U.S. uniformly enforce such contracts if assent to the

\textsuperscript{40} Register.com, Inc., v. Verio, Inc., 356 F.3d 393 (2d Cir. 2004).
contract was obtained. The approach in these cases is generally consistent with the standards set out in the U.C.I.T.A. (e.g. there must be a manifestation of assent to the terms with reason to know assent is being inferred and occurring after having had an opportunity to review them). If an opportunity to review and an expression of assent did not occur, the contract may be unenforceable. If the contract is unenforceable, however, that leaves the question of whether the user's access to and use of the information was authorised or constitutes trespass or infringement.

V. CONCLUSION

Licensing computer or digital information and intellectual property rights in the mass-market and elsewhere is not a mere re-characterisation of commercial practice with respect to sales of goods. On the contrary, licensing is the legal structure that supports the unique and diverse range of information products and establishes a functional, efficient distribution channel, allowing wide distribution of computer information to consumers and others. It has thus become a method of doing business used throughout a multi-billion-dollar industry that leads the modern economy. Numerous illustrations from the marketplace show this as a practical matter and also document that the effect of licensing in consumer and other markets is diverse, productive and efficient. The practical and legal roles of a licence go far beyond the issues for goods. In the consumer market and elsewhere, the licence is the product and its description, because the licence defines what uses the licensee may make of the licensed information. Mass-market licensing allows publishers, often by exercise of their property rights, to facilitate and establish a vibrant market for digital information, which benefits


42 See U.CITA §§ 208, 112.

43 Micro Star v. Formgen, Inc., 154 F. 3d 1107 (9th Cir. 1998) (lower court enforced online license; appellate court held that either the licence barred the conduct or there was no license to prevent claim of infringement).
consumers, both as consumers and as members of an economy. This in turn provides a means to efficiently allow mass availability of customised information and services.

The legal justification for licensing is also very clear. The vast majority of all courts that have addressed the question have held that licences of digital information under standard form contracts are enforceable, whether the contracts are made online, in direct contact between the publisher and the end user, or through so-called shrink-wrap licences where the end user and publisher do not directly deal with each other. In many cases, an additional property-rights basis for enforcing these contracts comes from the fact that the provider controls the computer resource from which the information is made available and the contract gives the consumer necessary but conditional authorisation to access that system. In still other cases, an additional property-rights basis comes from intellectual property law under which mere possession of a copy of information does not give the possessor rights to use the information in a manner that violates the retained exclusive rights of the copyright or patent owner, unless the owner grants it permission to do so. Given that this is a complex and important area in commerce, it is vital that any fears of the future and images of the past do not lead us to act in a way that wrongly encumbers and constrains one of the true sources of innovation and economic growth that has been fuelling the modern economy and generating formerly undreamed-of benefits to consumers.