

E-Commerce, Entrepreneurship, and the Law: Reassessing a Relationship

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The commercialization of the Internet in the second half of the 1990s triggered a wave of entrepreneurial activity, as well as a burst of innovation and Schumpeterian "creative destruction".¹ Despite the eventual burst of the dotcom bubble, a number of ecommerce brands have become household names, and the services they offer are used by millions around the world.² Entrepreneurship in the virtual world has frequently been compared with nineteenth century gold rushes and land grabs.³ As in the mountains and prairies of the Wild West, public policy seems to have no place on the virtual frontier, except to stifle, obstruct and slow down the new breed of entrepreneurs and innovators.

In this chapter, I argue that this offhand rejection of public policy is mistaken. To make my case, I consider the relationship between law (which I conceive of as a subset of public policy) and entrepreneurship, using the ecommerce sector as a test case.⁴ In particular, I look in some detail at three functions of the law: leveling the playing field for market competition, protecting innovation, and enforcing transactional obligations. My interest lies in how these functions may serve to support ecommerce entrepreneurship, rather than to stifle it. Much more research into the interaction between law and entrepreneurship is needed to understand law's potential costs and benefits, so I proceed to suggest a

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¹ "Creative destruction" is the process "that revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one", as cited in John Medearis, Joseph Schumpeter's Two Theories of Democracy, Harvard University Press 2001, p. 152.

² For example, by 2000 Amazon.com, only founded in 1994, had become the 48th most valuable brand name in the world, and at the end of Q2 '01 had 21 million regular customers.

³ See Debora L. Spar, Ruling the Waves, Harcourt 2001, pp. 2-4.

⁴ I use the term "law" to refer to formal societal rules, created through an agreed-upon societal process. "Policies" include a broader set of principles determining what and how things are done.

preliminary agenda for further scholarship. Finally, I take the idea of entrepreneurship and apply it to law-making itself. Contrary to conventional wisdom, I propose that entrepreneurs in some sectors may actually benefit from risk-taking rule makers.

1. The antagonistic view

Entrepreneurship and law have long been seen as naturally antagonistic. Law promises certainty. Entrepreneurship thrives on risk. Entrepreneurs expand the scope of possibility, overcome limitations, break rules. Laws restrict.

Entrepreneurs portray the situation this way. They see themselves as trailblazers, the business world's equivalent of Nobel laureates, renowned artists, and path-breaking societal leaders. The law in this view is a hindrance, constraining their innovative activities. Nothing expresses this "sense of self" better than the award winning, emotional 1997 Apple commercial entitled "Think different".⁵ Interspersed between short snippets of Albert Einstein, Pablo Picasso, Mahatma Gandhi and Alfred Hitchcock, we see entrepreneurs Richard Branson and Ted Turner. A somber voice comments:

"Here is to the crazy ones, the misfits, the rebels, the trouble makers, the round pegs in the square holes, the ones, who see things differently. They are not fond of rules and they have no respect for the status quo. They change things, they push the human race forward. And while some may see them as the crazy ones, we see genius."

Seen from this vantage point, entrepreneurs, the ones who break the rules, must necessarily clash with the law, a structure designed to protect the status quo. Entrepreneurs have found two ways to describe this clash. According to the first, the struggle is one of absolutes. Cyberspace is a legal void, a lawless frontier from which government, the law needs to be kept away. "Grateful Dead" lyricist and digerati John Perry Barlow is the most articulate representative of this view. In his much-quoted "Declaration of Independence of

⁵ <http://www.apple.com/thinkdifferent/ad1.html>

Cyberspace"⁶ he declared cyberspace outside the physical world and its rules. For him, extending laws to online activities would be an act of usurpation and the end of creativity, innovation and entrepreneurship.

A more pragmatic understanding of the situation concedes that law cannot be kept out of cyberspace forever. Internet entrepreneurs holding this point of view, like Barlow, see government intervention mainly as a threat. But in contrast to Barlow, they aim only at slowing the pace of law's entrance into cyberspace, while they move on to another yet unregulated niche, where they can continue to innovate.

To be sure, such antagonistic views are not surprising. Over the last decade, legislatures have been busy imposing numerous legal restrictions on ecommerce entrepreneurs. In the United States, a legislative framework dating from the Cold War prohibited the export of software for secure data transfers.⁷ A law tagged onto the much-awaited Telecom Act of 1996⁸ threatened Internet content and access providers with draconian criminal liability should they not police the spread of "indecent" information.⁹ Killing Napster, large recording and publishing companies secured the passage of a new copyright law making illegal the development and use of technology to share information - even if the sharing itself is legal.¹⁰ And in the European Union, a stringent data protection statute has severely curtailed the data mining of personal information, the very lifeblood of many ecommerce entrepreneurs

⁶ John P. Barlow, A Declaration of Independence of Cyberspace, 56 *The Humanist* 18-19 (1996): "Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone." An online version is available at http://www.eff.org/pub/Publications/John_Perry_Barlow/barlow_0296.declaration

⁷ On the debate on restricting cryptography, see Whitfield Diffie and Susan Landau, *Privacy on the Line*, MIT Press 1998, and Steven Levy, *Crypto*, Viking 2001.

⁸ Pub. L. No. 104-104, 110 Stat. 56.

⁹ The Communications Decency Act (CDA), codified as 47 U.S.C. § 609 (1996); held unconstitutional in *ACLU v. Reno*, 521 U.S. 844 (1997); much of the substance of the CDA was enacted again as the Children Online Protection Act (COPA), codified at 47 U.S.C. § 231; held unconstitutional in 2000 by the Federal Court of Appeals for the Third Circuit, *ACLU v. Reno II*, No. 99-1324, U.S. Supreme Court granted certiorari, decision pending; undeterred Congress passed a slightly amended version as the Children's Internet Protection Act (CIPA), codified as 20 U.S.C. § 9134 and 47 U.S.C. § 254(h); a complaint filed in Federal Court against CIPA is pending.

¹⁰ The Digital Millennium Copyright Act, Public L. 105-204 (1998) is not the only recent law strengthening existing right holders of intellectual property; for an eminently readable assessment see Jessica Litman, *Digital Copyright*, Prometheus Books 2001.

banking on mass customization of information and services.¹¹ No wonder entrepreneurs have seen themselves besieged by the law. Intriguingly, much of this legislative activism restricting entrepreneurial activity in cyberspace stems from a sense of loss of control similar to that felt by entrepreneurs in the face of government intervention. Passing laws is policy makers' crude reaction to what they perceive as the infringement of standards of decency, of privacy, and of property brought about by cyberspace entrepreneurs.

From the perspective of both the entrepreneurs and the legislators, this struggle looks momentous, an eternal ebb and flow between risk and security. Given these circumstances it is understandable that entrepreneurs view the law as their enemy, and that a conventional wisdom has formed not just among the digerati, but among the public at large that the legal system is the enemy of entrepreneurship in cyberspace.

There is some truth in this view. Yet, it provides only a limited perspective of a complex relationship, in which the "law" can be as much an enabling as a restrictive force.

Law as Leveler

Law is a potent tool to initiate and sustain competition, and by doing so may transform itself from being an entrepreneur's enemy to becoming her ally. By fostering entrepreneurial niches and enabling new entrants to gain entry to a market space, a new regulatory framework may turn into a powerful enabler for entrepreneurs, overcoming the legacy of the old regulatory regimes, which stifled innovation and entrepreneurship.

Over the last decades, many entrepreneurs have advocated for the "liberalization" of economic sectors from regulatory control. Their quest has been joined by many others,

¹¹ Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, 1995 O.J. (L 281) 31; see also Viktor Mayer-Schönberger, Operator, Please Give me Information: The European Union Directive on Data Protection in Telecommunications, in Sharon Eisner Gillett / Ingo Vogelsang (eds), Competition, Regulation, and Convergence, Lawrence Erlbaum 1999, p 121.

¹² In the following I use the term "law" to refer to formal societal rules, created through an agreed-upon societal process. "Law" then is a subset of what is called "policies", representing a set of general principles determining what and how things are done.

resulting in an impressive stream of economic "liberalization" in the United States as well as many other nations around the world. From the airline industry¹³ to telecommunications¹⁴ to financial services¹⁵ and the provision of energy¹⁶, old-style monopolies highly regulated by arcane administrative rules have been replaced with - mostly¹⁷ - vibrant markets offering better goods and services at a fraction¹⁸ of original prices.

Entrepreneurial companies typically see themselves as potential beneficiaries of such de-regulation. Given the complexity of older regulations, no regulation seems the best of all options. "Before government comes in and regulates", a senior manager from Microsoft remarked, "everything is fine, after that it's chaos."¹⁹ It seems that all government has to do is to eradicate regulations, weed out the stifling law, and let the invisible hand of the market take care of the rest.

Yet successful "liberalization" as Stephen Vogel²⁰ and others²¹ have eloquently shown, requires a skillfully crafted and carefully implemented legal framework to guarantee a

¹³ see generally David Boaz & Edward H. Crane (eds), *Market Liberalism: A Paradigm for the 21st Century*, Cato Institute 1993.

¹⁴ Pablo T. Spiller & Carlo G. Cardilli, *The Frontier of Telecommunications Deregulation*, *Journal of Economic Perspectives* 11, no. 4 (Fall 1997), 127; Tom Bell & Solveig Singleton (eds), *Regulator's Revenge*, Cato Institute 1998; Raymond Duch, *Privatizing the Economy: Telecommunications Policy in Comparative Perspective*, University of Michigan Press 1991;

¹⁵ David Meerschman, *Breaking Financial Boundaries: Global Capital, National Deregulation, and Financial Services Firms*, Harvard Business School Press (1991).

¹⁶ See e.g. Joseph Kalt, *New Horizons in Gas Deregulation*, Praeger 1996, or the works of the Harvard Electricity Policy Group at <http://www.ksg.harvard.edu/%7Ehepg/>

¹⁷ De-regulation is not a magic potion. It needs to be done "right". Not surprisingly, some attempts to introduce markets have failed. The California electricity crisis was one of the more visible. See only William Hogan, *The California Meltdown*, *Harvard Magazine*, September-October 2001.

¹⁸ The European Union, for example, has calculated that due to the de-regulation of telecommunications and electricity markets, real term expenditures for a standard household on electricity and telecommunications had been reduced by up to 25 percent in EU member states. See DG Internal Market, *EU consumers continue to benefit, but reforms must be accelerated*, COM(2000) 881.

¹⁹ Microsoft provides an interesting example, as it still retains a very strong entrepreneurial spirit, despite the fact that it has turned into the world's second biggest multinational corporation; for more on the entrepreneurial culture within Microsoft, see John Heileman, *Pride before the Fall*, Harper Collins 2000.

²⁰ Stephen K. Vogel, *Freer Markets, More Rules*, Cornell University Press 1996.

²¹ See e.g. Jill Hills, *Deregulating Telecoms: Competition and Control in the United States, Japan, and Britain*, 1986; Michael Moran, *The Politics of the Financial Services Revolution: The USA, UK and Japan* (1991); for more referencs see Viktor Mayer-Schönberger & Mathias Strasser, *A Closer Look at Telecom Deregulation: The European Advantage*, 12 *Harvard Journal of Law & Technology* 561 (1999).

market's ongoing success. At first glance, this may sound counterintuitive. But highly regulated sectors are often dominated by powerful monopolies or oligopolies. Merely abolishing the old regulatory framework may leave the new market with an all-powerful incumbent, ready to squash any entrepreneurial new entrant. This is particularly true for sectors like telecommunications, energy or transport, which require new entrants to invest heavily in infrastructure that incumbents have already put in place and paid for through inflated monopoly prices, and to connect to the incumbent's infrastructure.

Hence such re-regulations regularly define the conditions of "interconnection" for linking the networks of incumbent and new entrants. Left to the market, incumbents could extract prohibitively high fees from new entrants, and, given the financial resources at their disposal, could elect to starve out their nascent competition until it has run out of money. Of course, successful "re-regulation" requires more than just reining in large incumbents. New entrants must not get too good a deal, either. If they did, they would have less of an incentive to innovate and be efficient, and to create an attractive alternative. The challenge is to find a balance that creates incentives for all market players.

Consequently, a sophisticated replacement of the old regulatory framework must fulfill two distinct tasks. First, it must replace the old non-competitive setup by opening the sector to entrepreneurial new entrants. Equally importantly, however, it must also provide a framework that ensures continuing competition. What is termed "de-regulation" is in fact a complex "re-regulation", the replacement of old-style rules with a market-based regulatory framework. Thus Vogel entitled his book *Freer Markets, More Rules*.²²

A wide variety of entrepreneurs have already benefited from these new regulatory frameworks. For example, the deregulation of financial services in the US made it possible for ecommerce companies to "go demand-side", to offer a bundle of services not based on artificial regulatory categories but on their customers' comprehensive financial needs. New Internet access providers and network operators exist because of the deregulation of the

²² Stephen K. Vogel, *Freer Markets, More Rules*, Cornell University Press 1996.

telecommunication sector, while ecommerce resellers of excess energy are enabled by the re-regulation of energy markets.

To be sure, there is no certainty that "de-regulation" will be successful in creating and maintaining competitive markets. Building a new legal framework is a complex undertaking. Regulators may err and create the wrong set of incentives. In such ill-designed markets, competition will fail and entrepreneurs won't be better off than they were in closed markets. Yet, re-regulation - if done right - holds significant potential for entrepreneurs.

Law as Protector:

Creating and maintaining competitive markets is only one function of the legal system. Another is recognizing and protecting valuable rights. The most obvious example of such a right is the right to own property.

Property has always provided an important incentive for entrepreneurs. During the days of the gold rush individual entrepreneurs invested in prospecting claims. Similarly, whatever land families had staked out and fenced in at the Oklahoma land rush was theirs. In the post-industrial society of the Internet, the power over physical property has been replaced by the power to control information. For example, the astonishing stock market valuation of Microsoft is based not on its holdings of real estate, facilities, inventory or investment in other firms. It is based almost exclusively on intangibles - most notably intellectual property right for its best-selling software.

Entrepreneurs should be expected to fully embrace intellectual property rights. Yet, many entrepreneurs in the information technology sector, an area in which intellectual property protection is quite important, have become openly skeptical of intellectual property law's ability to serve their needs.²³ They argue that entrepreneurship depends on the open exchange of information, of innovative ideas and designs. Entrepreneurs they maintain

²³ For example, ecommerce entrepreneur Robert Young, of Red Hat Software, argues that intellectual property protection creates barriers restraining commercial success; See Robert Young, Giving It Away, in Chris DiBona / Sam Ockman / Mark Stone, Open Sources (O'Reilly 1999), p. 113 at 124.

combine existing ideas from a vast corpus of human knowledge when seizing new market niches. Destroying this sense of openness and robust informational exchange threatens the very culture in which entrepreneurship thrives.

Moreover, they suggest that intellectual property protection is less important for ecommerce entrepreneurs operating at breakneck speed. At such speed, entrepreneurs can easily let others copy their offerings, because the time it takes for these others to introduce similar services will be used by entrepreneurs to create new innovations. However hard they try, the copycats will always lag behind, while the innovators blaze the trail, and make money off the lead-time that they enjoy over their lagging competitors. Additionally it is argued that intellectual property rights have been modified over the last decades to benefit the incumbents, the "majors", the large possessors of intellectual property, while new entrants, the start-ups, the true entrepreneurs, are suffering from a stifling climate of over-protection. Finally, they contend that these legal changes have made it harder, more costly, and time-consuming for entrepreneurs to protect their innovations, further eroding their chances in the information markets. In sum, entrepreneurs would, contrary to the conventional wisdom, actually benefit from the abolition of intellectual property rights, as their agility, adaptability and ingenuity provides them with a material advantage over slow moving traditional competitors.

The critics have a point. To achieve innovation in today's complex markets, entrepreneurs invariably have to build upon existing innovations, which in turn are likely to have been patented or copyrighted by others. Jessica Litman²⁴ and Pamela Samuelson²⁵ have persuasively argued that in the last three decades intellectual property protection has been strengthened on the behest of large rights holders.²⁶ And these "majors" now control more of the intellectual property markets than ever before.²⁷ For example, the five leading media companies control more than ninety percent of the cinema and eighty percent of the home

²⁴ Jessica Litman, *Digital Copyright*, Prometheus 2001.

²⁵ Pamela Samuelson, *The Copyright Grab*, *Wired* 4.01 (January 1996), p. 134.

²⁶ See also Ronald V. Bettig, *Copyrighting Culture - The Political Economy of Intellectual Property*, Westview Press 1996.

²⁷ In the late 1980s Microsoft had one patent, by the beginning of the millennium this intellectual property vault had grown to over eight hundred.

video market. Microsoft maintains more than ninety percent market share not only of the operating systems but also of the office application software and the Internet browser markets. AOL/Time-Warner, Microsoft and Yahoo provide online services for more than fifty million subscribers, orders of magnitude more than their closest competitors. Moreover, with the questionable recognition of business method patents²⁸, already dominant companies like Amazon.com can patent parts of their shopping experience (the so-called "one-click-shopping"²⁹) and require royalties from every small ecommerce entrepreneur.

Against this backdrop, the call to abolish intellectual property laws and to open information vaults and let knowledge and innovation be used freely by others has fallen on surprisingly fertile ground. The open software based operating system Linux is its most prominent poster child. Known as "open source", "open content", or "open code" its proponents claim that they are bolstering, not destroying ecommerce opportunities. Even "majors" like IBM, Sun, and Apple, which have never been timid about enforcing their intellectual property rights, have jumped on the open software bandwagon.

Yet, this perspective provides a lop-sided view of the full picture. As Jane Ginsburg argues, intellectual property rights have also been weakened, both by lawmakers responding to calls for more "fair use", and much more importantly by technological advances that ease illegal copying and distribution.³⁰ Attempts to strengthen intellectual property laws are mainly responses to offset the threat posed by technological change. On a more abstract level, economists have argued that well crafted intellectual property protection not only benefits rights holders, but provides an incentive framework that maximizes innovation as well as information diffusion. For example, comparing the strength of national intellectual property protection and its relationship to economic growth, Robert J. Barro and Xavier Sala-i-Martin suggest that "poorly defined intellectual property rights imply that leaders have insufficient incentive to invent and followers have excessive incentive to copy."³¹

²⁸ See e.g. Matthew G. Wells, Internet Business Method Patent Policy, 87 Va. L. Rev. 729 (2001).

²⁹ See Amazon.com, Inc. v. Barnesandnoble.com, Inc., 73 F. Supp. 2d 1228, 1232 (W.D. Wash. 1999).

³⁰ Jane C. Ginsburg, Copyright Legislation for the "Digital Millennium", 23 Colum.-VLA J.L. & Arts 137 (1999).

³¹ Robert J. Barro, Xavier Sala-i-Martin, Technological Diffusion, Convergence, and Growth, JEG, Vol. 2, no. 1 (March 1997): 1-26.

Furthermore, most infringers are not the highly innovative coders, but competitors out to make a "quick buck". For example, the company complaining loudest that Amazon.com, a successful entrepreneurial startup, had been granted a questionable business method patent that stifled innovation was not a small entrepreneur, but traditional book selling incumbent Barnes & Noble. In addition, many of the more dubious intellectual property rights initially granted are, as Amazon had to realize, successfully contested because they lack originality or novelty. While it is true that large corporations have drastically stepped up their intellectual property protection activities, small companies are even more adamant. In 1972, small entrepreneurs only accounted for five percent of patent applications. In 1992 their share had grown to a staggering 23 percent. And, as Kevin Rivette and David Kline point out, these entrepreneurial Davids successfully have employed the law to win hundreds of millions in patent cases against powerful Goliaths like Microsoft or General Electric.³²

Alternatives to intellectual property come with their own problematic baggage. Limiting intellectual property protection may prompt businesses to protect their intellectual property by using other legal constructs, like trade secrecy, trademark and unfair competition laws, which tend to over-protect and favor larger players, exactly the opposite of what entrepreneurs would want.

Moreover, despite the claims of open software proponents, speed cannot fully substitute for protection. Massive innovation still requires substantial capital investment, which ultimately must be earned back. Information can be copied in matters of seconds, much faster than any fast paced innovation can ever occur. If a return on the initial investment is not assured, it must be financed through different means. IBM gave away its software in the 1970s (although it never gave up its intellectual property rights), because it was bundling it with (proprietary) hardware. Hardware sales were subsidizing software. But such cross-subsidization is usually not an option for a fledgling startup company, and uncertainty over the ability to earn its initial investment makes it harder to attract outside capital. It is no surprise then that so far open software initiatives have almost entirely been focused on non-

³² Kevin G. Rivette & David Kline, *Rembrandts in the Attic - Unlocking the Hidden Value of Patents*, Harvard Business School Press 2000, p. 18-19.

strategic information. IBM may have embraced Linux, but it certainly has yet to open source its own most valuable software gems. The same is true for Sun and Apple.

On a more conceptual level, experts have argued that the collaborative piece-meal style of innovation championed by the open software community and epitomized by Linux cannot provide the paradigm-shifting innovative breakthroughs entrepreneurs are pushing for. Hence, from an entrepreneurial perspective intellectual property protection may actually have a concrete conceptual advantage over the open software paradigm.

In sum, intellectual property laws are not faultless. Neither are they perfectly aligned with the interests of the entrepreneurs. Yet, contrary to some entrepreneurial sentiment, on balance they seem to protect rather than stifle entrepreneurial activity.

Law as Enforcer

Law fulfills a third potentially useful function: it enforces contractual obligations. When market participants transact with each other, they need to trust that the other side will fulfil its contractual obligation. Market participants have many different means to establish the necessary trust among them – from frequent, personal interactions to reliance on third party rating systems.³³ They may also find an appropriate substitute to trust in. This can be another human being, like a guarantor, or a societal contract enforcement and conflict resolution institution. The legal system is the main such institution. It permits buyers and sellers to contract without having to establish complete trust in each other's willingness to execute. Instead they rely on the threat of law's power to coerce the other side to perform (or at least to pay the damages caused by its non-performance). Law enables us to transact with others whom we do not know, whom we have not met, and who live far away.

The legal system functions as an enforcer of contractual obligations at a societal as well as individual level. Each individual enforcement action sends a signal not only to the parties

³³ This is what online auction site Ebay.com and others do by permitting auction participants to rate the reliability and trustworthiness of the respective other party in the auction. Over time, reliable buyers and sellers establish a strong positive rating, on which potential business partners rely.

affected, but also to other observers that non-compliance is costly. This societal signaling device will lead to fewer cases of non-compliance, lowering overall transactional risk and thus transaction costs.³⁴

Entrepreneurs generally are engaged in riskier business propositions than established corporations, in the hope of reaping disproportionate rewards. Yet, risk comes at a cost. While entrepreneurs may not be able to influence external risks such as overall market conditions or interest rates, they certainly desire to lower the risks they can control. Transactional risk is one such controllable component. When the legal system successfully lowers transactional risk, it directly assists entrepreneurs, arguably even more so than traditional businesses. What is true for entrepreneurs in general, is even more true for ecommerce entrepreneurs, who typically receive orders from customers they have never met, and hence had no chance to establish mutual trust. According to BizRate.com, the leading provider for ecommerce metrics, on a typical week in 2001 more than five million ecommerce transactions took place.³⁵ Amazon.com, the largest ecommerce retailer, received more than 31 million orders in the eight weeks before Christmas 2000 from its 21 million registered customers³⁶, and online auctioneer ebay hosted more than five million auctions in parallel. Every one of these millions of transactions bears some risk, especially where the seller knows little about her buyers. The power of the legal system to enforce contracts, and protect bona fide contractual parties helps lower the overall risk, benefiting fledgling ecommerce entrepreneurs.

The legal system as enforcer incorporates another advantage to entrepreneurs. It scales. Unlike building network infrastructure or brand recognition, utilizing the legal system does not require heavy initial investments from the parties. Instead, enforcement costs are mostly a linear function of transaction volume. At least in this limited sense the legal system is a public good. This feature of the law directly benefits ecommerce startups in transactional

³⁴ No paper on transaction cost can be complete without mentioning the "father" of transaction cost analysis, Ronald Coase, *The Problem of Social Cost*, 2 *Journal of Law & Economics* 1 (1960).

³⁵ For example, for the first week in October of 2001, less than a month after the terrorist attacks on the WTC and the Pentagon, BizRate.com reported 5.04 million ecommerce transactions, not substantially lower than a month or two earlier, for a total value of USD 657m.

³⁶ Amazon.com Press release and Annual Report, see <http://www.amazon.com>

markets, from ecommerce retailing to financial services to travel agencies online. Quite directly, the law is their ally, and in a way they most likely have not thought of.

However, the legal system is not the only way to lower transaction costs. Alternatives to lower transaction costs - like mediation, arbitration, self-regulation, or insurance - exist, yet so far the law has kept its primacy, partly because it is so widely accepted an institution, partly because *ceteris paribus* it has been less costly than other alternatives. But the success of law as a tool to lower transaction costs rests on a number of premises, two of which may be undermined by the very characteristics of Internet-based commerce. The first premise is the strong locational dimension of any legal system. Law functions well as enforcer as long as both parties are within the same jurisdiction, within the law's area of effective enforcement. Things get complicated, if the two parties are from two different jurisdictions. The legal system has evolved to resolve such situations by referring to meta-rules; rules to decide whose rules should apply.³⁷ But this process is costly and time-consuming.

The second premise is one of relative transaction value. Although enforcement scales with the number of transactions, it does not scale as well with the value of each transaction. To be sure, legal enforcement cost for a high-value transaction is higher than for a low value transaction, but below a certain threshold enforcement costs are more or less flat. It is about as expensive to enforce a \$500 contract as it is to enforce a \$5 contract. Unfortunately for the law, ecommerce is all about millions of low value transactions, regularly crossing jurisdictional boundaries. In a typical week in 2001 for example the average value of an ecommerce transaction was as low as \$130.³⁸

As a result, alternative systems may provide lower transaction costs than the law, thus robbing it of its competitive advantage, at least in economic terms: The legal system is too expensive to provide efficient contract enforcement. Even if no cheaper alternative exists, the increasing costs of using the law relative to the absolute value of the transaction may

³⁷ This is called "conflicts of laws"; see generally Scoles / Hay, *Conflict of Laws*, 2nd edition (1992); Arthur von Mehren & Donald Trautman, *The Law of Multistate Problems* (1965); Leflar, *American Conflicts Law* (1968).

³⁸ BizRate.com and The Industry Standard reported for a typical week 4.5 million ecommerce customer transactions for a total value of \$584 million, resulting in an average value of each individual transaction of \$129.78.

pose a problem not just for the law, but for the very business proposition: if one cannot enforce one's business transactions, one may not be able to survive as a business.³⁹

Ecommerce companies have therefore looked carefully at alternative systems to ensure contractual enforcement. Ebay has achieved a very low "fraud" rate of .01 percent through its rating system, which provides risk assessment information for contractual parties, and an optional arbitration system. It has also spurred a cottage industry of companies offering risk minimizing payment and escrow alternatives. On a much larger scale, credit card companies, too, offer a powerful alternative. They guarantee payment - contractual enforcement - for a percentage of the transaction value, thus ensuring excellent scalability, as well as efficiency even at comparably low transaction values.⁴⁰

Does this spell the end of law as enabling and supporting ecommerce entrepreneurship? It is too early to tell. Without doubt, the law is challenged in its role as enforcer by the swell in cross-jurisdictional low value transactions online.⁴¹ Addressing this challenge must be high on the agenda of any serious legislator, as well as of any entrepreneur hoping for an affordable system to reduce transactional risk. Yet, the legal system remains a powerful player, even in the wake of this substantial challenge and the advent of alternative structures. The law is deeply rooted in our society. It retains a strongly visible signaling effect, especially in high-profile cases, causing some to use it despite its economic shortcomings. Furthermore, alternative systems may compliment the legal system in reducing transactional risks, rather than replacing it. For example, for certain types of transactional disputes the legal system will remain the first choice. Finally, alternative systems require the law to be in place for them to work. Credit card companies, for instance, can only perform the role of

³⁹ Not every business needs legal enforcement. Software shareware, for example, is based on the honor principle: you pay if you decide to keep using it. Enforcement is based on ethical values rather than legal rules. If the transaction value is small, and the ethical values to pay are fairly widespread, such a business model may not only be sustainable but in fact more efficient than one based on legal enforcement.

⁴⁰ Credit card companies do, however, have a transaction minimum fee regardless of transaction value.

⁴¹ I have called this the "jurisdictional challenge", see Viktor Mayer-Schönberger, *Information Law Amid Bigger, Better Markets*, in Joseph S. Nye / Jack Donahue, *Bigger, Better Markets*, Brookings 2001, p. __; Viktor Mayer-Schönberger, *The International Lawyer in Times of Cyberspace*, in Jens Drolshammer / Michael Pfeifer (eds), *The Internationalization of the Practice of Law*, Kluwer 2001, p. 401.

enforcer because they themselves rely on the legal systems to ultimately resolve the disputes. Without the law, they could not exist.

As we have seen, one of law's functions is to guarantee contractual enforcement. Because it may thus reduce transactional risk it assists ecommerce entrepreneurs. They benefit from its scaling structure, its public good character and its societal acceptance. Yet low transaction values and cross-jurisdictional transactions reduce its potential usefulness. Legislators must confront this "jurisdictional challenge", but even if alternative systems abound, the law will not be completely displaced. It may become less visible as transactional enforcer, but its existence is no less needed.

3. Mapping out a Research Agenda:

Among the law's many functions, the three described above potentially assist and benefit ecommerce entrepreneurs in their activities by

- providing a regulatory framework enabling new entrepreneurial entrants in "liberalized" markets,
- protecting entrepreneurs in their innovative endeavors through intellectual property rights, and
- enforcing transactional contracts.

Law's role as supporting entrepreneurs is not a given for any of these functions. Whether or not law is aligned with and thus supportive of entrepreneurship depends on its substance, on how it is crafted. As we have seen, law holds substantial promise, but wrongly worded it can be what many entrepreneurs intuitively suspect it to be in general: stifling.

Hence, much of the success or failure of the law to support entrepreneurship depends on the concrete effect of legal rules on entrepreneurial activity. Yet neither the exact implications of certain legal designs on entrepreneurship, nor entrepreneurship's demands on the law have received much academic analysis. A search on Lexis, the comprehensive legal database in the United States, retrieves less than a handful of articles over the last three

decades looking at the interface of entrepreneurship and law.⁴² The harvest is not much bigger when looking at the teaching side. Researching law schools around the country reveals few programs or centers devoted to "entrepreneurship and the law".⁴³ And courses offered focus mostly on the legal and regulatory requirements to start a business, describing law as a hurdle, not a tool to be used.

Some research parallels may be drawn from work conducted on the role of law in so-called transition economies. Studies in that field looked at the suitability of the legal framework for contract enforcement⁴⁴, intellectual property protection⁴⁵, and the de-nationalization of certain economic sectors⁴⁶. Yet, while they may provide a solid set of general assumptions, these studies' focus is different. Their goal is to understand transition dynamics, not the more general interface between entrepreneurs and the legal system.

Additional academic work is therefore necessary to shed light on the subject, and to aid legislators in their difficult task. Different kinds of entrepreneurial activities are linked to different functions of the legal framework. In this essay, I have focused on ecommerce entrepreneurship and identified three related functions of the law. Furthering our understanding of these three functions and their interaction with entrepreneurship through

⁴² See Steven H. Hobbs, *Toward a Theory of Law and Entrepreneurship*, 26 *Cap. U.L.Rev.* 241 (1997); Keith Aoki, *Innovation and the Information Environment: Interrogating the Entrepreneur*, 75 *Or. L. Rev.* 1 (1996); James T. O'Reilly, *Entrepreneurs and Regulators: Internet Technology, Agency Estoppel, and the Balance of Trust*, 10 *Cornell J. L. & Pub. Policy* 63 (2000).

⁴³ Pepperdine University School of Law operates a "Center for Entrepreneurship and Technology Law", <http://law-www.pepperdine.edu/cetl/index.shtml>, there is the Germeshausen Center for the Law of Innovation and Entrepreneurship at Franklin Pierce Law Center, as well as the Program on law and entrepreneurship at Oregon Law School, Chicago-Kent Law School has an Information Technology & Entrepreneurship Clinic.

⁴⁴ Kathryn Hendley, *Beyond the Tip of the Iceberg: Business Disputes in Russia*, in Peter Murrell (ed), *Assessing the Value of Law in Transition Economies*, University of Michigan Press 2001, p. 20; Kathryn Hendley / Peter Murrell / Randi Ryterman, *Law Works in Russia: The Role of Law in Interenterprise Transactions*, in Peter Murrell (ed), *Assessing the Value of Law in Transition Economies*, University of Michigan Press 2001, p. 56; Glenn P. Hendrix, *The Experience of Foreign Litigants in Russia's Commercial Courts*, Peter Murrell (ed), *Assessing the Value of Law in Transition Economies*, University of Michigan Press 2001, p. 94; Minxin Pei, *Does Legal Reform Protect Economic Transactions? Commercial Disputes in China*, in Peter Murrell (ed), *Assessing the Value of Law in Transition Economies*, University of Michigan Press 2001, p. 180;

⁴⁵ Michael A. Heller, *A Property Theory Perspective on Russian Enterprise Reform*, in Peter Murrell (ed), *Assessing the Value of Law in Transition Economies*, University of Michigan Press 2001, p. 288.

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additional research could provide valuable insights, by for instance

- looking at how recent "re-regulations" attempt to rebalance the "playing field" for new entrants and incumbents alike, in order to analyze in what way this re-balancing was intended by the policy makers, and to what extent the rule structure put in place has resulted in the intended competition⁴⁷;
- exploring the concrete needs for intellectual property protection and information sharing for entrepreneurial companies in various sectors, for example with quantitative or case methods, to compare intellectual property protection with "open content" or "open software"⁴⁸, and to better understand the linkage between intellectual property protection and necessary startup funding;
- determining the (fixed) cost component of legal enforcement for various ecommerce transactions, to examine established alternative enforcement and dispute resolution structures, like credit card companies or online arbitration, their economic benefits and costs, as well as the level of their reliance on existing national legal systems.

This functional agenda could be complemented with research on the actors and their perceptions of the law. For example, more detailed research in how entrepreneurs assess the role of law, and the relationship between their activity and the legal system could clarify what - in the minds of the entrepreneurs - contributes most to law's unattractiveness.⁴⁹

Entrepreneurship may directly benefit from such research in at least two important ways. First, this research could provide the empirical foundation to argue for a reassessment of law, to see the law less in terms of black and white, of friend or foe, and more as a societal tool potentially beneficial for entrepreneurs if used appropriately. Secondly and equally important, such research could provide a better understanding of what kind of legal rules

⁴⁷ See e.g. Alfred Schipke, *Why Do Governments Divest?*, Springer 2001; Stephen K. Vogel, *Freer Markets, More Rules*, Cornell University Press 1996; Solveig Singleton, *Regulator's Revenge*, CATO 1998, Viktor Mayer-Schönberger & David Lazer, *Governing networks: Telecomm Deregulation in Europe and the US*, Brooklyn Law Journal (forthcoming).

⁴⁸ Steven Weber, *The Political Economy of Open Source Software*, BRIE Working Paper 140 (June 2000).

⁴⁹ Here, too, studies from transition economies may provide early indications; see e.g. Timothy Frye, *Keeping Shop: The Value of the Rule of Law in Warsaw and Moscow*, in Peter Murrell (ed), *Assessing the Value of Law in Transition Economies*, University of Michigan Press 2001, p. 229.

entrepreneurs should ask for. Such a deepened understanding would then permit the political debate to move beyond entrepreneurs' traditional calls for "no regulation" or "no laws", and towards an informed advocacy for rules enhancing and supporting entrepreneurial activity.

4. Reassessing the need for law: A Call for Legal Entrepreneurship:

Law is a set of predefined rules. By providing societal guidance and enforcement against violators law fosters predictability. Predictability in turn lowers transactional risk. Increasing predictability is particularly welcome in economic sectors with high risks. It is in these sectors that entrepreneurs are most active. Consequently, as a provider of some predictability law offers relatively greater utility for entrepreneurs in high-risk areas than for businesses in other economic sectors.

Predictability dictates that legislators do not act prematurely, but take their time to "understand" the inner workings of a particular sector before enacting rules. Yet, even after legislators have grasped an understanding of a sector, predictability may not be served by a "big bang approach", by passing one comprehensive legislative act. Instead, slowly evolving the legal framework through easily correctable small and deliberate steps will more likely provide overall predictability than an untested comprehensive act. The more cautious, evolutionary approach resonates well with American legal and business culture. The value of pragmatism and the common law tradition point in the same direction. Yet, the desire for predictability through legislative caution transcends culture and legal tradition. It is as important in civil as in common law systems for economic actors to be able to anticipate what the law is.

Yet, it is unclear whether such a risk-averse stance toward rule making is in fact preferable for entrepreneurs to an early legislative act. As we have seen, re-regulation - opening markets - cannot be done piecemeal, but requires a comprehensive framework. Moreover, for entrepreneurs, the sooner markets are open, the better. Similarly, if intellectual property rights need to be changed to create incentives for innovation, waiting may unduly burden entrepreneurs. And if law can efficiently provide enforcement of ecommerce transactions,

failing to swiftly extending it across jurisdictions and to modify it to lower transaction cost, may in fact discriminate against startups, who do not have an established enforcement system of their own.

Therefore, legislators may be ill advised to adopt legal frameworks reluctantly. This argument applies particularly to economic sectors like ecommerce with a strong first mover advantage, high fixed and low variable cost. In network and information industries, in which these properties and general network effects create a dynamic business environment, timeliness may be more important than perfection. In essence, predictability - while certainly an important factor in "timing" rule making - does not necessarily trump other considerations.

To be sure, bad rules enacted in a timely fashion will be as much of a hindrance as badly-timed but better written rules. It is after weighing these two alternatives and their potential outcomes that most legislators and entrepreneurs alike find themselves advocating for a "wait-and-see" approach. But this presupposes that having adopted no rules is always preferable to having the "wrong" rules, and that picking the "right" rules is nothing but a gamble, not a process with calculable risks. Such a risk-averse stance may be expected from legislators, but hearing it from entrepreneurs - continuously exposed to risks - is baffling. It also indicates a belief that the rule-making process is a black box, prone to produce unintended results.

To be sure, law making in a dynamic area comes with certain risks. Like entrepreneurship, it may require action and decision making without knowing all the facts. And unlike software, there is no straightforward method to "test" a law. Centuries ago, legislators could enact a new legal framework in a remote region of the state.⁵⁰ Like a beta-test of software, after some time the "bugs" in the law were discovered, and could be fixed before it was enacted for the rest of the nation.⁵¹ This is an early model of legislative research and development. But as over time even the remotest regions resisted being turned into legal and societal

⁵⁰ See e.g. the enactment of a "beta version" of what later became the civil code of the Austro-Hungarian empire in western Galicia; Herbert Hausmaninger, *The Austrian Legal System*, 2nd edition, Manz 2000, p. 228.

⁵¹ In the US Supreme Court Justice Brandeis called this the need for "laboratories of democracy"; see *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932).

guinea pigs, lawmakers had to abandon this approach. They replaced it with the evolutionary approach of "real-time" development and evaluation. Should one of the incremental steps taken turn out to be "wrong", it could be easily changed back to the previous "version".

This approach may have worked in the past. Yet in the highly dynamic, globally integrated economies of today, such a cautious approach loses much of its appeal, as economic windows of opportunity open and close quickly. Lawmakers often find themselves in competition with their colleagues in other jurisdictions. If legislation comes too late, others who acted earlier may have already attracted economic activity.

Legislators need to understand this evolving market of rules, and their role in it. By becoming active, by daring to innovate, to learn from their actions as well as from others, and to adapt quickly to a changing environment, they not only ensure the competitiveness of their jurisdiction, they also greatly assist their entrepreneurs. Instead of endlessly debating the next legislative steps among all the interest groups involved, half of which are stalling the process in hopes of gaining from inertia, legislators may want to legislate swiftly, despite the risk. Instead of just paying lip service to supporting entrepreneurship, pro-active legislators demonstrate that they understand the inherent dynamic of economic windows of opportunity. In sum, they may want to turn themselves into entrepreneurs, and take a risk by legislating. They may win, or fail. Yet, if they waver and wait in a dynamic environment, they can only lose.

Such a change may require a leap of faith for traditional lawmakers. Like former monopolists they have to shift their mindset towards competition. It will be a difficult transition. Yet, entrepreneurs are going to be, I am convinced, most supportive of such a move. They understand that giving up predictability in exchange for a timely legal framework will improve their chances for success.

The entrepreneurial lawmaker is not suitable for every economic sector, or all areas of economic activity. But it may hold great promise for areas of high dynamism, and of strong entrepreneurial activity, where moving swiftly and boldly is more important than waiting to get it right.

The ecommerce sector has helped fuel the entrepreneurial spirit. The legal system is still seen as stifling it. This is a mono-dimensional view, untenable in theory and unsuitable in practice. Instead of battling the law, entrepreneurs are better advised to look for and achieve alignment of the law and their own goals, for example by understanding, appreciating and lobbying for the strengthening of law's supportive functions. And in turn legislators may want to become more entrepreneurial themselves.