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Virtual Companies

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The internet has been used to create new markets (e.g., eBay) and to enable social production (e.g., Wikipedia). But it is still too hard to form and operate a company online. New legislation in Vermont may be about to change that.

There are only a few different ways to organize collaboration among groups of people to create value. In markets, autonomous actors exchange goods and services for a price. In social production (often called "peer production), participants contribute to a common goal in exchange for enhanced reputation or personal satisfaction. In firms, traditionally formed by an infusion of capital from investors, employees work for a paycheck and organize themselves by means of hierarchical management structures. The economics literature teaches that we tend to choose whichever form offers the lowest cost of coordination.

The Net creates another, hybrid possibility — an open space on the map of potential ways to create value together. That opportunity is to create a firm (a persistent company) based on pooling of attention and effort (as opposed to capital), with the goal of enabling the contributors to collectively own their joint work product. If participation in net proceeds is based on mutual rating among active contributors, the costs of coordination can be kept low and the problems of top-down management minimized. The theory is that if people can come together to create valuable products and services on the net, for love, still more will do so if they have some chance of owning their collective work product (potentially including the creation of intellectual property and the provision of services to customers) and gaining compensation for efforts that begin to seem like work. I'll call this new form a "virtual company", even though all corporations are, of course, intangible products of our collective imagination.

There have been several barriers to the creation of companies online. It is relatively expensive to obtain a traditional corporate charter — and standard incorporation statutes require a hierarchical management structure. This doesn't fit well with the dynamics of internet production, which usually involve self-selection by dispersed participants and transient membership in contributing groups. The traditional duty of directors and efficients to investors makes less sense for a company that doesn't need to raise capital. For many types of online work, all the capital necessary is already owned and distributed among the contributors in the form of their own computers, internet connections, and expertise.

Even limited liability company statutes, usually more flexible than standard corporation acts, can create barriers to the formation of online companies. They often require paper based filings, assume the existence of a physical headquarters building, and demand an in person annual meeting among identified members. These requirements make less sense in the context of ad hoc groups that come together online to create a product or service that they jointly own.

The marketplace speaks the language of price. Traditional companies speak the language of obedience. Peer production speaks the language of love. The new virtual company speaks a different language — shared ownership by those who actively contribute in a way that is valued by other collaborators. The closest analogue to this kind of "collective appropriation of peer production" is the cooperative — a form of organization that has developed a mixed reputation.

Cooperatives often allocate one vote to each member, regardless of level of contribution, and then compensate for this by developing hidden channels of power. Cooperatives are often based on the

accumulation of capital, rather than the pooling of time and effort. Even producer coops tend to become more like markets insofar as they use pricing mechanisms to reward contributions and limit the number and diversity of roles that can be played by self-selecting contributors. All too often, coops end up allocating power to boards of directors and migrating towards hierarchical management. If we want to combine the virtues of peer production with the opportunities provided by collective appropriation of work product and legal personhood, we need to invent a new form. The combination of the new Vermont act and the flexibility of an LLC operating agreement make this possible.

Of course, many people have already begun to build businesses together on the Net and in virtual worlds. But, under traditional legal doctrines, those that style themselves as companies are at risk of being recharacterized as partnerships, losing any claim to limited liability. In most cases, they have to rely on an individual participant to hold and administer any company funds (try opening a bank account on behalf of a World of Warcraft guild! Don't count on a secure return on your scarce attention resources in Eve Online, the head of which declares "fraud is fun!"). Online groups lack reliable means of entering into contracts, as groups, with third parties. And they would have a hard time appearing in court to defend their rights.

Vermont could be the Delaware of the Net

A new Vermont statute, signed into law on June 6, 2008, addresses some of these issues and could make Vermont the "Delaware of the Net". First, the law enables electronic filing of any documents required to register a company with the Secretary of State. (The Secretary of State is very supportive of the "virtual company" initiative, but it may take a little time before all of the State's systems are re-designed to accept electronic filings and payments.) Second, the statute eliminates requirements for in person meetings — instead permitting even asynchronous online communications for this purpose. Third, the act expressly contemplates that the agreements that establish relationships among members of a virtual company can be embodied in electronic form — this opens up the possibility that an online hosting company can help members make decisions together via rating and voting structures, and enforce rules regarding authorization to act on behalf of the company, by means of social software.

Because limited liability company law is flexible, deferring in most cases to the terms of an operating agreement, these enabling provisions of Vermont law can be used to set up a new kind of legal entity. A virtual company can be established in a way that precludes contributions of money in exchange for ownership interests and forbids transfers of such interests – thereby reducing any risk that the interests might be characterized as securities. The operating agreement of a virtual company can provide that active members will share in any distributable net proceeds based on mutual ratings of each other's contributions. It can treat the members receiving such payments as independent contractors, and opt for tax treatment as if it were a C corporation, thereby reducing the need to obtain real world identities from participants prior to distributions of cash and reducing the burden of filing K-1s during the formative stages.

While authority can be delegated to individuals to act as agents on behalf of the company when necessary, most decisions can be reserved for participatory voting by a transient, self-selected membership. A founder can articulate the goals of the company and recruit others to fill various pre-defined roles, conditioning or limiting participation on whatever basis seems appropriate.

In short, the new Vermont law opens up the possibility of groups of people coming together online to create and jointly own their work product. Some will argue that ownership of a collaborative work product is antithetical to the spirit of the open source movement that showed us the power of social production. They may claim that getting paid for, or attempting to profit from, online work will demoralize just those contributors who now work together online "for love". The contrary hypothesis is that, while many will no doubt continue to contribute to open source efforts, without any prospect of compensation, there is much

work that doesn't get done online because it seems like work, and because participants have to pay their rent.

The existence of a collaborative, online workplace holds out the prospect that anyone who can contribute value to a shared product can find at least some such "employment", from anywhere in the world, on their own schedules and in those areas and roles in which they are best able to make a contribution.

The Value of Legal Personhood for Online Firms

There are already spot *markets* online in which independent contractors can find compensated work of various kinds. So what's the big difference? One key is that a company, unlike a market, can persist over longer periods of time. This makes it possible for a group to enter into the contracts needed to exploit intellectual property they have jointly created (potentially, for example, providing their work product free for non-commercial uses while reserving the right to license it when used in commercial contexts). Compensation for the efforts of participants can be set after the value of the joint work becomes known, rather than by means of prices that must be paid from capital accumulated in advance. This lowers risk for all concerned, without requiring submission to the terms of a traditional publisher. Because a hosting system can make it easy to propose the creation of a company, founders can more quickly determine whether there are others well situated and willing to produce the product and service they envision. Companies based on bad ideas can fail quickly, at minimum cost, rather than incurring the costs of failing after hiring employees.

Any successful business involves the complementary alignment of many different interlocking roles. Someone needs to produce the product or service, someone needs to find customers, someone may need to find suppliers of various kinds of inputs, someone needs to be sure that regulations are obeyed, books kept, taxes paid. The list goes on and on. Traditional companies spend large amounts looking for employees to fill these roles, typically hiring a whole person (for a day job) and often having to do so in restricted geographic locations. In contrast, a virtual company can allow contributors with differing skills, availability, and interests to self-identify. It can obtain valuable contributions from participants who choose to make those contributions in just a few minutes a day. It can be relatively indifferent to a member's geographical location. It need not have a physical building, only an agent for service of process. In short, the flexibility of online work allows assembling many more different types of complex collaborations than have previously been possible.

Concretely, any knowledge based product or service can be assembled online. A virtual consulting team can respond quickly to requests from customers who want information about a particular topic assembled. A dispersed group can write a book or create a network of blogs that create advertising revenue. Another group could provide support services for patients with particular diseases. Another could develop both products and services to support home schooling parents. The possibilities are endless.

While participants self-select, there can be layers of quality control, also produced by volunteers, to protect the reputation of the virtual firm. And horizontal rating systems can provide assurance to all concerned that their own views about who has made the most valuable contribution to the company's success are appropriately taken into account when it comes time to distribute any net proceeds.

There is no requirement that a virtual company must conduct all of its activities online, much less at a site provided by the hosting company. The core "virtual company" functions involve the assignment of roles and the making of decisions to appoint agents, enter into contracts and allocate net proceeds. A virtual company could go into the pizza delivery business if its members wanted to do that. There may be some tax and regulatory consequences from engaging in company business in a particular location. But the point of creating this new corporate form is not to avoid taxes or defeat applicable regulation. It is to allow people to find those opportunities to create value for which they are already best qualified and available.

There is no requirement that a virtual company must be formed to maximize profits or even to make a profit. The persistent legal personhood of a virtual company could be used, instead, to share the work associated with administering a common asset (e.g., an environmental resource, placed under the control of the group) or making decisions about how to distribute charitable funds (donated to the group for this purpose). People can already pool their funds online to sponsor charitable projects, of course. But they can do so even more effectively if they can collectively enter into binding contracts with third parties or jointly own assets. Again, the corporate form leverages the ability of groups to take action over a sustained period and to control interactions with third parties.

The Hosting Company Opportunity

Obviously, it would be wasteful to require every virtual company to develop its own capabilities to take care of administrative matters. In consequence, a hosting company can offer to facilitate formation and location of new companies, provide tax administration services, and offer some form of "virtual company headquarters" software that enables group decision-making keeps core company records — making the "state of the company" visible to all concerned. A hosting company might offer such services in exchange for a percentage of the gross revenues or assets of the virtual companies it hosts. Such a hosting company would become a sort of "eBay for groups" — as opposed to the current real eBay for auction markets — helping users to found new companies and find the ones in which their own services would be most valuable.

It remains to be seen how many people will choose to come together to form and operate virtual companies. But there is reason to think this will happen. People are always more effective at creating value (and accomplishing any other kinds of goals) when they work together in groups. If the internet makes it easier to form and find groups that offer a kind of work that an individual is already well-positioned and available to perform, and if there is a reasonable prospect that the work will be compensated in proportion to value produced, we may all get a "net job" to supplement our "day job". People in developing countries who lack ready access to traditional employment opportunities may benefit greatly from this new organizational form.

One of the benefits provided by the virtual company form may turn out to be explicit identification of the roles available to be played. It may not be necessary or desirable to appoint any individual with plenary management powers. Instead, a virtual company founder may propose that members self-select to provide components of the product or service, provide quality control, make sales to third parties, negotiate contracts with suppliers or distributors, exercise control over a bank account or intellectual property assets, propose decisions for group action or articulate changing group goals and values. One individual might play several different roles, and some roles might be filled by many people simultaneously. Insofar as the creation of a new business inherently involves thinking through how many different people might coordinate their efforts to create value for customers, the explicitness of the screen might reduce the costs of doing so, particularly for groups that are engaged at a distance, for variable amounts of time, and self-selecting.

What Could Go Wrong?

What could go wrong? It's a long list. I'll discuss ten issues.

First, any state hosting virtual companies could make a mistake by charging franchise (formation) fees or income taxes at levels that would discourage exploratory formation of new entities. A much smarter strategy, like that contemplated by the hosting company described above, would be to charge a "franchise tax" based on gross revenues or assets and applicable only after a particular virtual company has created substantial value. Vermont currently charges a one time formation fee of \$50, with subsequent \$25 annual reporting fees. These amounts might be advanced by a founder and treated as a gift to the company (to avoid the complication of treating the payment as debt or, worse, as entitling the founder to an equity interest that could

be characterized as a security). It remains unclear whether a virtual company formed in Vermont might be obligated to pay a minimum income tax (approximately \$250) even if it has not revenue (or none derived from sales in Vermont). We are seeking a ruling on that question. More threateningly, some other states may assert the right to impose minimum corporate income taxes on Vermont virtual companies that have some "nexus" in such states. And some such states might claim that the presence of company members in their states satisfies this requirement. While choosing "pass through" tax treatment might eliminate tax at the corporate level, it creates a potential burden by requiring the distribution of all losses and gains to members, via K-1s, and this, in turn, might require real world identification of all members from the outset (instead of requiring this only when funds are actually distributed). Traditional tax rules are not optimized on this new form of group production, so there is still work to be done to convince local taxing authorities not to kill the virtual company infant in its crib.

Second, misguided regulators might characterize the interests in virtual companies as securities, bringing into play costly regulations that would kill the whole idea. This should not be a great risk, because the interests have value based solely on the efforts of the participants themselves and because, in the proposed forms of operating agreements, financial investments in exchange for equity interests, and transfers of individual member's contractual entitlements, are banned. But this is a risk that must be minimized.

Third, in order for a virtual company to open a bank account there must be financial institutions willing to deal with a legal entity composed of a transient membership. Overly vigorous application of "know your customer" rules or anti-money laundering statutes might drive banks to require individual "real world" identification of all participants – creating privacy risks and, more likely, transaction costs that discourage or deter the kind of transient participation that is optimal. To be sure, individuals who want to receive payment of money representing their share of any net proceeds would have to provide adequate identification (and comply with local tax and other laws). But the goal is to allow initial contribution on the same basis as is enabled by Wikipedia. We are in discussions with a local Vermont bank that seems open to the possibility that the "customer" who must be "known" is the Vermont virtual company itself (and, potentially, the founder). There is reason for optimism that these issues can be resolved. The goals of these regulations are to attack money laundering and reduce risk. Insofar as the bank account and books and transactional records of a virtual company all remain securely under the control of Vermont institutions, and open for inspection, risks are at a minimum and enforcement power remains in reliable hands.

Jourth, there is always some risk that a legal entity can be used for fraud or illegal (even terrorist) purposes. After all, the only difference between a "company" and a "conspiracy" is society's view of the lawfulness of the shared purpose of the enterprise! On balance, again, it seems easier to control any illegal activities when they take place in the context of a hosting company and a bank and accounting firm, all situated in Vermont, keeping the company books and funds. Obviously, a hosting company would retain the right and ability to shut down any illegal activities. But views of what is legal vary around the world, so the usual challenges and conundrums of internet jurisdiction and choice of law apply, perhaps somewhat more intensely than usual, in this context.

Fifth, it could turn out that the burden of rating other member's contributions and participating in horizontal decision-making will add too much cost, at least in terms of members' time and attention. It may be that many people just want to leave the decisions about compensation and coordination to a boss. The peer production phenomenon suggests the contrary. But this is an unknown. The answer would be for a hosting company to offer different flavors of operating agreement, some of which might allocate compensation decisions to a limited number of participants playing that role. The ability of participants to migrate freely among virtual company roles will produce evolutionary pressure leading to some optimal forms.

Sixth, third parties doing business with virtual companies may be surprised by the application of limited

liability in a context in which the company itself may not have the funds to compensate such a third party for a breach of contract or a tort committed in the course of the company business. This might be addressed by means of insurance and bonding, in situations in which the relationships between the company and third parties pose serious risks. Even traditional corporate law no longer entails notions of adequate capitalization, except in certain circumstances (like banking) where it is of the essence. Obviously, customers and suppliers of virtual companies will need to continue to protect themselves and make appropriate inquiries into the reputation and business histories of the companies with which they deal. One opportunity for the hosting company is to provide a cross-firm reputation system that helps all concerned decide with whom to deal.

Seventh, it is possible that a small group of individuals could game a rating systems so as to benefit themselves at the expense of other participants. But this risk can be minimized by making the rating systems themselves as transparent and flexible as possible. If everyone can see who is giving someone else favorable ratings, each individual can adjust their own rating decisions accordingly. The ability of a system like this to self-correct and prevent gaming has not been proven. But there is reason for hope.

Eighth, a highly successful virtual company might grow impatient with an increasing hosting company fee and seek to migrate away from the system, defeating the risk-spreading strategy that would enable low barriers to initial company formation. It seems likely that contractual protections can deal with this risk. But the stakes would grow ever higher if relatively few companies succeed to an extraordinary extent — which is the kind of Zipf power law distribution one must expect. On balance, this would be a good problem to confront, insofar as it implies some significant level of virtual company success.

Ninth, the restrictions on financial investment and transfers of interests could be attacked as in violation of state rules against restraints on alienation. An estate of a deceased member might assert that the interest must be allowed to pass to heirs. On the other hand, there are sound business reasons for these restrictions, and all participants would agree to these terms as a condition of entry into the shared production space. Contractual restraints on alienation have been favorably received in the context of small companies and traditional LLCs. There is a legal risk, but it seems manageable.

Tenth, a hosting company established to facilitate the formation and operation of virtual companies could itself fail, producing a serious legal and technical mess, with significant economic impact. The obvious answer is to allow for competition among hosting companies and take appropriate steps to escrow data. This kind of risk already permeates financial and other industries. It is certainly something to worry about. But many appropriate ways to lower the risk, or deal with catastrophes, are already known.

What Could Go Right?

What makes it worthwhile to take all these risks (not to mention the risk of forming a hosting company, which would itself require risking considerable capital to try to jump start the "market" for virtual firms)? The answer is that new, persistent organizational forms have the potential to create new wealth.

As Paul Romer has taught us, the very origin of wealth is finding new ways to collaborate together (to trade in goods, services and job descriptions). The market currently defines only a few kinds of roles. Traditional corporations define many more, but leave the power to do so in relatively few hands. The virtual company infrastructure will empower anyone to invent a new company purpose and imagine arbitrarily complex complementary roles for contributors.

The hosting system will allow individuals to discover for themselves the roles they are best suited (and willing) to play. Continuous evolution of the successful companies, and elimination of those that don't create sufficient value, will drive the entire system towards better results. And the persistence of the resulting organizations —

their ability to enter into contracts, own and protect property, make long term plans, reward the best contributors over time — will enable us, together, to attack problems and opportunities that cannot be as readily addressed by our traditional forms of social organization.

So things that could go right include: (1) people anywhere in the world quickly finding others with whom they can cooperate to create valuable products and services; (2) entrepreneurial founders helping others to imagine and pursue goals they could not achieve alone; (3) making use of expertise, ability and availability of attention and effort that is wasted inside traditional corporate hierarchies; (4) flexible assignments that adapt quickly to market conditions; (5) rapid abandonment of bad business ideas, with little risk or loss of capital; (6) an increase in the deployment of information to reduce costs associated with physical goods; (7) elimination of barriers to productive "employment" that relate to geographic distance; (8) increasing complexity of the global economy due to new types of "trade"; (9) increasing empowerment of individuals to shape their own working careers to fit their own unique talents and interests; and (10) increasing revenues for the State of Vermont and its citizens, with minimal environmental impact (if they collectively make the necessary infrastructure available, they will deserve this reward).

On the Brink of a New Opportunity

The virtual company project was initiated over two years ago by the Institute for Information Law and Policy at New York Law School. Teams of students have participated in drafting legislation, writing proposed operating agreements and terms of service for a hosting company, and designing new software interfaces optimized on showing relationships within a collaborating group and disclosing the state of a company at a glance. The necessary legislative changes have now been made. The original sponsor of the bill introduced in the Vermont house was Alison Clarkson. We are grateful for substantial assistance received from Oliver Goodenough of Vermont Law School, the Berkman Center and the Vermont Bar Association.

We are in the process of forming a hosting company and seeking support from key Vermont institutions (e.g., the Secretary of Economic Development) whose support will be needed to truly make Vermont into the 'Delaware of the Internet'. Potential software development partners, allied financial institutions and core staff have been identified. A business plan and decisions about funding and marketing strategies, for the hosting company, are under development. We have even retained a local Vermont lawyer who can navigate between the goal of enhanced online collaboration and the sometimes suboptimal or outmoded legal structures of the real world.

In the spirit of the underlying idea, we invite the contributions of all interested potential participants to help us make it easier for people to come together online to create (and, to the extent appropriate, collectively appropriate) new value in new ways.