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Facebook 2 Blackberry and Database Trading Systems: Morphing Social Networking to Business Growth in a Global Recession

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

Roger M. Groves*

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"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."

I. Introduction

Facebook now has applications to the Blackberry Smartphone and iPhone. That expansion has sparked Facebook's international explosion.² If the Facebook social networking technology has applications to Blackberry, why not business?³ 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 would offer characteristics similar to the successful use of environmental tradable credits that provided incentives to major corporations to stop using environmentally harmful products.⁴ 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.⁵ 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 protection, this article explores the issues and opportunities surrounding the generation of technology-friendly laws for this Facebook clearing system model.

¹ Justin Smith, *The Facebook Global Market Monitor: Tracking Facebook in Global Markets*, INSIDE FACEBOOK, Sept. 2009, http://www.insidefacebook.com/facebook-global-market-monitor.

² See Facebook Surpasses 175 Million Users, Continuing to Grow by 600k Users/Day, INSIDE FACEBOOK, Feb. 14, 2009, http://www.insidefacebook.com/2009/02/14/facebook-surpasses-175-million-users-continuing-to-grow-by-600k-usersday/ (noting that in February of 2009, "[i]f 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)).

The Blackberry is commonly regarded as a businessperson's smart-phone of choice. *See 2 BlackBerry Models Try to Answer iPhone*, PRLog, Dec. 14, 2008, http://www.prlog.org/10155037-2-blackberry-models-try-to-answer-iphone.html.

⁴ See John Norregaard & Valérie Reppelin-Hill, Controlling Pollution Using Taxes and Tradable Permits, INT'L MONETARY FUND, Dec. 2000, http://www.imf.org/external/pubs/ft/issues/issues25/index.htm.

⁵ Technology transfer refers to "the sale or licensing of intellectual property, or the field involving the sale and licensing of intellectual property." BLACK'S LAW DICTIONARY (8th ed. 2004) [hereinafter BLACK'S LAW].

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, 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's legal standards leads to the conclusion that the Facebook multilateral trading system can operate under each standard, the most favorable of which is the aforementioned European Union (E.U.) 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.

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. 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 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

⁶ 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).

account for essentially all the growth in our economy so far [in 2008]." 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. Of the ten thousand U.S. companies that export to Colombia, 8500 are small and medium-sized firms (SMEs). Further, thirty-nine percent of the exports to Panama are from SMEs. 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.

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. Its longevity is testimony to its ever-evolving application in the current marketplace. Approximately 400,000 U.S. companies barter annually, equaling approximately \$4.3 billion in transactions including international trade. 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. 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.

Carlos M. Gutierrez, U.S. Commerce Secretary, Remarks at a Small Business Administration trade symposium, Nov. 18, 2008, available at http://www.commerce.gov/NewsRoom/SecretarySpeeches/PROD01_007531 (regarding the importance of trade and its role in "ensuring our nation's future prosperity").

See PwC Emerging Markets Focus, FDIMAGAZINE, Oct. 7, 2008, available at http://www.fdimagazine.com/news/fullstory.php/aid/2532/pwc_emerging_markets_focus.html [hereinafter PwC] (detailing PwC's "global restructuring to follow its multinational client base into emerging markets"). See also HP Expected to Move Jobs East, FDIMAGAZINE, Oct. 7, 2008, available at http://www.fdimagazine.com/news/fullstory.php/aid/2530/hp_expected_to_move_jobs_east.html [hereinafter HP] (stating that more than sixty-eight percent of HP's revenues are generated overseas).

INT'L TRADE ADMIN., THE TRADE STIMULUS FACT SHEET, Oct. 27, 2008, http://trade.gov/press/press_releases/2008/fta-factsheet_102708.pdf.

Id

See HP, supra note 8.

¹² Penni Crabtree, *About 400,000 Companies Barter Goods or Services Each Year*, The SAN DIEGO UNION-TRIBUNE, Mar. 26, 2008.

¹³ *Id.*

¹⁴ *Id.*

III. INCREASED BARTERING AND COUNTERTRADE IN GLOBAL ECONOMIC DOWNTURNS

There is a global economic recession as of the writing of this article.¹⁵ 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.¹⁶ Financial experts around the world have recognized not only the severity of this current global downturn but also its likely longevity.¹⁷ 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.¹⁸

The global recession also has localized effects on U.S. firms. U.S. 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.¹⁹

See, World Economic Outlook: Financial Stress, Downturns, and Recoveries, INT'L MONETARY FUND, Oct. 2008, available at http://www.imf.org/external/pubs/ft/weo/2008/02/pdf/text.pdf [hereinafter Financial Stress] ("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.").

See World Economic Outlook: Crisis and Recovery, INT'L MONETARY FUND, Apr. 2009, available at http://www.imf.org/external/pubs/ft/weo/2009/01/pdf/text.pdf [hereinafter Crisis and Recovery] ("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.").

See Financial Stress, supra note 15 ("[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.").

See Crisis and Recovery, supra note 16 ("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.").

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 subsi-

The 2009 economic stimulus package allocates most of its funds to states to help them through the recession by 2011.²⁰ 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.²¹ Indeed, the U.S. Commerce Department and the Rockefeller Institute estimate that the recession for state revenue purposes will extend for over another three years.²² These forecasts, if realized, would in this author's view reduce the amount of state subsidies that 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 three-plus years, tax abatements and credits may well expire during this time and not be renewed. If the tax credits and abatements disappear, these U.S. 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 U.S. 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.²³ 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."²⁴

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.²⁵ Scholarly articles suggest that as global economic downturns increase, a modern sophisticated form of bartering

dies include Investment Tax Credits, Job Creation Credits, Research & Development Credits, Property Tax Abatements, Property Tax Exemptions, and Sales Tax Exemptions. *See id.*

Amy Merrick, States' Budget Woes are Poised to Worsen, WALL ST. J., June 3, 2009, at A2.

²¹ *Id.*

²² I.d

²³ Crabtree, *supra* note 12.

²⁴ Ia

See WORLD TRADE ORG., MINISTERIAL DECLARATION, Nov. 20, 2001, available at http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm (where the ministers of a multitude of World Trade Organization member states declared, "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.").

termed "countertrade" will increase.²⁶ 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.²⁷ 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.²⁸ 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 typically depend on a flow of inter-bank loans.²⁹ The Central banking system has been, not surprisingly, 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."³⁰ During eco-

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 (Thomson Reuters 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") should 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 Hastings Int'l & Comp. L. Rev. 247, 259 (1988) ("[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.").

See McVey, supra note 26 ("[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.").

²⁸ See id.

²⁹ See generally Michael Bruno et al., Understanding Interdependence: The Macroeconomics of the Open Economy (Peter B. Kenen ed., 1994).

Joellen Perry, Germany Blasts 'Powers of the Fed', WALL St. J., June 3, 2009, at A1.

nomic 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.³¹ 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. 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.³² 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.³³ This confluence of communications has made Facebook this country's largest photo sharing site, sixth most trafficked site, and a reason for Microsoft to invest \$240 million for a mere 1.6 percent of the company in October of 2007.³⁴ At the time of the Microsoft investment, the company had a valuation of over \$15 billion, making Facebook the fifth most valuable Internet company in the United States.³⁵ Yet, with a valuation in the billions, the annual revenue was but \$150 million.³⁶ 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.³⁷ 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 re-

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

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

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ Id

³⁷ This conclusion by the author is 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.

served."³⁸ 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.³⁹ Those provisions will be discussed below in conjunction with other laws concerning the protection of databases. Based on the Facebook 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, 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. 40

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." It also mentions its copyrights without further elucidation. 42

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 re-

Facebook Terms of Use, available at http://manyeyes.alphaworks.ibm.com/manyeyes/datasets/facebook-terms-of-use/versions/1.txt (last visited Sept. 5, 2009) (emphasis added). The Terms of Use cited for the purposes of this article are the previous iterations used by Facebook. They were recently modified and renamed the "Statement of Rights and Responsibilities." The new "Statements of Rights and Responsibilities" is available at http://www.facebook.com/terms.php (last visited Sept. 4, 2009).

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.

Facebook Terms of Use, *supra* note 38.

⁴¹ Ic

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

publish Site Content on any Internet, Intranet or Extranet site or incorporate the information in any other database or compilation, and any other use of the Site Content is strictly prohibited. 43

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. The Facebook Terms of use state that

[s]uch license is subject to these Terms of Use and does not permit use of any data mining, robots, 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.⁴⁴

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. This license is revocable at any time without notice and with or without cause."

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. Facebook may send users through its links to third party websites, and disclaims responsibility for the content of those sites. Because 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 flowing from a thirdparty website (Online Content Provider, "OCP") to a Facebook member to other

⁴³ *Id.* (emphasis added).

⁴⁴ *Id.*

⁴⁵ Id.

See Facebook Terms of Use, supra note 38.

⁴⁷ *Id.* ("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.").

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."⁴⁸

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.⁴⁹ Nor shall the OCP provide content that violates Facebook rules.⁵⁰ 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 not, Facebook is value-adding 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. Thus far, the plan has legs. Facebook has recently experienced international growth in ways most business ventures only dream of. There are numerous illustrations of the global Facebook explosion. Dur-

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.*

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* Glossary of Dedicated Server Hosting Terms, Servepath.com, http://www.servepath.com/support/definitions.php (last visited Sept. 5, 2009).

Facebook started 2008 with five million monthly active mobile users. *Sandberg: 20 Million Users now Accessing Facebook Through Mobile Platform, Inside Facebook, Jan. 9, 2009, http://www.insidefacebook.com/2009/01/09/sandberg-20-million-users-now-accessing-facebook-*

ing 2008 alone, Italy experienced growth of 2900%.⁵³ Now, approximately 8.5% of the Italian population accesses Facebook, making Facebook the fourth most trafficked website in Italy.⁵⁴ The 2008 year also brought Facebook an increased penetration of 600% in Spain, 400% in France, 400% in Switzerland, 2000% in Argentina, and 600% in Indonesia.⁵⁵

Facebook applications have been developed for iPhone and Blackberry Smartphone users. ⁵⁶ At least one million Blackberry users have already downloaded Facebook onto their respective devices. ⁵⁷ The "application" or connection between Facebook and the Blackberry device is not developed by Facebook. ⁵⁸ Facebook only provides the link and does not claim responsibility for the application of Facebook to the device. ⁵⁹ 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). ⁶⁰ 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

through-mobile-platforms. By January 2009, over twenty million users were actively using Face-book through mobile platforms. *Id.* Additionally, growth continues to spiral upwards internationally, particularly in Europe and South America. *See id.*

See Justin Smith, The Facebook Global Market Monitor: Tracking Facebook in Global Markets, INSIDE FACEBOOK, Sept. 2009, http://www.insidefacebook.com/facebook-global-market-monitor.

⁵⁴ See Facebook Growth Surges in Italy: Developers Look for Better Italian eCPMs, INSIDE FACEBOOK, Dec. 18, 2008, http://www.insidefacebook.com/2008/12/18/facebook-growth-surges-in-italy-developers-look-for-better-italian-ecpms.

⁵⁵ See Facebook Terms of Use, supra note 38.

See, e.g., Facebook, http://www.facebook.com/apps/application.php?id=2254487659&ref=s (last visited Aug. 31, 2009); Facebook, http://www.facebook.com/apps/application.php?id=6628568379 (last visited Aug. 31, 2009).

⁵⁷ See Natasha Lomas, Facebook for Blackberry Racks Up a Million Hits, Apr. 2, 2008, http://networks.silicon.com/mobile/0,39024665,39181364,00.htm.

Facebook, http://www.facebook.com/apps/application.php?id=2254487659&v=info &viewas=0 (last visited Aug. 31, 2009).

⁵⁹ See id.

⁶⁰ *Id.*

third party developers and manufacturers to enhance their products and services with wireless connectivity to data.⁶¹

Thus, for international Facebook applications, there are IP 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 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.⁶² 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. ⁶³

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.⁶⁴ That clearinghouse entity also finds the market for the goods supplied to it by the exchange participants.⁶⁵ An example is a U.S.

⁶¹ *Id.*

See George Cassidy, Financing Strategies — Barter's Rebirth, EAST/WEST COMMERSANT, Dec. 1, 1995.

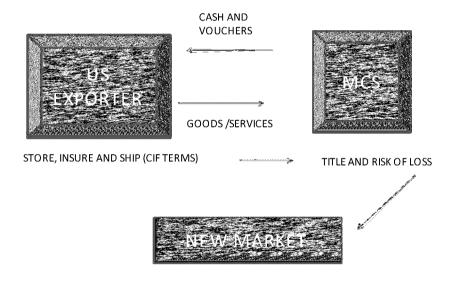
⁶³ See, e.g., id.

⁶⁴ Id.

⁶⁵ Id.

firm 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 generates 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 incur the risk of loss until the goods are delivered. The clearinghouse is termed the multilateral clearing system ("MCS"). The graphic description of this basic system is below:



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. From such use, an exchange member may find enhanced

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. FOLSOMET AL., INTERNATIONAL BUSINESS TRANSACTIONS 2 (9th ed. Supp. 2006).

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, "[t]oday, 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." 67

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 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.⁶⁸

C. Facebook as an MCS

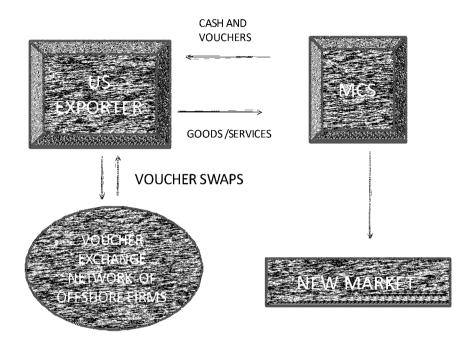
The value added services of the MCS are several and are perhaps best illustrated through this attempt to customize the MCS to Facebook. Obviously, the system is ultimately designed to provide the chain of buyers and sellers. So, imagine if Facebook's owners decided to expand its international client 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

⁶⁷ Id. at 252 (quoting Back to Barter, ICC Bus. World, Summer 1983, at 6).

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.

materials, capital equipment, supplies, and worldwide services for travel, accommodations and advertising.⁶⁹

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. 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.

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 at-

⁶⁹ See Cassidy, supra note 62.

⁷⁰ See id.

tracts 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.⁷¹ Often, such provisions are non-waivable by contract between the parties.⁷² Even distribution agreements may be severely restricted.⁷³ 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.⁷⁴ Countries currently struggle with whether to even allow social networking sites to operate within their borders. 75 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 and safeguarding an open and non-discriminatory multilateral trading system "76 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.⁷⁷ 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. 78

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

FOLSOM, *supra* note 66, at 238 n.4.

⁷² *Id.* at 238–41.

⁷³ See id. at 238–43.

⁷⁴ See id. at 10–11.

⁷⁵ 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 (discussing the recent shutdown and reinstatement of Facebook and Twitter in Iran).

⁷⁶ See WORLD TRADE ORG., supra note 25.

Technology Transfer" refers to "[t]he sale or licensing of intellectual property" or "[t]he field involving the sale and licensing of intellectual property." BLACK'S LAW, *supra* note 5, at 1504.

[&]quot;Soft Currency" refers to "[c]urrency that is not backed by reserves and therefore subject to sharp fluctuations in value." BLACK'S LAW, *supra* note 5, at 411, 1426. Soft currencies are not in demand in world markets. Australia and New Zealand Banking Group Limited, http://www.anz.com/edna/dictionary.asp?action=content&content=soft_currency (last visited June 20, 2009) (search "soft currency;" then follow "Financial Dictionary—Meaning for Soft currency" hyperlink).

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.⁷⁹ 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. The legal team may therefore draft an agreement to parse out the relative rights, responsibilities, liabilities, and representations and warranties between that 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. 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.

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. 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 "[b]ill 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." Legal-Explanations.com, http://www.legal-explanations.com/definitions/bill-of-lading.htm (last visited Aug. 31, 2009). The "[b]ill 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." *Id.* Letters of Credit are "document[s] issued by a bank that guarant[ee] the payment of a customer's draft." *See* WordNet, http://wordnetweb.princeton.edu/perl/webwn?s =letter%20of%20credit (last visited Aug. 31, 2009). 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 id.*

See FOLSOM, supra note 66, at 239.

⁸¹ See id. at 790–99.

⁸² *Id.* at 790, 801.

Facebook does not have a patent on youthful entrepreneurism. 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, available at 2009 WLNR 9945937. 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.

a letter of credit or bill of lading and may accept the related E-signatures on such documents. 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. 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.

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. The exchange is essentially an alternative to cash but achieves the same purchasing power as a form of currency; thus, it conserves cash. And, conserving cash can improve cash flow since there is more cash available for other business purposes. Representations of the same purposes.

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 transactional fee for each commodity exchanged. 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 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." BLACK'S LAW, *supra* note 5, at 558, 585.

For further description of these entrepreneurs, *see* Groves, "Gen GT: Future Business Ventures in Global Technology and Entrepreneurs of the Data Sharing Generation." (Forthcoming)

⁸⁶ See Cassidy, supra note 62.

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

⁸⁸ Id.

See id.; Crabtree, supra note 12.

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." 90

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 quarterbacks the team of traders.

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." In one view, databases can be classified according to types of content: "bibliographic, full-text, numeric, and images." 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

Thriving on Barter, Bus. TIMES (Singapore), Oct. 30, 2006, available at 2006 WLNR 18781084.

⁹¹ SQLServer.com, http://searchsqlserver.techtarget.com/sDefinition/0,,sid87_gci211895, 00.html (last visited June 20, 2009); *see also infra* note 95.

⁹² SQLServer.com, supra note 91.

of Intellectual Property Rights ("TRIPs"), 93 the European Union's Database Directive (EUDD), 94 and the U.S. model based on the United States Supreme Court's decision in *Feist Publications, Inc. v. Rural Telephone Service Company, Inc.* 95 Those sources will be discussed below in turn. Each country, of course, is a sovereign with the right to establish its own codification of IP laws. But in recognition of international agreements, countries form treaties amongst each other to facilitate uniform rules for those transactions. For purposes of this article, copyright protection is primary for this discussion. 96

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. 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. 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.⁹⁹

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:

Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299, available at http://www.wto.org/english/docs_e/legal_e/27-trips.pdf [hereinafter Agreement].

Ocuncil Directive, 96/9/EC, Legal Protection of Databases, Mar. 11 1996, OJ (L 077) available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31996L0009:EN:HTML.

⁹⁵ Feist Publ'n, Inc. v. Rural Tel. Serv. Co., Inc., 499 U.S. 340 (1991).

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

⁹⁷ Lisa M. Palluconi, The "Ten Step" Plan: Recovery from Denial of Technology Transfers, 910 PLI/COMM 343, 347 (2008).

⁹⁸ Id.

⁹⁹ Id. at 347.

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 off-shoring and virtual collaboration as potential export compliance exposures.¹⁰⁰

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. One of those treaties was TRIPs. TRIPs is regarded as the world's most comprehensive embodiment of multilateral international IP standards. TRIPs requires that countries establish copyright protection for computer programs and compilations of data. 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.¹⁰⁵

First, it is noteworthy that computer programs are treated separately as literary works in Section $1.^{106}$ Databases, on the other hand, are compilations of

Id. at 347; 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."); Audio tape: Lisa M. Palluconi, You Might Have Technology Exports If: Identifying Technology Exports in Virtual Collaboration and Offshore Services (May 21, 2009).

FELLMETH, supra note 26, at 432.

Id.; Agreement, *supra* note 93.

FELLMETH, *supra* note 26, at 4, 61 (Under TRIPs, member states are required to enforce IP laws affecting all major forms of IP protection, patents, trademarks, trade secrets and copyrights.).

See generally Agreement, supra note 93.

¹⁰⁵ *Id.* at art. 10.

¹⁰⁶ *Id.* at art. 10(1).

data under Section 2.¹⁰⁷ 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.¹⁰⁸ 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. As will be discussed below, the United States Supreme Court made such a distinction primary in *Feist.* 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. Many in the same community, however, agree that TRIPs provides only a minimum level of IP protection. Here

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. Section 2 clearly provides that data already copyrightable does not lose that protection just because it is included in a database. In the context of the Facebook MCS model, assume an entrepreneur becomes a member of the exchange group and submits his 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

¹⁰⁷ *Id.* at art. 10(2).

Facebook Terms of Use, *supra* note 38.

Agreement, *supra* note 93, at art. 10(2).

See infra Part VI.E.

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

See generally Andrea Antonelli, Applicable Law Aspects of Copyright Infringement on the Internet: What Principles Should Apply?, 2003 SING. J. LEGAL STUD. 147, 148–49 (2003); Sheldon W. Halpern, The Art of Compromise and Compromising Art: Copyright, Technology, and the Arts, 50 J. Copyright Soc'y U.S.A. 273, 307–08 (2003); David E. Shipley, Thin But Not Anorexic: Copyright Protection for Compilations and Other Fact Works, 15 J. INTELL. PROP. L. 91, 95–96 (2007).

Agreement, *supra* note 93, at art. 10(2).

¹¹⁴ *Id.*

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. 115 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". 116 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 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. 117 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. 118 Rather, the right is based on the database maker's labor, skill, and judgment, in establishing a substantial investment. 119 That substantial investment could consist of seeking, collecting, verifying, and presenting the database. 120 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]."121

Council Directive, *supra* note 94. 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*, 11 (Dec. 12, 2005), *available at* http://ec.europa.eu/internal_market/copyright/docs/databases/evaluation_report_en.pdf.

See Council Directive, supra note 94.

Council Directive, *supra* note 94, 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), *available at* http://dictionary.reference.com/browse/sui+generis.

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

Council Directive, *supra* note 94, at art. 7 ("[T]here 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 qualitatively, and/or quantitatively, of the contents of that database."); *see also* McManis, *supra* note 118, at 253–54.

¹²⁰ Council Directive, *supra* note 94, at art. 7.

¹²¹ Id.

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. 122

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 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." Those companies and firms must be "makers or rightholders" of the database. 124 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. 125 Those primary sui generis rights to exclude others from database access "may be transferred, assigned or granted under contractual licence". 126 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, 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 database.

The EUDD also grants a "group of natural persons" the exclusive rights to be owned jointly.¹²⁷ 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 entity assign their rights to their creations while performed during and within the scope of employment to

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.

¹²³ Council Directive, *supra* note 94, at art. 11(2).

¹²⁴ *Id.* at art. 11(1).

¹²⁵ *Id.* at art. 8.

¹²⁶ *Id.* at art. 7(3).

¹²⁷ *Id.* at art. 4(3).

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.¹²⁸

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), 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.¹²⁹ In the Facebook MCS context, the relevant question is, "What level of IP 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.*¹³⁰

In *Feist*, Rural Telephone Service Company (Rural) alleged that Feist Publications (Feist) infringed upon Rural's copyright protection of its telephone directory. 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. Rural contended that Feist's unauthorized extraction and reproduction of Rural's white page contents infringed Rural's copyright in its *entire* telephone directory.

The Court initially noted that *Feist* involved the interaction of two well-established propositions — the first is that facts are not copyrightable; the second is that copyright protection can exist for compilations of those facts. ¹³⁴ 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

 $^{^{128}}$ $\,$ Corporations, limited liability companies, and to a lesser extent, limited partnerships, are typical entities of choice.

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, *supra* note 5, at 422.

¹³⁰ Feist, 499 U.S. at 340.

¹³¹ *Id.* at 344.

¹³² *Id.*

¹³³ *Id*.

¹³⁴ *Id.* It should be noted that the "facts" referred to in *Feist* were the names, towns, and telephone numbers of Rural's subscribers. *Id.* at 342.

telephone directory). To resolve the issue, the Court sought guidance from several provisions of the Copyright Act of 1976. Upon review of the statutory language and legislative history, the Court concluded that "copyright requires originality . . .; that facts are never 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." ¹³⁷

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 copied anything that was original to Rural. 138 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. 139 The Court then focused on whether Rural had selected, coordinated, or arranged the uncopyrightable facts in an original way. 140 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 possess more than a *de minimis* quantum of creativity."¹⁴¹ 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. 142 Despite this nonstringent 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. 143 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; hence, the white pages did not meet requirements for copyright protection.¹⁴⁴

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.

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. *See Feist*, 499 U.S. at 344.

¹³⁶ See id. at 355–61.

¹³⁷ Id. at 360. In arriving at these conclusions, the Court focused particularly on 17 U.S.C. §§ 101–103. Id. at 360.

¹³⁸ *Id.* at 361.

¹³⁹ *Id*.

¹⁴⁰ Feist, 499 U.S. at 362.

¹⁴¹ *Id.* at 362–63.

¹⁴² *Id.* at 362.

¹⁴³ *Id.* at 362–63.

¹⁴⁴ See id. at 363–64.

Weather Bureau or ecological data from the Environmental Protection Agency that may have also been included verbatim in an exchange member's database.

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. 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." 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. 147

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 the MCS unlimited control over the use of the uploaded information. ¹⁴⁸ 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

¹⁴⁵ *Id.* at 349.

¹⁴⁶ Feist, 499 U.S. at 349.

¹⁴⁷ Id. (citing Jane C. Ginsburg, Creation and Commercial Value: Copyright Protection of Works of Information, 90 COLUM. L. REV. 1865, 1868 (1990)).

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.

electronics, sporting goods, medical devices, or by geography such as Asia, Europe, or South America) to be searched by other existing members. 149

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 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. But under TRIPs and the EUDD, the answer is not so clear. Also unclear is what extent of originality is enough to warrant protection.

As the above discussions and analyses reveal, the TRIPs standard of originality could be regarded as consistent with the Feistian U.S. standard. ¹⁵¹ 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

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

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.

See supra Sections VI.C and VI.E.

the EUDD should be the standard for database IP protections. That discussion follows.

VII. BALANCING EUDD PRIVATE DATABASE PROTECTIONS WITH THE PUBLIC GOOD

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 potentially 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." 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". [sic]

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 of 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 . . . data structures without . . . limitations that . . . safeguard the public interest under existing copyright laws)." ¹⁵⁴

The European Union's Database Directive: A Brief Overview and Commentary, http://cyber.law.harvard.edu/ilaw/Contract/europesumm.html (last visited Sept. 3, 2009) [herinafter European Union's Database Directive] (emphasis added). 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 118, at 257.

European Union's Database Directive, *supra* note 152.

¹⁵⁴ McManis, *supra* note 118, at 257.

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. 155 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 hording, is in vogue in business modeling.¹⁵⁶ 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. 157 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.

Just as fundamental is the reality that every business transaction has the effect of limiting public access. When entrepreneurs 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. There may be exceptions where public health and environmental concerns change the equation and demand public do-

precise behavioral characteristics of intangible creations — particularly their ubiquitous, nonrivalrous, and inexhaustible character — that clearly do distinguish them from physical goods [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.

Id. at 501 (footnotes omitted).

Council Directive, *supra* note 94, at art. 9(a)(b)(c).

See generally J. H. REICHMAN, Database Protection in a Global Economy, in REVUE INTERNATIONALE DE DROIT, 455 (2001), available at http://www.cairn.info/accueil.php (enter "reichman" at "Dans les articles"; then follow "Database Protection in a Global Economy [Version HTML]" hyperlink). 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

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: Instant Public Communication Service has Millions Tweeting*, 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.

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, 468 U.S. 85, 98 (1984).

main 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. 159

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. 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. 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). 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. 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

Fellmeth, *supra* note 26, at 4. 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.

¹⁶⁰ Council Directive, *supra* note 94, at art. 9(a).

See Roger M. Groves, Time to Step Up: Modeling the African American Ethnivestor for Self-Help Entrepreneurship in Urban America, 13-1 MICH. J. RACE & L. 99, 111 (2007).

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").

dumping grounds.¹⁶³ 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. Commission recorded the opinion of E.U. database users. 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. 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 mind-boggling 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 categorizes, formats, and makes it easy for people to share their stories, their lives, their disappointments, and their 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 survival skills than others. For those who can use the vast and

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. Groves, *supra* note 161 at 122; Alice Kaswan, *Distributive Justice and the Environment*, 81 N.C. L. REV. 1031, 1035 (2003). Members of this movement can be members of a Facebook MCS where trading occurs only among those philosophically aligned.

¹⁶⁴ Commission of the European Communities, *supra* note 115.

¹⁶⁵ *Id.* at 12.

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.