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**FACEBOOK 2 BLACKBERRY AND
DATABASE TRADING SYSTEMS:
MORPHING SOCIAL NETWORKING TO
BUSINESS GROWTH IN A GLOBAL
RECESSION**

Roger M Groves, *Florida Coastal School of Law*



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**FACEBOOK 2 BLACKBERRY AND DATABASE TRADING SYSTEMS: MORPHING SOCIAL
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Roger M. Groves¹

“While Facebook’s international audience totaled 34 million people at the beginning of 2008, on the first day of 2009 that number had increased to 95 million - nearly 70% of the total Facebook audience.”²

I. Introduction

Facebook now has applications to the Blackberry Smartphone and iPhone. That expansion has sparked Facebook’s international explosion.³ If the Facebook social networking technology has applications to Blackberry, why not business?⁴ Can the Facebook model of data sharing be customized to propel U.S. technology firms into new international markets? This article claims the affirmative, through a multilateral clearing system, with credits and vouchers, as part of the exchange of a commodity and the creative use of an evolving trade practice termed “countertrade.” The voucher system envisioned is not dissimilar to the successful use of environmental tradable credits that provided incentives to major corporations to stop using

¹ Roger M. Groves is an associate professor at Florida Coastal School of Law, former tax judge and equity partner at Howard & Howard, Attorneys P.C. Emphatic appreciation is extended to Sean M. Murray and Sean M. Murrell for their valuable contributions as research assistants.

² Justin Smith, *The Facebook Global Market Monitor: Tracking Facebook in Global Markets*, <http://www.insidefacebook.com/facebook-global-market-monitor> (last visited June 9, 2009).

³ See *Facebook Surpasses 175 Million Users, Continuing to Grow by 600k Users/Day*, Feb. 14, 2009, <http://www.insidefacebook.com/2009/02/14/facebook-surpasses-175-million-users-continuing-to-grow-by-600k-usersday/> (last visited June 9, 2009). (noting that in February of 2009, if Facebook were a country it would be the sixth most populous in the world and that Facebook’s monthly growth accelerated by *at least 25% in 30 countries* in January 2009 vs. December 2008) (emphasis added).

⁴ Blackberry is commonly regarded as a businessperson’s phone-plus device of choice. See PRLog, *2 BlackBerry models try to answer iPhone*, <http://www.prlog.org/10155037-2-blackberry-models-try-to-answer-iphone.html> (last visited June 9, 2009).

environmentally harmful products.⁵ But such a model must confront the reality that the data sharing and franchise agreements related thereto would be between entities of different countries, and the exporting of electronic data is a technology transfer subject to international regulation.⁶ As such, international laws must be navigated. And the intellectual property rights of database creators are still amuck in murky waters. Through the examination of the Trade Related Aspects of Intellectual Property Rights, the European Union Database Directive and the United States Supreme Court's cornerstone case for database protections, this article explores the issues and opportunities surrounding the generation of technology-friendly laws for this Facebook clearing system model.

This article first asserts that United States businesses increasingly need international growth to increase profitability. Part III claims that particularly during global economic stress, a sophisticated form of bartering is increasingly employed in that search for increased profitability. Part IV introduces Facebook's legal underpinnings as a database in need of intellectual property protection relative to its customers, and other websites chosen by the customers, and Facebook's own software developers. Part V explores Facebook's potential for international growth and customization of the bartering model to Facebook. Part VI suggests that for the Facebook model to have effective and practical application, the legal relationship between the participants of the system must be clarified with stability in interpretation. This requires an examination of the primary intellectual property laws that attempt to define and regulate the relationships in international business transactions. The analysis of the selected database legal standards leads to the conclusion that the Facebook multilateral trading system can operate under each model, the

⁵ See John Norregaard & ValérieReppelin-Hill, *Controlling Pollution Using Taxes and Tradable Permits*, December 2000, <http://www.imf.org/external/pubs/ft/issues/issues25/index.htm> (last visited June 9, 2009).

⁶ "Technology Transfer" refers to the sale or licensing of intellectual property, or the field involving the sale and licensing of intellectual property. See BLACK'S LAW DICTIONARY (8th ed. 2004).

most favorable of which is the European Union model. Finally, Part VII explores whether that E.U. model, albeit favorable for database creators, is also good for the public and its access to information. This article urges that although monopolistic behavior is possible among database owners, the more likely result is that data sharing will be enhanced as it is already in play among current online modeling. All that is needed is the transformative process from social to business networking at the international level. And the advocated model is more desirable during times of global recession.

II. U.S. COMPANIES AND THE NEED FOR INTERNATIONAL MARKETS

A United States corporation has the primary obligation, indeed a legally enforceable fiduciary duty, to seek profitability on behalf of its shareholders.⁷ Any chairperson of a corporate board of directors that strolls to the podium at the annual meeting of shareholders and declares, “Our vision is to remain static with no program for growth in profitability” would probably be making his or her last speech in that capacity. A folksy financial axiom is that there are only three ways to increase profitability: (1) increase revenues, (2) decrease expenses, or (3) both. The focus in this article is primarily with increased revenue through a transactional model which helps establish new markets and transactional efficiencies while reducing entrepreneurial expenses and ameliorating a wasting of inventories associated with those transactions.

U.S. companies in search of profitability increasingly incorporate the global marketplace to achieve the desired and required growth. They need only examine where the growth in the U.S. economy has occurred to see that the future markets are international. As succinctly stated

⁷ See *Dodge v Ford Motor Co.*, 170 N.W. 668 (Mich. 1919) (requiring a higher dividend distribution despite the principal wish of Henry Ford to reinvest surplus for charitable purposes).

by the former United States Commerce Secretary, “[U.S.] exports were \$1 trillion in 2001. At present rates, America’s exports will be approaching \$2 trillion [in 2008] . . . [and] exports account for essentially all the growth in our economy so far this year [2008].”⁸ If the former Commerce Secretary is correct, export trade from the U.S. is not only an economic pain prescription for the country, but also two trillion reasons for private industry and government to engage in trade with foreign countries. And the profit potential is not confined to large multinational corporations such as accounting giant PricewaterhouseCoopers and IT goliath Hewlett Packard.⁹ Of the ten thousand U.S. companies that export to Colombia; 8500 are small and medium-sized firms (SMEs).¹⁰ Further, thirty-nine percent of the exports to Panama are from SMEs.¹¹ Unavoidably, there is controversy with global growth because more employees abroad may likely bring staff cuts in the U.S. CEOs and boards of directors earn their keep by balancing increased profitability goals and shareholder returns with domestic employee protections and related U.S. market and nationalism issues.¹²

Part of this sought after international growth can be achieved through iterations of established trade techniques. One of the oldest forms of commerce is bartering.¹³ Its longevity is testimony to its ever-evolving application in the current marketplace. Approximately 400,000

⁸ Comments by U.S. Commerce Secretary Carlos M. Gutierrez on November 18, 2008 at a Small Business Administration (SBA) trade symposium regarding the importance of trade and its role in “ensuring our nation’s future prosperity”. See http://www.commerce.gov/NewsRoom/SecretarySpeeches/PROD01_007531.

⁹ See *PwC emerging markets focus*, fDiMagazine, Oct. 7, 2008, http://www.fdimagazine.com/news/fullstory.php/aid/2532/pwc_emerging_markets_focus.html (last visited June 11, 2009). (detailing PwC’s global restructuring to follow its multinational client base into emerging markets); *HP expected to move jobs East*, fDiMagazine, Oct. 7, 2008, http://www.fdimagazine.com/news/fullstory.php/aid/2530/hp_expected_to_move_jobs_east.html (last visited June 11, 2009) (stating more than sixty-eight percent of HP’s revenues are generated overseas).

¹⁰ See International Trade Administration, The Trade Stimulus Fact Sheet-October 27, 2008, http://trade.gov/press/press_releases/2008/fta-factsheet_102708.asp (last visited June 11, 2009).

¹¹ *Id.*

¹² See http://www.fdimagazine.com/news/fullstory.php/aid/2530/hp_expected_to_move_jobs_east.html (last visited December 20, 2008).

¹³ Penni Crabtree, *About 400,000 Companies Barter Goods or Services Each Year*, The San Diego Union-Tribune, March 26, 2008.

U.S. companies barter annually, equaling approximately \$4.3 billion in transactions including international trade.¹⁴ The World Trade Organization (“WTO”) estimates that this non-cash basis of trade represents fifteen percent of all international trade, i.e. \$8.4 billion of \$5.2 trillion in trading activity.¹⁵ This article addresses the use of an evolving sophisticated form of bartering known as “countertrade”, and the way in which Facebook could be customized through countertrade concepts to be an innovative business model for international transactions during global economic downturns.

III. INCREASED BARTERING AND COUNTERTRADE IN GLOBAL ECONOMIC DOWNTURNS

There is a global economic recession as of the writing of this article.¹⁶ What began as the faltering of some major markets in industrialized nations has quickly evolved into what some have dubbed the greatest global recession since The Great Depression of the 1930’s.¹⁷ Financial

¹⁴ Penni Crabtree, *About 400,000 Companies Barter Goods or Services Each Year*, The San Diego Union-Tribune, March 26, 2008.

¹⁵ Penni Crabtree, *About 400,000 Companies Barter Goods or Services Each Year*, The San Diego Union-Tribune, March 26, 2008.

¹⁶ See International Monetary Fund, *World Economic Outlook: Financial Stress, Downturns, and Recoveries*, October, 2008, available at <http://www.imf.org/external/pubs/ft/weo/2008/02/pdf/text.pdf> (last visited June 7, 2009) (“Faced by increasingly difficult conditions, the global economy has slowed markedly. The advanced economies grew at a collective annualized rate of only 1 percent during the period from the fourth quarter of 2007 through the second quarter of 2008, down from 2½ percent during the first three quarters of 2007. Available data for the third quarter and forward-looking indicators suggest that the downturn in the advanced economies is continuing to deepen. Indeed, business and consumer confidence indicators for the United States and the euro area are now close to lows experienced during the 2001–02 recession. The emerging and developing economies have not decoupled from this downturn. Growth in these countries eased from 8 percent in the first three quarters of 2007 to 7½ percent in the subsequent three quarters, as domestic demand (particularly business investment) and net exports have moderated. Moreover, recent trade and business activity indicators are signaling continuing deceleration.”)

¹⁷ See International Monetary Fund, *World Economic Outlook: Crisis and Recovery*, April, 2009, available at <http://www.imf.org/external/pubs/ft/weo/2009/01/pdf/text.pdf> (last visited June 7, 2009) (“Wide-ranging and often unorthodox policy responses have made some progress in stabilizing financial markets but have not yet restored confidence nor arrested negative feedback between weakening activity and intense financial strains . . . The continued pressures reflect to an important degree the damaging feedback loop with the real economy – as economic prospects have darkened, estimates of financial losses have continued to rise, so that markets have continued to question bank solvency despite substantial infusions of public resources. As the vicious circle between the real and financial sectors has intensified, global economic prospects have been marked down further . . . By any measure, this downturn represents by far the deepest global recession since the Great Depression.”).

experts around the world have recognized not only the severity of this current global downturn but also its likely longevity.¹⁸ Many are forecasting that this global recession is going to continue to worsen before it begins to get better, and that the climb back to normalcy will be a slow and arduous one.¹⁹

The global recession also has localized effects on US firms. US firms dependent on state financing or tax breaks should also consider the impact of state budget deficits on their liquidity. State incentives like tax credits, exemptions, and abatements are subsidies offered to firms to locate within the state.²⁰ The 2009 economic stimulus package allocates most of its funds to states to help them through the recession by 2011.²¹ But state budget deficits are forecasted to be nearly twice the amount of stimulus funds over that same period, leaving a shortfall that prolongs the recession for the states.²² Indeed, the US Commerce Department and the Rockefeller Institute estimate that the recession for state revenue purposes will extend for over another three years.²³ These forecasts, if realized, would in this author's view reduce the amount of state subsidies that

¹⁸ See October 2008 World Economic Outlook, *supra* note 19 (“[T]he latest stage of the financial crisis has seen a further steady weakening in corporate and emerging economies’ positions . . . Markets remain exceptionally volatile, and it is difficult to predict how long this volatility will persist. The longer the turmoil lasts, the more entrenched the feedback loop between the financial and real sectors will become and the more broadly real sectors across the world will suffer. This, together with intensified and broadened deleveraging, would delay the recovery and increase the likelihood of a global recession. Accordingly, recent developments suggest that the outlook for global growth has weakened considerably as a result of recent events and that the downside risks to the baseline forecast have increased.”).

¹⁹ See April 2009 World Economic Outlook, *supra* note 20 (“To summarize, the 2009 forecasts of economic activity, if realized, would qualify this year as the most severe global recession during the postwar period. Most indicators are expected to register sharper declines than in previous episodes of global recession. In addition to its severity, this global recession also qualifies as the most synchronized, as virtually all the advanced economies and many emerging and developing economies are in recession. On this basis, the advanced economies are projected to suffer deep recessions.”).

²⁰ Peter D. Enrich, *Saving the States From Themselves: Commerce Clause Constraints on State Tax Incentives for Business*, 110 HARV. L. REV. 377, 382-406 (1996). Common state subsidies include Investment Tax Credits, Job Creation Credits, Research & Development Credits, Property Tax Abatements, Property Tax Exemptions, and Sales Tax Exemptions. *Id.* at 382-289.

²¹ Amy Merrick, *States’ Budget Woes are Poised to Get Even Worse*, WALL STREET JOURNAL, Vol. CCLIII No. 128, June 3, 2009, p. A2.

²² *Id.*

²³ *Id.*

previously existed since the states will need to accelerate tax collections to cover the shortfall once the stimulus funds expire. They could raise taxes, but of course that would be politically very unpopular. Another less volatile tactic is to reduce or eliminate tax breaks and subsidies to businesses, without an adverse impact on money-strapped individuals. Especially if the recessionary impact on states is prolonged another 3-plus years, tax abatements and credits may well expire during this time and not be renewed. If the tax credits and abatements disappear, these US firms will have greater tax liability. Taxes paid are expenses that likely reduce the amount of cash flow and liquidity. And if there is less liquidity, the firm may find bartering of goods and services a viable alternative to using cash for purchases. Even more obvious is the likelihood that severe state deficits would decrease the amount of state financing or the cost of borrowing from the state would be higher through higher interest rates. That too, would force US firms to consider alternatives to currency.

Particularly important to our current world economic distress is the observation that bartered trade increases in times of economic downturn.²⁴ As one trade organization official stated, “In an economy like this, businesses still have inventory, still have expenses, but they may not have the customers. What barter does is bring in new customers and allow businesses to use excess capacity or unsold inventory to pay for things they still need to run their business.”²⁵

At least as early as 2001, the international multilateral trading community recognized a global economic downturn and the need to assess the impact on the world’s commercial transactions.²⁶ Scholarly articles suggest that as global economic downturns increase, a modern

²⁴ Crabtree, *supra* note 16.

²⁵ *Id.*

²⁶ See World Trade Organization, Ministerial Declaration of 20 November 2001, WT/Min(01)/Dec/1, Declaration 1 [hereinafter Doha Declaration], available at http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm (last visited June 7, 2009), where the ministers of a multitude of World Trade Organization member states declared,

sophisticated form of bartering termed countertrade will increase.²⁷ This increase is anticipated in part because businesses in developing countries that depend on their own country's currency will have fewer assurances of hard currency payment when trading goods and services with businesses in developed countries.²⁸ If a business in a developing country has a softer currency than its business client, it may have to offer some substitute for currency – i.e. goods or services in trade for an “apples to apples” exchange of value with that business client.²⁹ Thus, a U.S. firm seeking new markets in a developing country should have increased bargaining power with a business from a developing country. If the U.S. firm has either an investment opportunity in that country or needs products from that country for its domestic business, the U.S. currency is an advantage and bargaining chip.

Another factor that may increase countertrade during global economic stress involves the banking system. There are central banking systems that are globally interconnected and they

“We are determined, particularly in the light of the global economic slowdown, to maintain the process of reform and liberalization of trade policies, thus ensuring that the system plays its full part in promoting recovery, growth and development.”

²⁷ Countertrade can be defined as “an exchange of goods or services by one party for goods or services of another” without a currency exchange between the parties. AARON XAVIER FELLMETH, *THE LAW OF INTERNATIONAL BUSINESS TRANSACTIONS* 432 (American Casebook Series 2009). The countertrade transaction is more the exception than the rule because of the potential for transactional inefficiencies, primarily the need for both parties finding a suitable exchange product and then the difficult assignment of an apples for apples valuation or exchange rate to make sure, for example, if a gravel producer wanted to exchange its gravel for office chairs of a chair manufacturer, they both received equivalent value. *Id.* at 433. This article suggests a Compatibility Exchange Matrix (“CEM”) be developed to match the products and exchange values although detail in that area is beyond the scope of this article; *see e.g.*, William D. Zeller, *Countertrade, The Gatt, And The Theory of The Second Best*, 11 *HSTICLR* 247, (1987) (“[A]n OECD study has found that sharp rises in international barter in all country groups have taken place during specific periods of global recession and illiquidity.”) (citing I. Outters-Jaeger, *The Development Impact of Barter In Developing Countries* 11-15 (1979); Thomas B. McVey, 17A *RMMLF-INST* 6, *Countertrade: Commercial Practices, Legal Issues And Policy Dilemmas* (1985) (“Countertrade practices in the Third World have been increasing at a dramatic rate in response to heightened problems generated by global economic pressures.”).

²⁸ *See* Thomas B. McVey, 17A *RMMLF-INST* 6, *Countertrade: Commercial Practices, Legal Issues And Policy Dilemmas* (1985) (“[Countertrade] requirements are imposed by countries as a mechanism to assist in expanding exports and generating sufficient amounts of hard currency to finance import transactions. In most cases, countertrade requirements are imposed by nations which are experiencing shortages in foreign exchange reserves, low currency values, or similar economic difficulties. In essence, a nation uses its purchasing power as leverage to generate the currency it needs to finance its purchases from a private firm and to force that private firm to accept the responsibility and corresponding risk of marketing the nation's marginally undesirable goods in the world marketplace.”).

²⁹ *See id.*

typically depend on a flow of inter-bank loans.³⁰ The Central banking system is not uncharacteristically under recent fire. Germany's Chancellor provided a rare criticism of the central banks of the European Union, United States, and Britain for investing and using bank policies that may "lay the groundwork for another financial blowup."³¹ During economic stress, the fear of high risk transactions causes the flow of bank loans to slow to a trickle, with a similar fate for bank guarantees.³² And those firms, including digital entrepreneurs, who depend on bank financing to show financial viability to other parties to a typical transaction, may have to resort to more countertrade transactions with different clients than those who only rely on benchmarks built on traditional bank financing formulas. As will be discussed below, countertrade can provide opportunities for database owners like Facebook to network those trading partners. And this article proffers a Facebook model for such transactions.

IV. FACEBOOK AND ITS LEGAL UNDERPINNINGS

On February 4, 2004, a Harvard student introduced an internet-based means for Harvard students to network amongst each other.³³ Five years later, over seven hundred employees now oversee and facilitate the electronic sharing of information among over fifty million people, and the uploading of 4.1 billion photos.³⁴ This confluence of communications has made Facebook this country's largest photo sharing site, sixth most trafficked site, and a reason for Microsoft to

³⁰ See generally MICHAEL BRUNO, ET AL., UNDERSTANDING INTERDEPENDENCE: THE MACROECONOMICS OF THE OPEN ECONOMY (Peter B. Kenen ed., Princeton University Press 1994).

³¹ Joellen Perry, *Germany Blasts 'Powers of the Fed'*, WALL STREET JOURNAL, Vol. CCLIII No. 128, June 3, 2009, A1.

³² See generally Annmarie H. Boyd, et al, *The Emergency Economic Stabilization Act and Responses to the Credit Crises: An Interim Report*, 126 BLJ 3 (2009).

³³ The founding student was Mark Zuckerberg. CrunchBase, <http://www.crunchbase.com/company/facebook> (last visited June 7, 2009).

³⁴ *Id.*

invest \$240 million for a mere 1.6 percent of the company in October of 2007.³⁵ At the time of the Microsoft investment, therefore, the company had a valuation of over \$15 billion, making Facebook the fifth most valuable internet company in the United States.³⁶ Yet, with a valuation in the billions, the annual revenue was but \$150 million.³⁷ The value therefore may well be in its potential, not its earnings. It is the potential that is explored in this article – the potential for business application internationally.

At its legal core, Facebook is a database.³⁸ Its core business is not the sale of tangible products like furniture or equipment. Rather, it selects and arranges information in a format that allows interactive use by its online customers. The previous Facebook “Terms of Use” stated in relevant part, “All content on the Site and available through the Service, including designs, text, graphics, pictures, video, information, applications, software, music, sound and other files, and their *selection and arrangement* (the “Site Content”), are the proprietary property of the Company, its users or its licensors with all rights reserved.”³⁹ (*emphasis added*). It is noteworthy that the “selection and arrangement” language is non-coincidentally identical to the phraseology employed to protect database owners’ two major sources for international intellectual property (“IP”) protection.⁴⁰ Those provisions will be discussed below in conjunction with other laws concerning the protection of databases. Based on the Facebook

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ This conclusion is by the author based on the material that follows regarding Facebook’s representations of what it provides to its customers and its harmony with legal characterizations of those arrangements described in this section.

³⁹ The Terms of Use cited for the purposes of this article are the previous iteration used by Facebook, they were recently modified and renamed the “Statement of Rights and Responsibilities.” A copy of the previous terms can be found at <http://manyeyes.alphaworks.ibm.com/manyeyes/datasets/facebook-terms-of-use/versions/1.txt>, and will be referenced throughout this article and referred to as “Facebook Terms of Use”. The new “Statements of Rights and Responsibilities” is available at <http://www.facebook.com/terms.php> (both last visited June 20, 2009).

⁴⁰ The two major sources are Article 10 of the Trade Related Aspects of Intellectual Property Treaty (TRIPs), and The European Union Database Directive. See *infra* Part.VI.

representation of its rights, it then declares that those rights allow Facebook to prevent others from unauthorized use of its proprietary property. In its own words:

No Site Content may be modified, copied, distributed, framed, reproduced, republished, downloaded, scraped, displayed, posted, transmitted, or sold in any form or by any means, in whole or in part, without the Company's prior written permission, except that the foregoing does not apply to your own User Content (as defined below) that you legally post on the Site.⁴¹

This section recognizes that its customers have potential protectable rights in whatever they submit to Facebook's website. But those rights do not include the ability to extract or tinker with Facebook's own site content.

Beyond those proprietary property rights declarations Facebook identifies its trademarks, stating: "graphics, logos, designs, page headers, button icons, scripts and service names are registered trademarks, trademarks or trade dress of Company in the U.S. and/or other countries."⁴² It also mentions its copyrights without further elucidation.⁴³

For eligible users, Facebook grants a limited license, described in the following section of the Terms of Use:

[Y]ou are granted a limited license to access and use the Site and the Site Content and to download or print a copy of any portion of the Site Content to which you have properly gained access solely for your personal, non-commercial use, provided that you keep all copyright or other proprietary notices intact. Except for your *own User Content*, you may not upload or republish Site Content on any Internet, Intranet or Extranet site or incorporate the

⁴¹ Facebook Terms of Use, *supra* note 42.

⁴² *Id.*

⁴³ The only copyright reference is in the Terms of Use warning "unauthorized use may also violate applicable laws including copyright and trademark laws and applicable communications regulations and statutes." Facebook Terms of Use, *supra* note 42.

information in any other database or compilation, and any other use of the Site Content is strictly prohibited.⁴⁴ (*emphasis added*)

Thus, Facebook already separates its own IP rights (site and site content) from any user's assembled content (e.g. own pictures, narratives of recent events, and tagging of pictures). As will be discussed below, that same separation is necessary to navigate the rights of business users in a more elaborate model.

And despite the user's ability to access the Facebook site, that access is merely a license to use, without the ability to extract and then use the Facebook site content without express authorization. As stated in the Facebook Terms of Use, "Such license is subject to these Terms of Use and does not permit use of any data mining, robots, scraping or similar data gathering or extraction methods. Any use of the Site or the Site Content other than as specifically authorized herein, without the prior written permission of Company, is strictly prohibited and will terminate the license granted herein."⁴⁵ The Facebook terms clarify that users only have a revocable license to use the site, not any IP rights in the site itself; stating, "Unless explicitly stated herein, nothing in these Terms of Use shall be construed as conferring any license to intellectual property rights, whether by estoppel, implication or otherwise."⁴⁶ This license is revocable at any time without notice and with or without cause.⁴⁷

The Facebook Terms of Use also recognize the shared content between users, and the need to address the interrelated intellectual property rights among Facebook, user A, and user B.⁴⁸ Facebook may send users through its links to third party websites, and disclaims

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *See id.*

responsibility for the content of those sites.⁴⁹ Since Facebook offers the opportunity for users to share member profiles, video, and other content created by those users, Facebook requires users to conform to certain rules.

Another Facebook relationship involves content flow from a third party website (Online Content Provider, “OCP”) to Facebook member to other friends of the member. Through what is termed a Share Link, Facebook member information is actually appearing on the OCP’s website and Facebook facilitates content flow from the OCP site to a Facebook member or that member’s friends. As stated in the Facebook Terms of Use, “[A] Share Link is a button and/or a text link appearing on an Online Content Provider's web page that, upon being clicked by a user, enables [Facebook] to launch a sharing mechanism through which users can share with others or post to their own member profile, links and content from that page.”⁵⁰

The Terms of Use note that any OCP has permission” presumably a license, to use Facebook logos and IP only for the sharing purpose, not unauthorized profiteering.⁵¹ Nor shall the OCP provide content that violates Facebook rules.⁵² The model proposed in this article also envisions Facebook facilitating third party websites, from which content may flow to members of an exchange group of entrepreneurs under specified parameters. For example, a third party firm in Nepal, India that is a software networking trouble shooter (OCP) may have a website that other members of the business exchange group can use to better the member’s goods or services. Assuming Facebook has international cultural connectivity with India in ways its members do

⁴⁹ Facebook Terms of Use, *supra* note 42 (“The Site contains (or you may be sent through the Site or the Service) links to other web sites (“Third Party Sites”) as well as articles, photographs, text, graphics, pictures, designs, music, sound, video, information, applications, software and other content or items belonging to or originating from third parties.”).

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Id.*

not, Facebook is value added to its members in making available OCP data for its Facebook users. As the previous example illustrates, all of these social network relationships described in the Facebook Terms of Use – customers, OCPs and Facebook – have broader business applications in the international trade transactions.

V. FACEBOOK INTERNATIONAL GROWTH

A. *Business Opportunities as a Multilateral Clearing System*

The insatiable appetite for profitability may lead a U.S. firm to tap into the expertise of others as business partners in efforts to increase market share. Facebook is no exception. Its business partners were software developers. Its hope was to increase profitability through new *applications* and expand into new international markets.⁵³ Thus far, the plan has legs. Facebook has recently experienced international growth in ways most business ventures only dream of.⁵⁴ There are numerous illustrations of the global Facebook explosion. During 2008 alone, Italy experienced growth of 2900%.⁵⁵ Now, approximately 8.5% of the Italian population accesses Facebook, making Facebook the fourth most trafficked website in Italy.⁵⁶ The 2008 year also

⁵³ The term “applications” refers to Facebook applications. A Facebook application is defined as a platform for developers which provides a framework to interact with the core Facebook features. Facebook applications have detailed descriptions, users ratings and reviews, wiki pages, detailed features, and screen shots. See Servepath.com, Glossary of Dedicated Server Hosting Terms, <http://www.servepath.com/support/definitions.php> (last visited June 16, 2009).

⁵⁴ Facebook started 2008 with 5 million monthly active mobile users. By January 2009 over 20 million users were actively using Facebook through mobile platforms. Additionally, growth continues to spiral upwards internationally, particularly in Europe and South America. See Insidefacebook.com, Sandberg: 20 Million Users Now Accessing Facebook Through Mobile Platforms, <http://www.insidefacebook.com/2009/01/09/sandberg-20-million-users-now-accessing-facebook-through-mobile-platforms/> (last visited June 16, 2009).

⁵⁵ See Justin Smith, *The Facebook Global Monitor: Tracking Facebook in Global Markets*, <http://www.insidefacebook.com/facebook-global-market-monitor> (last visited June 16, 2009).

⁵⁶ See Facebook Growth Surges in Italy: Developers Look for Better Italian eCPMs, <http://www.insidefacebook.com/2008/12/18/facebook-growth-surges-in-italy-developers-look-for-better-italian-ecpms> (last visited June 16, 2009).

brought Facebook an increased penetration of 600% in Spain, 400% in France, 400% in Switzerland, 2000% in Argentina, and 600% in Indonesia.⁵⁷

Facebook applications have been developed for iPhone and Blackberry Smartphone users.⁵⁸ At least one million Blackberry users have already downloaded Facebook onto their respective devices.⁵⁹ The “application” or connection between Facebook and the Blackberry device is not developed by Facebook.⁶⁰ Facebook only provides the link and does not claim responsibility for the application of Facebook to the device.⁶¹ Rather, an independent software developer provides the application connectivity. In the case of the Facebook-Blackberry arrangement, the software developer is Research In Motion, Ltd. (RIM).⁶² The Facebook website provides the following description of RIM’s business activity:

“Research In Motion is a leading designer, manufacturer and marketer of innovative wireless solutions for the worldwide mobile communications market. Through the development of integrated hardware, software and services that support multiple wireless network standards, RIM provides platforms and solutions for seamless access to time-sensitive information including email, phone, SMS messaging, Internet and intranet-based applications. RIM technology also enables a broad array of third party developers and manufacturers to enhance their products and services with wireless connectivity to data.”⁶³

Thus, for international Facebook applications there are intellectual property rights of two major contributors to be protected, Facebook and its software developer. If members of an international exchange network of businesses existed, Facebook may need to engage the services

⁵⁷ See *supra* note 46.

⁵⁸ See e.g., Facebook, <http://www.facebook.com/apps/application.php?id=2254487659&ref=s> (last visited June 16, 2009).

⁵⁹ See Natasha Lomas, *Facebook for Blackberry racks up a million hits*, <http://networks.silicon.com/mobile/0,39024665,39181364,00.htm> (last visited June 16, 2009).

⁶⁰ <http://www.facebook.com/apps/application.php?id=2254487659&ref=s>

⁶¹ See Facebook, <http://www.facebook.com/apps/application.php?id=2254487659&v=info&viewas=0> (last visited June 17, 2009).

⁶² *Id.*

⁶³ *Id.*

of a software developer and contractually allocate rights between them. Very likely, the software developer would license the software to Facebook in exchange for royalty payments.

Then, using the same type of provisions from its existing Terms of Use, Facebook would detail the relationship between the Facebook, OCPs and the business customer. Business users of the site would not have extraction and tinkering rights to the Facebook/Software Developer's site content any more than the individual social networking users unless authorized by Facebook.

B. The Role of the Multilateral Clearing System (MCS)

While barter exchanges are centuries old, they are an evolving and growing part of international countertrade and have found a place in multilateral trading among information technology firms.⁶⁴ The generic formulation of this system involves the following parties:

1. An exporter of goods and/or services (a U.S. firm in this model) who is also willing to purchase goods or services in exchange.
2. A clearinghouse that takes title and risk of loss of the goods.
3. An international off-shore entity, willing to purchase or sell goods or services with the U.S. exporter and other exchange members.⁶⁵

Both the U.S. exporter and international buyer agree to be part of the exchange system where the clearinghouse processes a cash payment, or a voucher/credit, or a combination of these items as the return payment for their respective goods and services.⁶⁶ That clearinghouse entity also finds the market for the goods supplied to it by the exchange participants.⁶⁷ An example is a U.S. firm

⁶⁴ See George Cassidy, *Financing Strategies- Barter's Rebirth*, EAST/WEST COMMERSANT, Dec.1, 1995, available at 1995 WLNR 4072109.

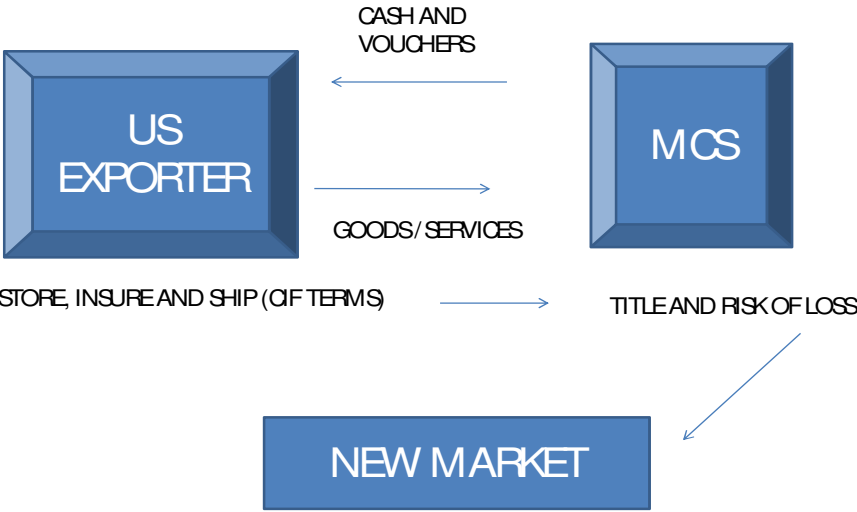
⁶⁵ See, e.g., *id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

with excess inventory, or a firm with a product that is no longer as marketable or available in the U.S. due to a change in U.S. environmental or food and drug regulations. The U.S. firm does not have expertise or business affiliations in international markets. Yet, it nonetheless desires to find a market for those products and thereby generate profits rather than losses.

In the clearinghouse, the U.S. firm finds an entity that has international resources and expertise as well as a network of potential purchasers of the U.S. firm’s excess or economically obsolete goods. Since the clearinghouse takes title and assumes the risk of loss for the product, the U.S. exporter has minimized its risk. All the clearinghouse requires is that the U.S. exporter store, insure and ship (CIF terms) until the goods are delivered.⁶⁸ The clearinghouse is termed the multilateral clearing system (“MCS”). The graphic description of this basic system is below:



⁶⁸ These are traditionally accepted terms in transport, known as C.I.F., for cost, insurance, freight, all at the expense of the seller until the goods reach an agreed destination. See RALPH H. FOLSOM ET AL., INTERNATIONAL BUSINESS TRANSACTIONS 2 (9th ed. 2006 Documents Supp. 2006).

The U.S. exporter may use the cash and/or voucher and credits for any number of purposes to fulfill other business needs. Vouchers or credits may be tradable for office equipment or construction services if, for example, the U.S. entity is planning a plant expansion or is starting up with minimal capital. Some credits and vouchers could even take the form of travel or other perks to reward employees or clients.⁶⁹ From such use, an exchange member may find enhanced firm goodwill, increased retention of existing highly-valued employees or clients, or future clients who also see value in such voucher arrangements.

Vital to the value of the MCS is its ability to bring entrepreneurs into the same MCS system in a way that expands each firm's sales beyond its own preexisting client list. The MCS model is designed to expand a firm's sources for future revenues beyond what the firm otherwise gains on its own. The MCS system transforms a simple barter among two parties into a multi-faceted MCS. As one commentator summarized, "Today, simple barter has blossomed into the sophisticated system known as countertrade. . . . And that has, in turn, nurtured a new breed of entrepreneur, the expert who can form a chain of buyers and sellers so that, eventually, everybody gets what he wants."⁷⁰

A simple hypothetical two-party barter may be between a construction contractor that needs office equipment and a manufacturer of office equipment that needs a small plant expansion. They could exchange products and no sophisticated MCS model would be necessary. If, however, party A is a person or small company with a U.S. patent of a pharmaceutical product that cures a disease found mostly in developing countries, that patent holder may find valuable a

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⁷⁰ RALPH H. FOLSOM ET AL., INTERNATIONAL BUSINESS TRANSACTIONS 252 (9th ed. 2006) (quoting excerpt of article *Back to Barter* from ICC BUSINESS WORLD, Summer 1983, p.6).

network already versed in the customs and practices of developing countries, assuming those in developing countries also have something of equivalent value to offer the patent holder.⁷¹

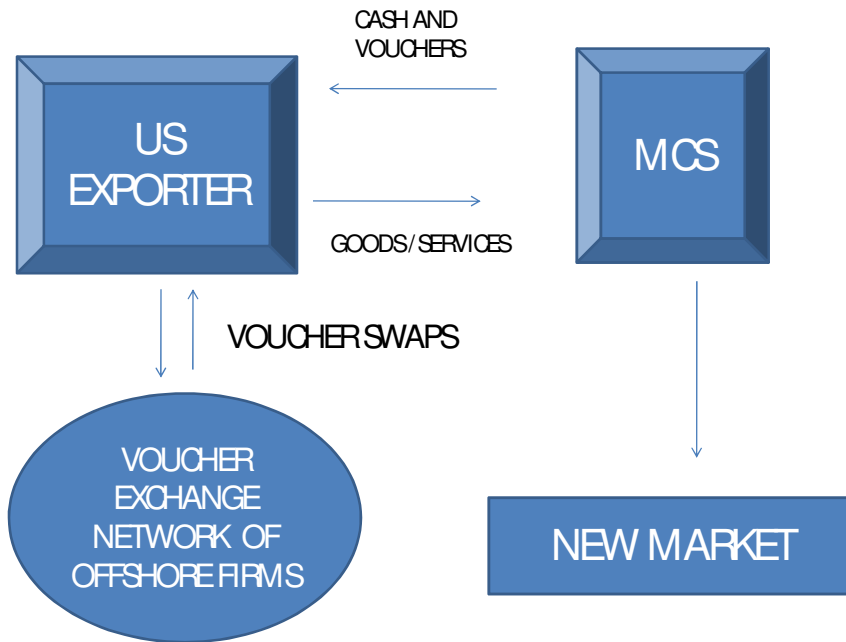
C. Facebook as an MCS

The value added services of the MCS are several and are perhaps best illustrated through this attempt to customize the MCS to Facebook. Obviously, the system is ultimately designed to provide the chain of buyers and sellers. So, imagine if Facebook's owners decided to expand its international client base beyond socially networking individuals sharing personal photos and messages via personal mobile phones and computers to businesses sharing and downloading business E-signed documents, graphics and images. What would prevent the Facebook MCS from using computer technology and global marketing techniques to allow businesses in different countries to exchange products and services through the above system of cash and credits/vouchers? What would prevent Facebook, already expert at overseeing a value-added social network exchange, from overseeing a value-added business network exchange? Facebook could indeed establish a chain of buyers and sellers so that credits earned by one seller could be exchanged for the services of another entity in the exchange network. The vouchers or credits could be used to swap for anything from raw materials, capital equipment, supplies, and worldwide services for travel, accommodations and advertising.⁷²

⁷¹ An example may be the patent holder's desire for patients for further studies, paid for and provided by the one or several developing countries. The developing country could itself be a member of the MCS exchange system. The patent holder may then earn vouchers as a credit to exchange with several of those countries.

⁷² See George Cassidy, *Financing Strategies- Barter's Rebirth*, EAST/WEST COMMERSANT, Dec.1, 1995, available at 1995 WLNR 4072109.

The graphic depiction of the exchange network is below:



One MCS provider devoted 100 persons in a New York office to essentially three tasks: (1) making deals, (2) re-marketing inventories, and (3) paying companies that are part of the exchange network.⁷³ Among the million-plus and growing Blackberry owners who have already downloaded Facebook, isn't it likely that many are using the Blackberry for business purposes already? And, if Facebook devised an application for business as seductively attractive as its social network tools, is there not also vast potential for an MCS through Facebook? Instead of connecting with college alumni, a firm could connect with exchange members who have been carefully selected and categorized for their mutually beneficial aspects.

⁷³ See George Cassidy, *Financing Strategies- Barter's Rebirth*, EAST/WEST COMMERSANT, Dec.1, 1995, available at 1995 WLNR 4072109.

Some firms may argue that they are just as capable of finding business partners from search engines and websites of those same business clients. This Facebook MCS is not suggested as ideal for all. Perhaps some large, well- healed firms can afford significant international networking resources and have the ability to select and arrange information in a user-friendly manner that attracts a multitude of entities that connect with each other. But, at least on the social networking side of transactions, no one has done it like Facebook.

There are various challenges in an international transaction. Facebook’s clearinghouse function would offer each member the value-added service of being the customs, cultural, and legal *translator* to facilitate the international transaction. Unlike the United States, some nations mandate the designation of a local agent for the distribution of goods into that country.⁷⁴ Such provisions are non-waivable by contract between the parties. Even distribution agreements may be severely restricted.⁷⁵ Facebook could screen credible from unscrupulous agents by recommending or certifying agents via its role as an MCS provider. Similarly, U.S. firms may face anti-Americanism or related cultural issues occasioned by fear of exploitation of another country’s cultural or natural resources.⁷⁶ Countries currently struggle with whether to even allow social networking sites to operate within their borders.⁷⁷ The similar issue may face a business variant or division of such sites. Facebook could be the more culturally-friendly face of America with certain trading partners, and could play a lobbyist role as well. Indeed, the MCS is essentially a vehicle designed to fulfill the goals articulated by various nations in a recent treaty: to facilitate international multilateral commercial transactions and affirm the goal of “upholding

⁷⁴ RALPH H. FOLSOM ET AL., INTERNATIONAL BUSINESS TRANSACTIONS 239 n.4 (9th ed. 2006).

⁷⁵ See *id.* at 238-243.

⁷⁶ See *id.* at 10-11 n.1.

⁷⁷ See CNN.com, *Iranians Regain Access to Facebook, Twitter*, May 26, 2009, <http://www.cnn.com/2009/WORLD/meast/05/26/iran.facebook/index.html> (last visited June 20, 2009) (discussing the recent shutdown of Facebook and Twitter in Iran).

and safeguarding an open and non-discriminatory multilateral trading system.”⁷⁸ Similarly, the goal of the MCS in countertrade transactions is to increase transactions among firms from various countries, particularly parties new to technology transfers from developing countries.⁷⁹ And to achieve that goal, the MCS can assist in the effort to solve soft currency or liquidity issues through voucher credits and carefully matched exchange partners.⁸⁰

And, rather than each member paying each of its respective counsel, would not each firm contemplating international transactions prefer a specialized legal group that combines the cultural filter with the required international documents? Bills of lading, letters of credit, and the above-noted agent rules of particular jurisdictions are but a few of the specialized areas that would be involved in such transactions.⁸¹ If Facebook provided the legal team a small portion of the transactional fee charged to facilitate the transactions, it could both provide and subsidize these quality legal services.

The Facebook legal team would, for example, provide value to exchange members if a foreign nation requires a foreign distributor or agent resident to that country in order to sell goods in that country.⁸² The legal team may therefore draft an agreement to parse out the relative rights, responsibilities, liabilities, and representations and warranties between that

⁷⁸ See World Trade Organization, Ministerial Declaration of 20 November 2001, WT/MIN(01)/DEC/1 ¶ 6, available at http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm.

⁷⁹ “Technology Transfer” refers to the sale or licensing of intellectual property, or the field involving the sale and licensing of intellectual property. See BLACK’S LAW DICTIONARY (8th ed. 2004).

⁸⁰ “Soft Currency” refers to currency that is not backed by reserves and therefore subject to sharp fluctuations in value. See BLACK’S LAW DICTIONARY (8th ed. 2004). Soft currencies are not in demand in world markets. See http://www.anz.com/edna/dictionary.asp?action=content&content=soft_currency (last visited June 20, 2009).

⁸¹ A bill of lading is the official document prepared by the carrier duly accepting the goods for shipment containing information like item quantity, value, vessel details, date, port, consigner, consignee etc. The bill of lading is the contract to carry the goods to the said destination based on which seller can claim consideration and buyer can take delivery of the goods. See Legal-Explanations.com, <http://www.legal-explanations.com/definitions/bill-of-lading.htm> (last visited June 20, 2009). Letters of Credit are documents issued by a bank that guarantee the payment of a customer’s draft. In essence, letters of credit are instruments used to substitute a bank’s credit for that of the customer, who, in international transactions, may be unknown to the seller. See <http://wordnetweb.princeton.edu/perl/webwn?s=letter%20of%20credit> (last visited June 20, 2009).

⁸² See FOLSOM, *supra* note 65, at 239.

exchange member and its foreign agent or partner. Within an international agreement, those rights may obviously include the licensing by the foreign distributor/agent (“partner”) of the U.S. software developer’s technology. The traditional protections of that technology under U.S. law are through patents, copyrights and trademarks.⁸³ While there are varying rights among the three protection types, the trademark licensing is at the core of most international franchise agreements and Facebook would protect the exchange member’s rights in the foreign agent agreement.⁸⁴

What may also separate Facebook from the individual exchange member or other MCS providers is its seemingly unique connectivity with the younger generations, which translates into the, say, under fifty-something entrepreneurs, which now includes Twitter.⁸⁵ That younger business segment may also be the plasma for innovation in technology. They may be the business generation most likely to be using the Blackberry Smartphone or iPhone as it evolves more business applications. That segment may therefore embrace rather than shun the electronic transmission of important international documents like a letter of credit or bill of lading, and may accept the related E-signatures on such documents.⁸⁶ The types of goods and services to be exchanged (apart from the voucher swaps) may increasingly be software or other intangible property from this creative database generation of entrepreneurs.⁸⁷ Facebook may have goodwill with developers and other electronically sophisticated entrepreneurs since Facebook itself is an entity that was born into and profited from its internet acumen.

⁸³ *See id.* at 790-99.

⁸⁴ *Id.* at 790, 801.

⁸⁵ Facebook does not have a patent on youthful entrepreneurship. Twitter’s three co-founders are all in their 30’s and incidentally they did not depend on traditional criteria for business success. They were all college dropouts. *See* Jon Swartz, *A World That’s All a-Twitter*, USA TODAY, May 26, 2009, at B1. But the point is the same. There is a generational dynamic to information technology modeling. This article attempts to incorporate that dynamic in modeling future international business transactions in periods of global economic stress.

⁸⁶ The Electronic Signatures in Global and National Commerce Act of 2000 establishes the legal equivalency of electronic contracts, electronic signatures, and other electronic records with their paper counterparts. *See* BLACK’S LAW DICTIONARY (8th ed. 2004).

⁸⁷ For further description of these entrepreneurs, see Groves, “Gen GT: Future Business Ventures in Global Technology and Entrepreneurs of the Data Sharing Generation” at SSRN: _____.

D. MCS Benefits

For the MCS exchange member, the benefits of a Facebook MCS can be summarized as follows: (1) developing a new market/ customer base, (2) the ability to sell excess capacity or domestically obsolete commodities, and (3) converting losses from that excess capacity into revenue or needed goods or services.⁸⁸ The exchange is essentially an alternative to cash but achieves the same purchasing power as a form of currency; thus it conserves cash.⁸⁹ And, conserving cash can improve cash flow since there is more cash then available for other business purposes.⁹⁰

As stated earlier, the Facebook MCS may not be well-suited for every international business firm. But if a firm is among the U.S. small and medium sized businesses in international trade without the resources or expertise to build both a customized network of purchasers of its product or a qualitative legal team for those transactions, the Facebook MCS may be advisable.

E. Capitalization of the Entity

The capital needed to establish and maintain such an MCS is typically generated from the following primary sources: (1) existing reserves dedicated to expansion, (2) monthly fees from members in the exchange, (3) website advertising, and perhaps most significantly (4) a

⁸⁸ See Cassidy, *supra* note 64.

⁸⁹ See Michael Joe Medill, *Illinois Trade Association Acquired for \$4 Million*, DAILY HERALD (Arlington Heights, IL), October 5, 2006, available at 2006 WLNR 24575069.

⁹⁰ *Id.*

transactional fee for each commodity exchanged.⁹¹ As for the potential for advertising revenue from the Facebook MCS website, its considerable market penetration from being one of the most trafficked sites on the planet provides an attractive lure to advertisers. Each exchange member could also advertise. Each outside entity that desires the exchange members as clients could advertise. Beyond advertising, each transaction facilitated by Facebook would generate a fee for the customer's use of Facebook's many value-added features described above.

As stated by one executive of an exchange company, "Today, business is conducted in a borderless world and barter is an effective tool for companies to expand and penetrate global markets, and grow their bottom line."⁹²

VI. THE INTELLECTUAL PROPERTY RIGHTS OF FACEBOOK AND MCS MEMBERS AS DATABASE CREATORS IN INTERNATIONAL TRANSACTIONS: HARMONIZING THE INTELLECTUAL CREATIONS OF THE MCS PARTIES

A MCS can only effectively function if there is clarity in the legal relationships among all participants in the system: i.e. the exchange members and Facebook as facilitator. Only by knowing the relative rights in their respective property can a member then enter into assignments of interests and license agreements regarding those rights. Obviously, conflicting claims or uncertainty over the parties' respective rights in specific property and the extent of protection of that property could thwart the buying and selling of goods and services in this transactional format. The focus in this writing is on the facilitator, Facebook, which lies at the heart of the transaction and quarterback the team of traders.

⁹¹ See Michael Joe Medill, *Illinois Trade Association Acquired for \$4 Million*, DAILY HERALD (Arlington Heights, IL), October 5, 2006, available at 2006 WLNR 24575069; Penni Crabtree, *About 400,000 Companies Barter Goods or Services Each Year*, THE SAN DIEGO UNION-TRIBUNE, March 26, 2008, available at 2008 WLNR 5816844.

⁹² *Thriving on Barter*, BUSINESS TIMES (Singapore), October 30, 2006, available at 2006 WLNR 18781084.

This author asserts that the primary protection of the facilitator is for its creation of a database. A database can be generically defined as a “collection of information that is organized so that it can easily be accessed, managed, and updated.”⁹³ In one view, databases can be classified according to types of content: bibliographic, full-text, numeric, and images.”⁹⁴ The countertrade model will need to preserve the integrity of the database that creates a format for exchange users, the methods of user interactions in buying and selling goods and services amongst each other. There are differing legal models for protection of databases and how a Facebook MCS falls within those standards is discussed below.

A. Intellectual Property Protection of International Databases

Three sources of IP protection for databases are explored at the international level: Article 10 of the international treaty entitled Trade-Related Aspects Intellectual Property Rights (“TRIPs”)⁹⁵, the European Union’s Database Directive (EUDD)⁹⁶ and the U.S. model based on the United States Supreme Court’s decision in *Feist Publications, Inc. v. Rural Telephone Service Company, Inc.*⁹⁷ Those sources will be discussed below in turn. Each country, of course, is a sovereign with the right to establish its own codification of intellectual property laws. But in recognition of international agreements, countries form treaties amongst each other to

⁹³ SQLServer.com, http://searchsqlserver.techtarget.com/sDefinition/0,,sid87_gci211895,00.html (last visited June 20, 2009); *see also infra* note 139.

⁹⁴ *Id.*

⁹⁵ Agreement on Trade-Related Aspects of Intellectual Property Rights, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299 (Apr. 15, 1994), *available at* http://www.wto.org/english/docs_e/legal_e/27-trips.pdf (last visited June 20, 2009).

⁹⁶ Directive on Legal Protection of Databases (Database Directive), 96/9/EC, OJ 77 (Mar. 27, 1996) *available at* <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31996L0009:EN:HTML> (last visited June 20, 2009).

⁹⁷ *Feist Publ’n, Inc. v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340 (1991).

facilitate uniform rules for those transactions. For purposes of this article, copyright protection is primary for this discussion.⁹⁸

B. The Challenge

The law often is faced with the daunting task of catching up to innovative business practices. Global integration of businesses involved in information technology (“IT”) and their collaborative tools is no exception.⁹⁹ Such tools include databases, net meetings, wikis, team rooms, grid and cloud computing, and of prime relevance to this article, social networking networks like Facebook.¹⁰⁰ Technology designed for international use has the unintended consequence of leaving the law of various countries playing catch up.

Our global integration, combined with these new mediums that facilitate the ease and speed of data sharing, bring many challenges, including export compliance. Large and small companies alike have been caught off guard by this export issue, primarily because the actual export (e.g., the ability for foreign nationals abroad to remotely access technology) is neither transparent nor intuitive.¹⁰¹

The issue of how to regulate international data sharing is not only befuddling to digital entrepreneurs, but also to international law of various governments. This is evidenced in the following comment:

At the same time, this type of technology transfer does not necessarily trigger the traditional export control points long-established within businesses, such as controls for physical shipments or physical collocation with foreign nationals. This has further contributed to the inability of some to identify offshoring

⁹⁸ Trademarks are also highly valued, particularly where franchise rights are granted internationally, but that is beyond the scope of this article.

⁹⁹ Lisa M. Palluconi, *The “Ten Step” Plan: Recovery From Denial of Technology Transfers*, 910 PLI/COMM 343, 345 (2008).

¹⁰⁰ *Id.*

¹⁰¹ Palluconi, *supra* note 102, at 345.

and virtual collaboration as potential export compliance exposures.”¹⁰²

C. *The International Response for Databases*

After eight years of negotiations, the world’s major economic powers agreed upon a series of treaties in 1994, known as the World Trade Organization Agreements.¹⁰³ One of those treaties was the Agreement on Trade-Related Aspects of Intellectual Property Rights (“TRIPs”).¹⁰⁴ TRIPs is regarded as the world’s most comprehensive embodiment of multilateral international IP standards.¹⁰⁵ TRIPs requires that countries establish copyright protection for computer programs and compilations of data.¹⁰⁶ Article 10 is specific to computer programs and databases, and states in its entirety:

1. Computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention (1971).
2. Compilations of data or other material, whether in machine readable or other form, which by reason of the selection or arrangement of their contents constitute intellectual creations shall be protected as such. Such protection, which shall not extend to the data or material itself, shall be without prejudice to any copyright subsisting in the data or material itself.¹⁰⁷

¹⁰² *Id.*; see also Kathleen C. Little et al., *Joint International Production, Research and Co-Development with Foreign Partners: Managing Export Compliance Risk in the Global Marketplace*, 6 No. 5 INT’L GOV’T CONTRACTOR ¶ 34 (2009) (“[T]his article focuses on the inevitable export compliance issues facing U.S. companies in this ‘new world order’ of ever-increasing international collaborative ventures.”); Lisa M. Palluconi, *You Might Have Technology Exports If: Identifying Technology Exports in Virtual Collaboration and Offshore Services* (May 21, 2009).

¹⁰³ AARON XAVIER FELLMETH, *THE LAW OF INTERNATIONAL BUSINESS TRANSACTIONS* 432 (American Casebook Series 2009).

¹⁰⁴ *Id.*; Agreement on Trade-Related Aspects of Intellectual Property Rights, *supra* note 98.

¹⁰⁵ AARON XAVIER FELLMETH, *THE LAW OF INTERNATIONAL BUSINESS TRANSACTIONS* 4, 61 (American Casebook Series 2009) (Under TRIPs, member states are required to enforce IP laws affecting all major forms of IP protection, patents, trademarks, trade secrets and copyrights).

¹⁰⁶ See generally Agreement on Trade-Related Aspects of Intellectual Property Rights, *supra* note 98.

¹⁰⁷ *Id.* at art. 10.

First, it is noteworthy that computer programs are treated separately as literary works in Section 1.¹⁰⁸ Databases, on the other hand, are compilations of data under Section 2.¹⁰⁹ Section 2 is particularly relevant to this analysis since Facebook is a compilation of data, not a computer program. And as noted above, the “selection or arrangement” of materials in Section 2 is the same phraseology once employed by Facebook in its description of its legal rights in relation to Facebook users.¹¹⁰ Saliently, that “selection or arrangement” of the database contents is what is legally protected as intellectual creations. So under TRIPs, a Facebook MCS would be a protected intellectual creation by its selection of certain exchange member data that is made available for trade with other exchange members. The intellectual creation is born when Facebook takes an entrepreneur’s electronic descriptions of goods for sale or trade, and arranges those descriptions in a compilation with all other exchange members.

Section 2, however, does not explicitly distinguish original from non-original compilations of data.¹¹¹ As will be discussed below, the United States Supreme Court made such a distinction primary in *Feist*.¹¹² Should there be a conclusion, therefore, that under TRIPs anyone who compiles a database and has *any* element of selection or arrangement of data has IP protection? Some commentators conclude that the act of selection and arranging data is itself the intellectual creation consistent with U.S. law.¹¹³ Many in the same community, however, agree that TRIPs provides only a minimum level of IP protection.¹¹⁴

¹⁰⁸ *Id.* at art. 10(1).

¹⁰⁹ *Id.* at art. 10(2).

¹¹⁰ Facebook Terms of Use, *supra* note 42.

¹¹¹ Agreement on Trade-Related Aspects of Intellectual Property Rights, *supra* note 98, at art. 10(2).

¹¹² *See infra* Part VI.E.

¹¹³ RAYMOND T. NIMMER, LAW OF COMPUTER TECHNOLOGY, § 1:13 (June 2009).

¹¹⁴ *See generally* Andrea Antonelli, *Applicable Law Aspects of Copyright Infringement on the Internet: What Principles Should Apply?*, 2003 SINGJLS 147, 148-49 (2003); David E. Shipley, *Thin But Not Anorexic: Copyright Protection for Compilations and Other Fact Works*, 15 JIPL 91 (2007); Sheldon W. Halpern, *The Art of Compromise and Compromising Art: Copyright, Technology, and the Arts*, 50 JCPS 273, 307-08 (2003).

Finally, TRIPs distinguishes between the rights of database creator and whoever supplied the bits of data that go into the making of (or subsisting in, per the agreement language) the database.¹¹⁵ Section 2 clearly provides that data already copyrightable does not lose that protection just because it is included in a database.¹¹⁶ In the context of the Facebook MCS model, assume an entrepreneur becomes a member of the exchange group and submits its own copyrighted instruction manual for goods it trades through the MCS. The MCS may select and arrange the entrepreneur's description of its goods, including its instruction manual in a way that is user friendly and attractive for purchase by other exchange members. Under Section 2, the MCS may have copyright protection for the entire database, but the entrepreneur would retain his copyright protections over the instruction manual. Presumably, therefore, the MCS would need to gain permission of the entrepreneur to profit from the use of the instruction manual. Likewise, the entrepreneur could not use the MCS database without Facebook's permission.

D. The European Union Database Directive

The European Union established a Database Directive ("EUDD") in 1996, adopted by all 25 European Union member states.¹¹⁷ It was designed to address the marketing of databases in the European Community, and to facilitate "freedom of natural and legal persons to provide on-line database goods and services on the basis of harmonized legal arrangements throughout the Community".¹¹⁸ As discussed below, these purposes are aligned with the needs of a Facebook MCS, and the manner in which the model participants qualify under the EUDD. At bottom, the

¹¹⁵ Agreement on Trade-Related Aspects of Intellectual Property Rights, *supra* note 98, at art. 10(2).

¹¹⁶ *Id.*

¹¹⁷ Database directive, *supra* note 99. For the list of the 25 Member states and the year of ratification see, Commission of the European Communities, *DG Internal Market and Services Working Paper (First Evaluation of Directive 96/9/EC on the Legal Protection of Databases*, Brussels, December 12, 2005, p. 11.

¹¹⁸ See the European Union Database Directive, Council, European Parliament, *Directive 96/9/EC of the European Parliament and of the Council of Mar. 11, 1996 on the legal protection of databases*, Official Journal L 077 , 27/03/1996 p. 0020 - 0028 1996 OJ L 77.

EUDD provides a sui generis right for makers of a database to prevent “extraction and/or re-utilization” of the content of that database without the authorization of the maker.¹¹⁹ In essence, the sui generis right is a new form of IP protection not tied to the creative requirements for copyright or other traditional IP statutory rights.¹²⁰ Rather, the right is based on the database maker’s labor, skill, and judgment, in establishing a substantial investment.¹²¹ That substantial investment could consist of seeking, collecting, verifying, and presenting the database.¹²² And to clarify that this new sui generis IP right was *not* dependent on first having copyrightable status, Article 7 of the EUDD states, “[This] right . . . shall apply irrespective of the eligibility of that database for [copyright protection].”¹²³

So, potentially, one could create a database with intense labor due to sheer volume of data, with skilled judgment on how large to make the database, and a substantial investment of money, but without using any creative juices in rearranging the data. To more precisely conflict with TRIPs, the database maker could simply copy large files of raw data – product descriptions for example. Under the EUDD, the database maker is protected. Under Feist and TRIPs, she is not protected.¹²⁴

In light of the EUDD purposes, it is important to consider who qualifies as the intended beneficiaries. In this author’s opinion, both Facebook and the exchange members should fall

¹¹⁹ Database directive, *supra* note 99, at art. 7(1); Sui generis means, “A person or thing that is unique, in a class by itself. [For example], She is an original artist; each of her paintings is sui generis . . . From Latin, meaning of its own kind.” AMERICAN HERITAGE NEW DICTIONARY OF CULTURAL LITERACY (3d ed. 2005).

¹²⁰ Charles R. McManis, *Taking Trips on the Information Superhighway: International Intellectual Property Protection and Emerging Computer Technology*, 41 VILL. L. REV. 207, 252 (1996).

¹²¹ Database directive, *supra* note 99, at art. 7; (The exact language in relevant part is as follows: “which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the whole or of a substantial part, evaluated quantitatively, and/or qualitatively, of the contents of that database.”); *see also* McManis, *supra* note 123, at 253-54.

¹²² *Id.*

¹²³ *Id.*

¹²⁴ As will be noted below, the EUDD sui generis protection would also not exist under the U.S. Supreme Court standard in *Feist*. *See infra* Part VI.E.

within the contemplation of the intended beneficiaries of the sui generis rights because the substantive provisions of the EUDD include as beneficiaries “companies and firms” with a registered office within the European Community that have “operations . . . genuinely linked on an ongoing basis with the economy of a Member State.”¹²⁵ Those companies and firms must be “makers or rightholders” of the database.¹²⁶ Both Facebook and exchange members can be makers of a database. As such, they can each claim exclusive rights in the database, and therefore prevent the sharing of databases if they so choose. But the EUDD also builds in the flexibility for the exchange of those rights.¹²⁷ Those primary sui generis rights to exclude others from database access “may be transferred assigned or granted under contractual license”.¹²⁸ Therefore, an exchange member who creates its own database is fully able to grant a license or assign to Facebook some of its database content to facilitate a trade with other members. In return, that exchange member receives either a good or service it needs, or a credit/voucher, or a combination of the two. The negotiations between exchange members and Facebook would need to be carefully structured to include three levels of analysis: (1) the goods and services to be exchanged, (2) the values assigned to each exchange, and (3) the electronic database contents to be exchanged, if any. It is also possible for exchange members to joint venture on projects, collaborating with their own respective levels of expertise to create a single data base.

The EUDD also grants a “group of natural persons” the exclusive rights to be owned jointly.¹²⁹ While this provision contemplated an individual person (as opposed to a corporation) as the maker of a database, Article 7 authorizes the transfer of rights from a maker to a rightholder to those sui generis rights. As is often the case, employees of a corporation or other

¹²⁵ Database directive, supra note 99, at art. 11(2).

¹²⁶ Database directive, supra note 99, at art. 11(1).

¹²⁷ Database directive, supra note 99, at art. 8.

¹²⁸ Database directive, supra note 99, at art. 7(3).

¹²⁹ Database directive, supra note 99, at art. 4(3).

entity assign their rights to their creations while performed during and within the scope of the employment to the entity. Exchange members are most likely to be an entity with limited liability that insulates the individual owners from personal liability, and the natural persons or groups thereof are employees of the entity that assigned or otherwise transferred their rights in the database to the entity.¹³⁰

The flexibility authorized by the EUDD is well suited for the MCS model. An exchange member could transfer its rights in all or part of its database to Facebook in exchange for the cash, credits or vouchers. The transferring member may be satisfied with a lump sum payment (e.g. retiring owners, sale or liquidation of the enterprise), or a combination of cash, or a combination of existing or future receipt of goods or services (e.g. to establish a new business venture or services required to wind up the business activity).

E. The U.S. Feistian Model

A database is fundamentally a compilation of information.¹³¹ In the Facebook MCS context, the relevant question is “What level of intellectual property protection should be afforded to the creators and content of the compilations?” The United States Supreme Court explored this question in *Feist Publications, Inc. v. Rural Telephone Service Co., Inc.*¹³²

¹³⁰ Corporations, limited liability companies, and to a lesser extent, limited partnerships, are typical entities of choice.

¹³¹ Black’s Law Dictionary defines a database as “a compilation of information arranged in a systematic way and offering a means of finding specific elements it contains, often today by electronic means.” BLACK’S LAW DICTIONARY (8th ed. 2004).

¹³² *Feist Publications, Inc. v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340 (1991).

In *Feist*, Rural Telephone Service Company (Rural) alleged that Feist Publications (Feist) infringed upon Rural’s copyright protection of its telephone directory.¹³³ The crux of Rural’s argument was that Feist had copied Rural’s white page listings and inserted the copied information identically into Feist’s own competing telephone directory without Rural’s consent.¹³⁴ Rural contended that Feist’s unauthorized extraction and reproduction of Rural’s white page contents infringed Rural’s copyright in its *entire* telephone directory.¹³⁵

The Court initially noted that *Feist* involved the interaction of two well-established propositions— the first is that facts are not copyrightable; the other is that copyright protection can exist for compilations of those facts.¹³⁶ In essence, the Court had to determine whether Feist was entitled to copyright protection for its extraction and reproduction of uncopyrightable facts (i.e. names, addresses and telephone numbers) from a copyrightable work (Rural’s telephone directory).¹³⁷ To resolve the issue, the Court sought guidance from several provisions of the Copyright Act of 1976.¹³⁸ Upon review of the statutory language and legislative history, the Court concluded that copyright requires originality; that facts are not original; that the copyright in a compilation does not extend to raw facts it contains; and that a compilation is copyrightable only to the extent that it features an original selection, coordination, or arrangement.¹³⁹

Applying these principles to the facts of *Feist*, the Court first investigated whether Feist, by taking the names, addresses, and telephone numbers from Rural’s white pages, had actually

¹³³ *Id.* at 344.

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ *Id.* It should be noted that the “facts” referred to in *Feist* were the names, towns, and telephone numbers of Rural’s subscribers.

¹³⁷ As noted in this sentence the facts are not copyrightable, but Rural had a telephone book with other aspects that it selected and arranged in presenting the telephone book for which Rural had received copyright protection from the U.S. Copyright office. *Id.*

¹³⁸ *See id.* at 355-61.

¹³⁹ *Id.* at 360. In arriving at these conclusions, the Court focused particularly on 17 U.S.C. §§ 101-103.

copied anything that was original to Rural.¹⁴⁰ The Court found that such raw data as names and telephone numbers did not satisfy the statutory originality requirement because that data in no way owed its origin to Rural.¹⁴¹ The Court then focused on whether Rural had selected, coordinated, or arranged the uncopyrightable facts in an original way.¹⁴² The amount of requisite originality was not articulated through a list of factors, but rather, was noted in a terse statement that a “modicum” was necessary and that copyright protects only those constituent elements of a work that posses more than a mere *de minimis* quantum of creativity.¹⁴³ Though the Court recognized that the originality requirement is low, it also indicated that the requirement could not be satisfied if the selection and arrangement of facts was so mechanical or routine as to require no creativity whatsoever.¹⁴⁴ Despite this non-stringent standard, the Court found that Rural’s typical, garden variety alphabetical compilation of obvious facts did not possess the minimal creative spark required by the Copyright Act.¹⁴⁵ Accordingly, the Court ultimately held that the names, addresses, and telephone numbers of Rural’s subscribers were uncopyrightable facts and that these bits of information were not selected, coordinated, or arranged in an original way in the white pages and hence the white pages did not meet requirements for copyright protection.¹⁴⁶

Under *Feist* then, a Facebook MCS would have the ability to copy, without copyright infringement, the raw data of weather statistics from the U.S. Weather Bureau or ecological data from the Environmental Protection Agency that may have also been included verbatim in an exchange member’s database.

¹⁴⁰ *Id.* at 361.

¹⁴¹ *Id.*

¹⁴² *Id.* at 362.

¹⁴³ *Id.* at 363.

¹⁴⁴ *Id.*

¹⁴⁵ *Id.* at 362-63.

¹⁴⁶ *See id.* 363-64.

Feist also stands for the position that under existing U.S. copyright law, a factual compilation can be protected via copyright. But *Feist* also warns that such protection is wafer-thin.¹⁴⁷ Particularly relevant to the Facebook MCS model is *Feist's* acknowledgment that notwithstanding a valid compilation copyright, a *subsequent* compiler remains free to use the facts contained in another's publication to aid in preparing a competing work, so long as the competing work does not feature the same selection and arrangement.¹⁴⁸ As the Court noted:

[N]o matter how much original authorship the work displays, the facts and ideas it exposes are free for the taking. . . [T]he very same facts and ideas may be divorced from the context imposed by the author, and restated or reshuffled by second comers, even if the author was the first to discover the facts or to propose the ideas.¹⁴⁹

Therefore, to the extent an entrepreneur exchange member of the Facebook MCS provides facts without any creativity, or even a copyrightable database, Facebook could still receive copyright protection for its own subsequent database if it exhibits a modicum of creativity. An entrepreneur who seeks to sell electronics to international markets through the MCS would likely compile information about his business entity (i.e. name, address, e-mail address, telephone number, etc.), the products he wished to advertise through the exchange, the prices at which he wished to sell or exchange his goods, and product descriptions identifying strong selling points of his merchandise. Based on the earlier definitions, this compilation of information could be classified as a database. That entrepreneur (MCS exchange member) could upload all or part of his database into a "master" MCS database while simultaneously authorizing

¹⁴⁷ *Id.* at 349.

¹⁴⁸ *Id.*

¹⁴⁹ *Id.* (citing Jane C. Ginsburg, *Creation and Commercial Value: Copyright Protection of Works of Information*, 90 COLUM. L. REV. 1865, 1868 (1990)).

the MCS' unlimited control over the use of the uploaded information.¹⁵⁰ Assuming that the MCS entity arranged its numerous member databases with the minimal modicum of creativity and originality called for under *Feist*, the MCS could claim copyright protection in the master database it compiled. The low originality requirement would easily be satisfied by arranging and placing member databases into user-friendly categories (i.e. by product or service type such as electronics, sporting goods, medical devices or by geography such as Asia, Europe, South America) to be searched by other existing members.¹⁵¹

While *Feist* would recognize protection for the MCS entity's master database, *Feist* would also limit that protection to the manner in which the MCS entity had selected and arranged the information. For example, under *Feist*, the non-original information or facts such as the products offered for sale, the sale price, and the exchange members' business contact information would not be protected. Much like Rural's white page contents, nothing would protect the MCS if another, competing entity extracted and duplicated such information in its own database based on its own original arrangement scheme. On the other hand, the brief product descriptions generated by the members to promote their merchandise as well as the overall organizational scheme of the master database likely would remain protected as creative materials having originated with the exchange members or the MCS entity.

F. Harmonizing Database IP Protection Standards

Assume a database selects and arranges the information of others. All three of these sources of database protection agree on one principle: If the database owner has a requisite level

¹⁵⁰ This transfer of rights in the IP protection of the exchange member's database could be mandated as a term of enrollment into the MCS exchange or it could be a license separately negotiated between each member and the MCS.

¹⁵¹ Conceptually, the model is sensitive to the compatibility of goods and services among exchange members, so each member sees the value of membership.

of *originality* in the way it selects and arranges data, the database is afforded copyright protection separate from other database users. The thorny legal issue is whether copyright protection should extend to the database owner if originality is not present in the selection and arrangement of data. Under *Feist* the answer to this issue is clearly no.¹⁵² But under TRIPs and the EUDD the answer is not so clear. Also unclear is what extent of originality is enough to warrant protection.

The TRIPs standard of originality is regarded as consistent with the Feistian U.S. standard.¹⁵³ Under TRIPs, Article 10, section 2, the database is protected if, by reason of selection or arrangement, the database constitutes an intellectual *creation*. And such a creation comports with the notion of a “modicum” of originality under *Feist*. Under TRIPs, the copyright protection extends to the compilation or database and not necessarily to the individual items in the database. Nothing in *Feist* appears contrary to that rule. But the EUDD provides the theoretical drama. Neither TRIPs nor *Feist* incorporates the new protections for uncopyrightable content of databases contained in the EUDD. Only the EUDD provides IP protection for the skill and labor as a new IP right, even without the originality otherwise required for copyright protection. The question thus raised is whether the EUDD should be the standard for database IP protections. That discussion follows.

VII. BALANCING EUDD PRIVATE DATABASE PROTECTIONS WITH THE PUBLIC GOOD

¹⁵² So *Feist*, though intended for the United States only, is helpful in illuminating a possible international treatment of whether to protect non-original elements of a database at least as to facts such as names, addresses and telephone numbers.

¹⁵³

The EUDD has been criticized for overly protecting database creators for their intellectual creations at the expense of access to that information by the public. According to one commentator, the EUDD gives database creators a perpetual monopoly of the database contents, anointing those creators an unprecedented exclusivity in information “without there being *any* corresponding benefits or improvements to the public domain.”¹⁵⁴ As stated by the commentator,

Clearly, this is the antithesis to any effective regime dealing with rights in information, for it privileges the interests of the investor over, and at the expense of, those of the public. In sum, therefore, the Directive can be seen as creating ‘one of the least balanced and most potentially anti-competitive intellectual property rights ever’.¹⁵⁵

This author agrees that the Directive is *potentially* anti-competitive, but does not read the EUDD so starkly in practical application. It is not as likely, in my view, that this EUDD database protection will operate as an all or nothing war – all for the database maker and nothing for the public. Rather, battles of theoretical principalities are in reality a balancing of competing interests. And this author opines that in practical application not all, and perhaps not even a majority, of the exclusive rights opportunities by database makers are likely to result in monopolistic behavior at the expense of the public.

Another commentator is also less indicting; after noting the interests at odds he leaves as an open question whether the EUDD is either a “‘cornerstone of the information society’ for having rescued database publishers from the perils of under-protection” or a “‘legal monstrosity’ for having endowed electronic database publishers with potentially perpetual exclusive rights in .

¹⁵⁴ Harvard website overview of the EUDD, <http://cyber.law.harvard.edu/ilaw/Contract/europesumm.html> (last visited June 20, 2009). Professor Charles R. McManis specifically points to the fact that the initial 15 year protection period for the sui generis right can be easily renewed without limit, thereby creating the monopolistic control over the database. McManis, *supra* note 123, at 257.

¹⁵⁵ Harvard website overview of the EUDD, *supra* note 157.

. . data structures without . . . limitations that . . . safeguard the public interest under existing copyright laws.”¹⁵⁶

Admittedly, at first glance, the broad database maker’s rights are only diminished by three narrow exceptions. Those who are not the database creator can extract or reutilize the database without the database creator’s consent only (1) when the database is non-electronic, (2) for teaching or scientific research of a non-commercial nature, or (3) for public security or an administrative or judicial procedure.¹⁵⁷ What may be initially missed, however, is a challenge to the notion that database makers are likely to use their exclusive rights in a monopolistic manner to the detriment of the public. Trends in database entrepreneurship indicate a different direction, that database sharing, not hoarding, is in vogue in business modeling.¹⁵⁸ Rather than profiteering in private, Google, Facebook, and Twitter are illustrations of modeling and achieving profitability through facilitating instantaneous communication among as broad a base of the public as possible.¹⁵⁹ As the earlier section in this article advocates, the business application of Facebook through a multilateral exchange group can enhance, rather than diminish, access to new markets among new and evolving groups of entrepreneurs, who are also a part of the public.

¹⁵⁶ McManis, *supra* note 123, at 257.

¹⁵⁷ Database directive, *supra* note 94, at art. 9(a)(b)(c).

¹⁵⁸ See generally J. H. Reichman, *Database Protection in a Global Economy* (2001) available at http://www.cairn.info/article.php?ID_REVUE=RIDE&ID_NUMPUBLIE=RIDE_162&ID_ARTICLE=RIDE_162_0455&FRM=N (while expressing concern about the EU Database Directive’s exclusive property right, the author articulates how the concern of monopolistic behavior among database creators has not come to fruition, emphasizing the “precise behavioral characteristics of intangible creations – particularly their ubiquitous, nonrivalrous, and inexhaustible character – that clearly do distinguish them from physical goods. . . [and those concerns] ignore the vast nonprofit sector of activities that processes the raw materials of intellectual creations and that aggregates these raw materials into distinct packets of knowledge and information goods. [Further ignoring] the central role of the public domain in generating the upstream flows of data and information from which both the public and private sectors necessarily draw in order to produce the downstream applications of knowledge goods that attract intellectual property rights.”).

¹⁵⁹ Twitter has been valued at over \$100 million and is another iteration of instant information facilitation. Jon Swartz, *A World That’s All a-Twitter*, USA TODAY, May 26, 2009, at B1. As noted previously, Facebook had been valued at over \$15 billion, and Google had an initial public offering for \$1.67 billion.

Just as fundamental is the reality that every business transaction has the effect of limiting public access. When entrepreneur A and B execute a contract, they have jointly decided to limit the exchange of financial benefits to the exclusion of the public in general.¹⁶⁰ There may be exceptions where public health and environmental concerns change the equation and demand public domain access. But the exception does not change the general rule that business transactions internationally are most often guided by the parties' own negotiated and allocated exchange of legal obligations and benefits amongst themselves without factoring in a benefit for the public domain.¹⁶¹

Even within the EUDD, there are creative uses of the exceptions to database owner exclusivity that can accommodate the MCS Facebook model, and thereby open the door to millions of transactions and billions of dollars. Though awkwardly worded, the EUDD allows substantial parts of the contents of *non*-electronic databases to be extracted or re-utilized by lawful users of the database which is made available to the public.¹⁶² In the MCS transactions, the exchange members will be lawful users. Many entrepreneurs may have tangible goods to be submitted into the exchange. The documents that facilitate the transaction may be the traditional non-electronic letter of credit, bill of lading methods between international buyers and sellers.

¹⁶⁰ This legal proposition is not dissimilar to the recognition in U.S. antitrust law that in reality every contract is a restraint of trade, and that only unreasonable restraints should be legally prohibited. *See generally* Nat'l Collegiate Athletic Ass'n v. Board of Regents of Univ. of Okla., 468 U.S. 85 (1984).

¹⁶¹ AARON XAVIER FELLMETH, THE LAW OF INTERNATIONAL BUSINESS TRANSACTIONS 4 (American Casebook Series 2009). An unresolved issue beyond the scope of this article is under what circumstances the general public should still have access to databases even when it has no permissions from Facebook or exchange members. The most compelling circumstance is where public health of a developing nation is devastated by an epidemic demands access to confront those issues. Assume an entrepreneur has a database that includes a cross referencing system of patented pharmaceutical products that save lives of persons that are HIV positive. If the developing country has crisis level consequences from that disease and no generic alternative to the patented product, government officials could legislate a compulsory license to be granted to the government or its selected entities from that country. That is a negotiated compromise. The entrepreneur is allowed into the country but for a price – a royalty payment for the privilege of chasing profitability. But that is essentially a compromise of restricted access which may be unacceptable if millions of lives may be lost due to that restricted access.

¹⁶² Database directive, *supra* note 94, at art. 9(a).

The flexibility of sharing content with lawful users outside of database owners can be obviously accomplished with assignments of interests or other traditional legal means of transfer. And the ability to make contents available to the public could allow library or museum licenses of content.

Another more direct public benefit still allowable under the EUDD, and what may be particularly well suited for this MCS Facebook model, is a member exchange group aligned by principles of social entrepreneurship (i.e. a blend of private profitability and social good).¹⁶³ Since a public benefit is part of the business model, those exchange members may be more inclined to share database information with their exchange partners in the common quest to better the general public.¹⁶⁴ Assume, for example, an environmental engineering firm develops a database that matches certain compounds with soil concentrations. This helps remediate pollution in urban areas known to have been industrial dumping grounds.¹⁶⁵ Also assume there is another firm in another country that has a database that combines certain soil data to more effectively locate the source of the contamination. If both firms believe that each other's database makes its own database more valuable in the marketplace while also helping the environment, there is a basis of exchange and collaboration, perhaps even a joint venture. Through the MCS, they may seek to share database information.

Finally, the most insightful source for ascertaining the value of EUDD sui generis rights in operation may be the international database community. A survey conducted by an E.U.

¹⁶³ See Roger M. Groves, *Time to Step Up: Modeling the African American Ethninvestor for Self-Help Entrepreneurship in Urban America*, 13-1 MICH J R & L 100, 111 (2007).

¹⁶⁴ This matching of exchange members is a vital value-added component of the Facebook MCS, which should be carefully constructed through what this author terms a Compatibility Exchange Matrix ("CEM").

¹⁶⁵ The practice of overburdening low income and minority communities with a disproportionate amount of environmentally undesirable and unhealthy sites has motivated the environmental justice movement to cure the imbalance. Alice Kaswan, *Distributive Justice and the Environment*, 81 N.C. L. REV. 1031, 1035 (2003); Groves, *supra* note 165 at 122. Members of this movement can be members of a Facebook MCS where trading occurs only among those philosophically aligned.

Commission recorded the opinion of EU database users.¹⁶⁶ The summarized conclusion was that the EUDD has generally accomplished its goals in bringing about legal certainty, reduced costs to protect databases, and enhanced business opportunities and marketing of those databases.¹⁶⁷ If true, the EUDD also facilitates practical application of the MCS model to transactions in the E.U. Exchange members should be more encouraged to share databases with other members and with Facebook's own database if there is increased certainty about their respective rights. The clarity of rights should reduce the ambiguity of interpretations that often leads to confusion and costly litigation. Without such barriers, entry into the exchange network should open market exchanges to a broad spectrum of business database creators or those involved in the sale of goods and services, electronically or otherwise.

VIII. CONCLUSION

The genius of Facebook is not in its complexity, but in its simplicity. It does not offer a Nobel Prize winning algorithm on how the world now turns differently on its axis due to climate change. Rather, Facebook addressed the basic need amongst humans to communicate more easily when facing a mindboggling avalanche of data, and when the precious commodity of time is far spent. Facebook found a simpler way to communicate. At bottom, all it did was format data. In its own words, Facebook provides "selection and arrangement" of other people's information. It categories, formats, and makes it easy for people to share their stories, their lives, disappointments and aspirations. Business firms too have stories to tell, disappointments, and saliently, aspirations of future business they all hope will enhance their lives. In times of global economic crisis, some forms of communication amongst businesses have better designed

¹⁶⁶ See *infra* note 167.

¹⁶⁷ Commission of the European Communities, *DG Internal Market and Services Working Paper*, Brussels, December 12, 2005, p.12.

survival skills than others. For those who can use the vast and evolving web as part of its business plasma, a Facebook-styled multilateral clearing service with international countertrade exchange partners may be a viable business vehicle. And a broad protection of the database maker under the EUDD appears well-suited to enhance those opportunities.