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Conference Paper

The next reformation: The corporation in the age of Amazon

20th Biennial Conference of the International Telecommunications Society (ITS): "The Net and the Internet - Emerging Markets and Policies", Rio de Janeiro, Brazil, 30th-03rd December, 2014

Provided in Cooperation with:

International Telecommunications Society (ITS)

Suggested Citation: Melus, Gregory (2014) : The next reformation: The corporation in the age of Amazon, 20th Biennial Conference of the International Telecommunications Society (ITS): "The Net and the Internet - Emerging Markets and Policies", Rio de Janeiro, Brazil, 30th-03rd December, 2014, International Telecommunications Society (ITS), Calgary

This Version is available at:

<https://hdl.handle.net/10419/106855>

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The Next Reformation: The Corporation in the Age of Amazon

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*The system of law lingers behind society in its progress and delays to translate newly formed social relations into enforceable rights and obligations until (in many cases) long after they have been fully formed.*¹

I. Introduction

Much of the debate of the Internet focuses on how to integrate the Internet to existing society. This question is no longer relevant. Instead, the question should be how to integrate existing society to the Internet. The challenge for policymakers is to translate traditional social institutions to the new medium of the Internet. As a medium the Internet is reforming society in ways humanity is struggling to fully comprehend.² The Internet drives the social transformations because human behavior is transferred to the Internet.

Society transforms because differences between humans dissolve in the two dimensions of cyberspace. The Internet frees human interactions from constraints of geography, time, and information and alters human behavior. This unprecedented liberty to interact challenges traditional social organizations and institutions. This change has as rapid as it has been recent, and the challenge is for leaders to reform the legal framework to reflect new modes of social organization on the framework of the Internet.

The overarching goal of this paper is to provide an understanding of the social effects of the Internet to support policy makers form solutions to the challenges of the Internet. To demonstrate this change, the paper will analyze how the Internet is supplanting the institution of the corporation. The corporation is an institutional pillar of modern society that organizes human interactions to achieve a benefit. The Internet renders the institution of the corporation redundant because the Internet dissolves its social utility by absorbing all the rents the corporation captures. This process is described as the process of convergence, which dissolves differences of distance, time, and information. The paper concludes that the Internet essentially supplants the corporate form because the infrastructure of the Internet provides the same social benefit and utility as the corporate form. To support this argument, the paper will analyze this change from various perspectives. The paper will describe why and how the corporation was created from a legal perspective, examine the social utility from an economic perspective, and analyze the effect of the Internet from a sociological perspective. Ultimately, the paper

¹ JOHN P. DAVIS, 2 CORPORATIONS i 209 (1905).

² See generally Megan McArdle, *Why New York Hates Airbnb*, BLOOMBERG VIEW (Oct 17, 2014) (describing how Airbnb undermines the hotel industry in New York); Robinson Meyer, *When You Fall in Love, This Is What Facebook Sees* THE ATLANTIC (Feb. 15, 2014)(demonstrating how online behavior translates to emotions); Paul Krugman, *Amazon's Monopsony Is Not O.K.*, THE NEW YORK TIMES (Oct. 20, 2014) A25; Franklin Foer, *Amazon Must Be Stopped*, THE NEW REPUBLIC (Oct. 9, 2014).

will develop a framework for policymakers to understand how the Internet affects other aspects of society.

This framework is founded on arguments of law, economics, and sociology. Legalistically, this paper, will demonstrate that a corporation should be interpreted as a “nexus of contracts” both between the sovereign and the members of a corporation and between the corporate members themselves. The sovereign grants special rights to the corporation as a juridical person not afforded to citizens in exchange for providing a benefit to society. The social benefit is achieved because the corporation gives enforceable rights to guarantee that obligates members fulfill their functions dutifully. Applying this phenomenon to the historical context demonstrates that the benefit of the corporation springs from the ability to orchestrate human behavior over differences of distance, time, and information.

The legal interpretation that demonstrates the social benefits of the corporation is reinforced by the economic doctrines that demonstrate the social utility of and the rents captured by the corporation. The doctrines of spatial economics demonstrate how the area of economic development is limited by the marginal costs of transportation. Additionally, reducing the transportation costs of a good can increase the geographic area of economic development and the scarcity rents or profits. Those transportation costs can be reduced by the efficiencies gained from orchestrating and normalizing human behavior. Again, coordinating human behavior over differences of distances, time, and information is the key to social utility.

Lastly, the infrastructure of the Internet erases these differences by the process of “convergence.” Convergence occurs when innovation connects previously isolated social institutions and causes them to compete. The process transforms established business models and the society they support in a process popularly known as disruption. The Internet is causing “convergence” to virtually every industry and market because the Internet dissolves differences of distance, time, and information. Amazon is a company, whose business model manifests the process of convergence to fulfill its goal of being an “everything store”³ and competing numerous markets.

For purposes of this paper, the analysis of the corporate form, the joint stock company, will begin when the earliest recognizable entity was created. There are several legal theories of corporate analysis, but all agree that the modern corporation was formed when the corporation was recognized as a separate legal entity from its members.⁴ This separation was not fully recognizable until the advent of the joint stock company in the

³ Brad Stone, *The Everything Store: Jeff Bezos and the Age of Amazon* 24-5 (2014) (explaining that Bezos, founder of Amazon, figured that someone would be the intermediary of the Internet).

⁴ Reuven S. Avi-Yonah, *The Cyclical Transformations of the Corporate Form: A Historical Perspective on Corporate Social Responsibility*, LAW AND ECONOMICS WORKING PAPERS ARCHIVE, Art. 38 *9-15 (2005).

middle of the sixteenth century, and consequently the basis of our analysis.⁵ As an aside, for purposes of this paper, certain terms particular to academic doctrines are treated as equals in each study; for example, “firm” in economic terms is a “corporation” in legal terms; and “social utility” is “social benefit,” respectively.

II. The Corporation as Contract

Fundamentally, the corporation can be viewed as a “nexus of contracts.”⁶ This nexus of contracts has two parts: First is a social contract between the sovereign and the members of the corporation, second is a collection of contracts between members that regulate how the members operate within the framework of the corporation.⁷

a. The Public Quid Pro Quo

The corporation is a state recognized social organization that provides a social benefit. The popular understanding of the corporation is more limited than the historical definition. The corporation is a formalized relationship between the state and the corporate that is a social contract.⁸ The terms of the social contract are the exchange of the state enforced rights granted to corporate members in exchange for the achievement of a social benefit.⁹ Corporations generally referred to any group of citizens united for a

⁵ Douglas Arner, *Development of the American Law of Corporations to 1832*, 55 S.M.U.L. 23, (2002).

⁶ Henry Hansmann & Reinier Kraakman, *The Essential Role of Organizational Law*, 110 YALE L. J. 387, 391 (Dec. 2000) (describing the firm “as [a] ‘nexus of contracts’ . . . to coordinate activity”).

⁷ 2 HALE AND FLEETWOOD ON ADMIRALTY JURISDICTION, 230 (Ed. M.J. Prichard & D.E.C. Yale 1993)(describing the rewards that sailors received from joining ventures as proportional shares of the profits).

⁸ 1 WILLIAM BLACKSTONE, COMMENTARIES *456 (comparing laws of corporations to “rules and orders for the regulation of the whole, which are a sort of municipal laws of this little republic.”); Davis, *supra* note 1, at 206 (stating “theory of voluntary association . . . [to] maintain[ing] the relations assumed until the purpose of the association is attained . . . [on] which the corporation is based – is identical, when applied to the state . . .”);

⁹ Statute of Monopolies (1623) (“exempting any companies or societies of merchants within this realm created for the maintenance, enlargement or ordering of any trade or merchandise”); see also Margaret Patterson & David Reiffen, *The Effect of the Bubble Act on the Market for Joint Stock Shares*, 50 THE JOURNAL OF ECONOMIC HISTORY 163, 171 (1990) (describing how the aim of the Bubble Act was to increase Parliamentary revenues).

common purpose sanctioned by the Crown.¹⁰ Adam Smith, described the benefit to the sovereign as such:

[t]hose companies, . . . perhaps, have been useful for the first introduction of some branches of commerce, by making, at their own expense, an experiment which the State might not think it prudent to make¹¹

William Blackstone, the renowned jurist described that corporate members gain rights:

. . . [w]hen it is for the advantage of the public to have any particular rights kept on foot and continued to constitute artificial persons, who may maintain a perpetual succession, and enjoy a kind of legal immortality.¹²

According to the arrangement the Crown would grant exclusive authority to several individuals organized in one entity to undertake an endeavor for the benefit of society.¹³ The exclusive authority would guarantee rewards for undertaking a risk that was too great for the Crown.¹⁴

The logic underlying this social contract has existed since the times of Romans and perhaps as early as the Greeks.¹⁵ Examples of the logic include when the Romans sanctioned individuals to pay a fee for the privilege to collect taxes on behalf of the state, permit individuals to enter into partnerships, and allow a University to own property.¹⁶ The logic of harnessing self-interest for social benefit is not unique to corporate law and is applied to other areas of human behavior such as intellectual property, which encourage creative endeavors for the benefit of society by giving creators an exclusive

¹⁰ See generally Joan C. Williams, *The Invention of the Municipal Corporation: A Case Study in Legal Change* 34 AMERICAN UNIV. LAW REV. 369 (1985) (detailing how the social relationships between lords and vassals were translated into hereditary feudal relationships)

¹¹ ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS (1776).

¹² BLACKSTONE, *supra* note 8, at 455

¹³ Arner, *supra* note 5, at 25; Davis, *supra* note 1, at 82, 105.

¹⁴ Davis, *supra* note 1, at 82, 105; Arner, *supra* note 5, at 22-3; 38; 46.

¹⁵ ANDREW STEPHENSON, PH.D., A HISTORY OF ROMAN LAW WITH A COMMENTARY ON THE INSTITUTES OF GAIUS AND JUSTINIAN 371-73 (1912) (explaining the different social organizations permitted to own property under Roman law including universities, municipalities, and trading companies); JOSEPH K. ANGELL & SAMUEL AMES, LAW OF PRIVATE CORPORATIONS AGGREGATE 10 (1852) (tracing the origin to the principal of formal social organization to the Greeks); Arner, *supra* note 5, at 23, 27-28.

¹⁶ Avi-Yonah, *supra* note 4, at 9, 16.

limited right to profit from their creations.¹⁷ Eventually, this logic would expand to incentivize international commercial activities of the joint stock company.

The origin of this logic can be traced from the direct precursors reinforces the underlying doctrine of the corporation as a social contract, which extends to the legal relationships between the corporate members. The logic of harnessing self-interest for the benefit of society, which grew into the corporation was planted in the feudal age.¹⁸ In Anglo-Saxon culture, the feudal relationships began as agreements for mutual protection to guarantee.¹⁹ The Saxon invasion heralded the adoption of formal feudal grants for mutual security between lord and vassal.²⁰ To add greater stability to the system of governance, the relationships were inherited to the descendants of the feudal deed.²¹ Eventually, the relationship expanded into other areas of human activity such as commerce and governance in the form of guilds and the incorporation of boroughs.²²

From pedestrian beginnings of weavers and goldsmiths, the corporate form was soon applied to companies dedicated to exploration, colonization, and commerce with the newly discovered lands in the Americas and Africa.²³ This social contract expanded and normalized into a body of common law and charters present in many forms including the joint stock company, letters of marque, letters of patent, letters of trade, colonial and municipal charters, etc.²⁴ As the logic applied to more social functions needed by the Crown, the relationships between the entities and participants became more complex and complicated.

¹⁷ Smith, *supra* note 11.

¹⁸ Angell, *supra* note 15, at 10.

¹⁹ Williams, *supra* note 10, at 375-76 (detailing how the social relationships between lords and vassals were translated into hereditary feudal relationships).

²⁰ EMILY ZACK TABUTEAU, ON THE LAWS AND CUSTOMS OF ENGLAND: DEFINITIONS OF FEUDAL MILITARY OBLIGATIONS IN ELEVENTH-CENTURY NORMANDY 48 (eds. Morris S. Arnold et. al)(identifying the beginning of the formalization of feudal responsibilities as the Norman invasion of 1066 and examining the formal charters, which created those obligations). Davis, *supra* note 1, at 2.

²¹ See e.g. Williams, *supra* note 10; Tabuteau, *supra* note 20 (identifying the beginning of the formalization of feudal responsibilities as the Norman invasion of 1066 and examining the formal charters, which created those obligations).

²² Williams, *supra* note 10, at 372-79, 382 (explaining the formalization of feudal relationships evolved into professional guilds and the incorporation of older towns and cities such as City of London are evidence of this);

²³ Williston, *supra* note 22, at 109.

²⁴ Statute of Monopolies (1623) (“exempting any companies or societies of merchants within this realm created for the maintenance, enlargement or ordering of any trade or merchandise”); Case of Monopolies II Co. Rep. 84(b) (1601) (stating “until 1610 it had been a common practice of the Crown, by charter or letters patent, to grant to subjects an exclusive right to sell, buy, make, work or use anything within the realm”); see also Patterson & Reiffen, *supra* note 9, at 171.

In exchange for these social benefits the Crown granted the members enforceable legal rights vis-à-vis the society as a whole. Blackstone described the fundamental rights of the corporation.²⁵ The fundamental rights of corporations are: 1) capable of perpetual succession; 2) to sue and be sued, implead or be impleaded, grant or to receive by its corporate name, and do all other acts as a natural person; 3) to purchase and hold lands; 4) to have a common seal; and 5) to make by-laws or private statutes.²⁶ Ironically, in Blackstone's day, corporations could refer equally to both public and private social organizations.²⁷

From the historical context, the social contract theory is the logical explanation for the creation of the corporate form. During the age of Exploration, the rewards to both were great. This age nourished the corporate form and raised the level of sophistication and formalization. Entrepreneurs attempted to explore distant lands in an attempt to colonize those lands and trade for exotic goods.²⁸ These voyages required coordination of human behavior to transcend differences of distance, time, and information. The social benefits were necessary because individual traders could not undertake the investment of resources to successfully achieve the missions.²⁹ The regions where these corporations operated required coordinated action because those regions "were attended with the greatest risk of attack by pirates, shipwrecks and destruction by savages; larger investments of capital were necessary and the danger of losing it was greater."³⁰ Additionally, chartering the corporation allowed the Crown to prevent rival nations from exploring and conducting commerce with foreign lands.³¹ Corporate grants functioned as de facto monopolies because it was a grant of sovereign authority, and the sovereign retained what remained by default until chartered to the corporation.³² Any actions taken without grant or charter would be unlawful. The Crown provided a limited monopoly for trade in certain regions as an extra incentive to traders and merchants to undertake the risk and expense of the foreign ventures.³³ The ultimate benefit of the corporation was

²⁵ Case of Sutton's Hospital, 5 Co. Rep. 23 (1526-1616)(check Ames 29-30); Avi-Yonah, *supra* note 4, at *13.

²⁶ Blackstone, *supra* note 8, at 463; Arner, *supra* note 5, at 29.

²⁷ This paper will refer to corporation in the historical context of both public and private entities. Davis, *supra* note 1, at 105.

²⁸ Frank Evans, *The Evolution of the English Joint Stock Limited Trading Company*, 8 COLUM. L. REV. 339, 340 (May 1908).

²⁹ Davis, *supra* note 1, 153 (stating that the trade had to be carried on by fleets of merchant vessels . . .").

³⁰ *Id.* at 156.

³¹ *Id.* at 154-6 (the Crown retaining ultimate power over the corporation free to repeal and reform the corporate form).

³² Margaret Patterson & David Reiffen, *The Effect of the Bubble Act on the Market for Joint Stock Shares*, 50 THE JOURNAL OF ECONOMIC HISTORY 163, 165 (1990) (explaining, "By restricting corporate status to relatively few firms and preventing competition between the firms, Parliament could increase the value of charters.")

³³ Honorable East India Co. v. Sands, 10 State Trials 373 (1684) (upholding the exclusive right of the East India Company to trade with India); Evans, *supra* note 28 at 63, 65, 73-

the ability to conduct trade by orchestrating and coordinating human behavior over differences of distance, time and information.

b. The Nexus of Contracts

Aside from the social contract between the sovereign and the members of the corporation, the corporation can be considered as a contract between its own members. This contract organizes human behavior and provides the direct tangible social benefit required by the social contract theory explained above. However, this is not the only interpretation, there are two interpretations of corporations: the contract theory, the artificial entity theory and the real theory.³⁴ Each interprets the form and function of a corporation differently to serve the purpose of justice.

Aside from the contractual theory, the other two interpretative theories of the corporation are the artificial entity theory, and the real theory.³⁵ All three agree that the origin of the modern corporate form began at the recognition of the separation of the legal entity from its members.³⁶ All three have been applied in American jurisprudence at one time or another to achieve justice.³⁷ The difference of each lies in how the corporate form is treated. Generally, the most conservative interpretation is the real entity theory, followed by the artificial theory, and the contract theory is the most liberal.

The more conservative interpretation of the corporation treats the corporate form as inviolable regarding the separation of property, liability, and ownership and control of the corporation and its members.³⁸ Some academics contend that a conservative interpretation of the corporation has been the engine of economic growth. However, the

75, 143 ((quoting The Charter of the Africa Company (1588) (“the adventuring of a new trade cannot be a matter of small charge and hazard to the adventures in the beginning”) and The Charter of the Hudson Bay Company (1670) (granting a limited monopoly “for the discovery of a new passage into the South Sea and for the find of some trade for furs [etc.].”))

³⁴ Herbert Hovenkamp, *The Classical Corporation in American Legal Thought*, 76 Geo. L. J. 1593, 1620-27 (1987-1988) (explaining the three judicial interpretations and the political-economic justifications).

³⁵ Robert T. Sprouse, *Legal Concepts of the Corporation*, 33 THE ACCOUNTING REVIEW 37, 39-47 (Jan. 1958); Avi-Yonah, *supra* note 4, at *18.

³⁶ Avi-Yonah, *supra* note 4, at *9-12.

³⁷ See generally *Bank of the United States v. Deveaux* 9 U.S. 61 (1809) (adopting the contract interpretation rejecting the notion of a corporation as a citizen and finding diversity jurisdiction based on shareholders); *Dartmouth College v. Woodward* 17 U.S. 518 (1819) (adopting the artificial view permitting the state to review and reform a charter); *Bank of the United States v. Dandridge* 25 U.S. 64 (1827) (supporting the real entity view by strictly construing the charter of a bank as inviolable).

³⁸ Robert B. Ekelund, Jr. & Robert D. Tollison, 11 BELL JOURNAL OF ECONOMICS 715, 718 (1980) (explaining that traditional theories regard the effectiveness of raising capital and their theory stresses the importance of limited liability).

historical record does not support that reasoning.³⁹ After the passage of the Bubble Act, few commercial corporations were chartered by the Crown or Parliament.⁴⁰ The Act was so restrictive that people who desired to organize capital and labor avoided the corporate form altogether.⁴¹ Instead, they elected other legally recognized entities that did not have the characteristics of separation of property, liability, and control but could organize behavior.⁴² The popularity of the corporate form was largely a modern phenomenon.⁴³ Businessmen found innovative ways to achieve the aims of protecting their investments and property without using the corporate form.⁴⁴ In fact, in England the industrial revolution occurred largely without using the corporate form and in the United States, many businessmen used trusts to organize their businesses and corporations.⁴⁵ The historical record questions the assumption that separation of control and ownership and limited liability as the *sine non qua* of the corporation, and consequently questions the real entity model.⁴⁶ Next, the artificial theory lies somewhere in the middle, recognizing the social contract between the sovereign and corporate members, but not necessarily the contract between the members.

Recently, the contract theory of interpretation has become popular as courts have discarded the corporate form in the interest of justice. Critics maintain that this is an aberration from traditional interpretations of corporate law. However, despite what critics maintain, the contract theory dates to common law in England and can be found in the earliest Supreme Court decisions and continues in many subsequent state and federal decisions.⁴⁷ The theory better reflects the historical context, economic function, and sociological role of the corporation at the expense of its rigid form.

From the contract perspective, the corporation is a complex contractual relationship that gives each member or party certain rights to obligate other members to

³⁹ Margaret Patterson & David Reiffen, *The Effect of the Bubble Act on the Market for Joint Stock Shares*, 50 THE JOURNAL OF ECONOMIC HISTORY 163, 167 (1990).

⁴⁰ Oscar Handlin & Mary Handlin, *Origins of American Business Corporation*, 5 THE JOURNAL OF ECONOMIC HISTORY 1, 2-3 (May 1945)

⁴¹ *Id.*

⁴² Margaret Patterson & David Reiffen, *The Effect of the Bubble Act on the Market for Joint Stock Shares*, 50 THE JOURNAL OF ECONOMIC HISTORY 163, 171 (1990).

⁴³ Handlin & Handlin, *supra* note 40, at 13 (explaining that early English law did not have limited liability).

⁴⁴ *Id.*, at 8-11.

⁴⁵ *Id.*, at 7-8 (describing how economic enterprises were organized without the corporate form).

⁴⁶ *Id.*, at 22-23 (May 1945)

⁴⁷ *Dr. Salmon v. the Hamborough Co.*, House of Lords Journals, III 864, (1671) (using the law of equity to pierce the corporate veil); *Naylor v. Brown, Finch*, 83 (using the law of equity to transfer the debts of a dissolved corporation to its shareholders); *Slee v. Bloom et al.*, 19 NY 484 (1822); *see also* Handlin & Handlin, *supra* note 39, at 19-22.

act according to a prescribed behavior.⁴⁸ The corporation can be viewed as the vehicle that orchestrates the behavior of member individuals that operate in unison to achieve the purpose of the corporation.⁴⁹ In this way, the corporation leverages and multiplies the effectiveness of individuals by orchestrating their behavior as a group to achieve goals that would otherwise not be possible by individuals.⁵⁰ The power to compel and limit behavior within a corporate framework allows for the corporation to function and separate ownership and control, limit liability of members, and reduce risk to the member property.⁵¹ Consequently, this functions for the state provided tools to encourage more participants to undertake endeavors by reducing the risk.⁵²

In essence, the corporate model is a voluntary social contract between its members that agree to assume legally enforceable obligations to each other.⁵³ From the explanation above, the perspective of an individual member of the corporation, the contractual framework to analyze the corporate model emerges.⁵⁴

Externally, the characteristics of the corporation were consistent, regardless of what framework of interpretation. However, applying the contract theory, the most important characteristic from a functional perspective was the ability to make by-laws or private statutes enforceable against its members. By-laws or private statutes provided the security and stability necessary to ensure that those who accepted the extra responsibilities of operating within the confines of a corporation could enforce their additional rights of obligating responsibilities on other members of a corporation.⁵⁵ The consistency reduced risk and provided economic security.⁵⁶

⁴⁸ The Bubble Act 6 Geo I, c. 18 at XI (1719) (codifying the authority for corporations to create bylaws despite the overall effect of destroying the corporation); *see also* Williston, *supra* note 22, at 105-122; Arner, *supra* note 5, at 34-5; Hansmann & Kraakman, *supra* note 6, at 390 (establishing that important secondary function of corporate entity is to assign creditor rights to members).

⁴⁹ Williston, *supra* note 22, at 122; Henry N. Butler, *The Contractual Theory of Corporation*, 11 GEO. MASON L. REV. 99, 103 (Summer 1989).

⁵⁰ Davis, *supra* note 1, 111; Butler, *supra* note 49, at 105. *But see* Oscar Handlin & Mary F. Handlin, *Origins of the American Business Corporation*, 5 THE JOURNAL OF ECONOMIC HISTORY 1, 8 (May 1945) (arguing that examples of agglomerations of persons that previously achieved large commercial enterprises disproves that the corporate form facilitated achievement).

⁵¹ Blackstone, *supra* note 8, at 455-56 (commenting on the vulnerability of corporations that “could neither frame, nor receive, any laws or rules of their conduct; none at least, which would have any binding force, for want of a coercive power to create a sufficient obligation.”); Butler, *supra* note 49, at 109; Arner, *supra* note 5, 49; Hansmann & Kraakman, *supra* note 6, at 391.

⁵² Davis, *supra* note 1, at 75.

⁵³ Arner, *supra* note 5, at 55.

⁵⁴ Hansmann & Kraakman, *supra* note 6, at 391; Butler, *supra* note 49, at 100.

⁵⁵ Henry N. Butler, *supra* note 49, at 105; Arner, *supra* note 5, at 38-42.

⁵⁶ Davis, *supra* note 1, at 65.

Practically, it was the ability to create and enforce rights against other members of the corporation that made the corporation to function. These rights were created from the charter and bylaws of the corporation. These rights provided rules for members and punishments against anyone that interfered in the company's zones of influence operating as an effective monopoly.⁵⁷

The monopoly permitted the organization time to develop "supply chains, contacts, and bases from which to conduct operations," which were reinforced by the individual mandates within the corporation.⁵⁸ Specifically, the bylaws provided the ability to ratify and enforce laws on the members and agents of the joint stock company to maintain those "supply chains, contacts, and operation bases."⁵⁹ For example, as stated in the charter of East India Company the company's rights may include:

[M]ake such . . . reasonable laws, constitutions, orders and ordinances as to them . . . shall seem necessary and convenient for the good government of [the company] and of all factors, masters, mariners and other officers employed . . . in any of their voyages, and for the better advancement and continuance of [their] trade, [if only they should be] reasonable or not contrary or repugnant to the laws, statutes or customs [of England]. [And in order to enforce them they might] impose such punishment and penalties by imprisonment of body or by fines and mercements . . . upon all offenders [against] such laws . . . as to [them] shall seem necessary, requisite and convenient for [their] observation.⁶⁰

The social contract refined the responsibilities and rights of all participants into a body of common law.⁶¹ The authority of the Corporation to establish and prosecute laws permitted the corporation to coordinate and orchestrate the actions of its members and

⁵⁷ *Id.*, at 149 (listing the punishment for violating the charter including the "forfeiture of ships and merchandise and double their value, one fourth to the crown, one fourth to the informer and one half to the company.")

⁵⁸ *Id.*, at 143 (explaining how the second Africa Company "erected forts, factories and warehouses in the territory.")

⁵⁹ The Bubble Act 6 Geo I, c. 18 at XI (1719) (codifying the authority for corporations to create bylaws despite the overall effect of destroying the corporation);

⁶⁰ Davis, *supra* note 1, at 117 (1905) (quoting the charter of the 'Governor and Company of Merchants of London, Trading into the East Indies').

⁶¹ Sprouse, *supra* note 35, at 39 (quoting I. WORMSER, FRANKENSTEIN INCORPORATED 76-77 (1931)) (The franchise which grants these valuable privileges and immunities necessarily involves the assumption of corollary duties and obligations to the sovereign. The legal vassal created by the sovereign owes obligations of fealty and utmost good faith to its creator.")).

agents over differences of distance, time, and information to achieve a common purpose of its charter.⁶²

Controlling human behavior provides specialization and creates more value within the corporation. Ironically stated as a criticism to the corporate form, Adam Smith alluded to one benefit of the corporation that despite that:

[T]he only trades which it seems possible for a joint-stock company to carry on successfully without an exclusive privilege, are those of which all the operations are capable of being reduced to what is called routine, or to such a uniformity or method as admits of little or no variation.⁶³

Adam Smith failed to recognize that the corporation is the glue, which binds its members to each other and reduce those “functions to routine.” The corporate model ensures that its members continue to act for its benefit to fulfill the social benefit required by its charter. Ultimately, what allows for the regularization of human behavior and specialization of the individual parts is the “nexus of contracts” that comprises the corporation.

From the historical context to which the precursors of the modern corporation reveals that social benefit of opening new areas of trade and exploring foreign lands. Trade and commerce to foreign lands required large fleets of vessels of both large merchantmen and war ships.⁶⁴ Moreover,

[T]he larger the unit of activity, whether imposed by physical conditions or by others, the greater the need of association. It was not correlation of activity that traders needed; it was association of activity.⁶⁵

The corporate form of the joint stock company created the social benefit required by the sovereign. The form coordinated human behavior across differences of time, distance, and information to achieve the social benefit required by the social contract with the sovereign. The corporation operated as a collection of enforceable contracts the state allocated property and rights between its members and agents that allowed the necessary coercion to achieve the ultimate purpose of the corporation for which it was founded. Thus, the efficiencies produced by the corporation by allocating rights to members to orchestrate behavior could fulfill its function to the state. Additionally, after achieving the purpose, the corporation acted as a repository of information and security that

⁶² *Id.* at 63, 65, 73-75 (*quoting* the Charter of the Hudson Bay Company (1670) (granting a limited monopoly “for the discovery of a new passage into the South Sea and for the find of some trade for furs [etc.].”))

⁶³ Smith, *supra* note 11, at book v. ch. I art. 5

⁶⁴ Davis, *supra* note 1, at 153.

⁶⁵ *Id.*

guaranteed economic behavior that would ultimately benefit the Crown. The required social benefit was international trade, which expanded the area of economic development for the home country.⁶⁶ Corporate rights orchestrated human behavior across differences of geography, time, and information to expand trade and economic activity.

The legal interpretations of the corporation as contracts, one which provides benefits to the state and its members and the other which provides benefits to its members are supported by economic doctrines. The benefit depends on the second benefit of organizing human behavior. Economic doctrines regarding spatial economics and efficiencies of the firm further support the understanding of the corporation as a “nexus of contracts” and human relationships.

III. The Benefits of the Corporation: an Economic Perspective

Mirroring the social benefits provided to the state, the doctrine of spatial economics demonstrates the economic value of the corporation. The corporation provides the means to transcend the difference between distance, time, and information between where goods are produced and sold. The value of and profit produced by the corporation is supported by the ‘scarcity rent’ captured. The scarcity rent is the difference between the cost to produce a good and the price the good is sold. A reduction in transportation costs achieved by the efficiency of the firm.

a. The Social Utility from Spatial Economics

Corporations capture the scarcity rent of foreign commerce. Von Thünen demonstrated that the cost of a good is dependent upon the distance of the economic activity to the market and the transportation costs associated with bringing the foreign good to market.⁶⁷ The Von Thünen model is agricultural and depends on the example of an isolated town in the center of concentric rings of agricultural activity. With the market at the center, the allocation of competing agricultural goods depends on the transportation cost. Those transportation costs increase the relative distance from the market until the cost of production equals the market price.⁶⁸

The profit or scarcity rent is what the corporation captures. Thus, the constraints for the location of the economic activity can be determined by the transport costs of bringing the good to market. If cost of production per item is equal, and transportation

⁶⁶ See Ekelund, Jr. & Tollison, *supra* note 38, at 716 (stating that early voyages were “essentially hand-to-mouth affairs” and “each expedition was financed independently, to be decomposed into returns at voyage’s end.”)

⁶⁷ JOHANN HEINRICH VON THÜNEN, ISOLATED STATE, 71, 107, 161-64 (Carla M. Wartenberg Translator)(1966) (calculating the land rent by the system developed for spatial geography); Colin Clark, *Von Thünen’s Isolated State*, 19 OXFORD ECON. PAPERS 370, 371 (Nov. 1967).

⁶⁸ Masahisa Fujita, *Thünen and the New Economic Geography*, 6 (lecture delivered on September 14, 2000).

costs are marginal, the activity will continue to the point where cost is greater than price.⁶⁹ Further, looking at the relationship between the distance between the economic production and the market reveals the incentives to the producer.⁷⁰ Incentives dictate that the closer the economic activity occurs to the market the greater the profit to the producer. This profit is known as “scarcity rent.”

The corollaries depend on the definition of rent implicit in spatial geography and defined by J. Mill as the scarcity rent or profits.⁷¹

The rent, therefore, which any land will yield, is the excess of its produce, beyond what would be returned to the same capital if employed on the worst land in cultivation.⁷²

The doctrine states that in a market of multiple producers of a comparable good, the difference between the price of the good and the cost to produce the good is the “scarcity rent.”⁷³ When the price is fixed determined by the intersection of the supply and demand curves, and the cost of a good is dependent on its transport costs. The producers closer to market with less transportation costs will have a lower cost of production. The difference between the cost and the price equals the scarcity rent.

Conversely, the closer the producer is to the market the transport costs are lower and capture more scarcity rents.⁷⁴ That function of cost implies that the greater the distance from the market the greater the transaction cost to bring equal goods to market and thus, the advantage to reduce transaction cost by organizing the activity under a firm.⁷⁵ Lastly, the greater the distance from the market will encourage the firm to include more transactions and more products to market.⁷⁶

If demand remains steady, the entrepreneur will discover methods to reduce costs and increase production. Increases in production are divided into two categories of technological change: “production-technological and transport-technological change.”⁷⁷ The second category, transport-technological change, increases production by

⁶⁹ Lewis H. Haney, *Rent and Price: “Alternative Use” and “Scarcity Value”* THE QUARTERLY JOURNAL OF ECONOMICS, 119, 137-38 (1910).

⁷⁰ Haney, *supra* note 69, at 137-38.

⁷¹ JOHN STUART MILL, PRINCIPLES OF POLITICAL ECONOMY, Bk. II Ch. VI Sec. 3 Rent of Land is the Excess (1885); *Id.*, at 137-38.

⁷² Mill, *supra* note 71 at Bk. II Ch. VI Sec. 3.

⁷³ Von Thünen, *supra* note 67, 161-64; Haney, *supra* note 69, at 137-38 (1910) (differentiating J.S. Mill’s definition of rent into alternative use and scarcity value).

⁷⁴ Von Thünen, *supra* note 67, at 96-140; Haney, *supra* note 69, at 137-38.

⁷⁵ Coase, *Nature of the Firm*, 4 ECONOMICA 386, 403 (1937)

⁷⁶ *Id.*

⁷⁷ J. Richard Peet, *The Spatial Expansion of Commercial Agriculture*, 45 ECONOMIC GEOGRAPHY 283, 289 (1969)

“lower[ing] the cost of production or transport,” and can be accomplished by the efficiencies gained from organization of individuals into firms.⁷⁸ When such efficiencies are coupled with a rising demand, the zones of economic activity expand quickly from the market center.⁷⁹ The corporate form will function as the transport technology that increases efficiency.

Returning to the joint stock company, spatial economics demonstrates the company provided a good that would otherwise not be available. The joint stock company provided the means for transport technology in trade and commerce to transcend differences in distance, time and information. Many of the goods provided by the joint stock company were rare with an inelastic demand curve. The scarcity rent is high and incentivize producers to benefit from the scarcity rent. Additionally, corporations would begin limited operations in foreign countries and increase involvement and development of the commercial relationship. Over time this develops into profound and regularized trading relationship spanning many industries.⁸⁰

b. Effectiveness from Firm Efficiency and Institutional Knowledge

The corporation functioned as the transport technological change that increased the scarcity rent would be to organize the individual members into the corporation. The organization of individual relationships and transactions into routine actions under the aegis of a corporation reduced the transaction costs of the companies. Furthermore, the firm served as a repository of institutional knowledge to achieve efficiencies. This concept is relevant to the joint stock company, which operates as a multi-national firm and transcends differences of distance, time, and information.

Both the efficiency of the firm and the benefit of institutional knowledge are two recognized economic social benefits that mirror the legal arguments of the corporation. Coase proposed the benefits of organized behavior in his study, “The Nature of the Firm.”⁸¹ To prove his argument he abstractly describes how the behavior is codified in specific legal relationships between individuals.⁸² The similarities of the benefits provided by the firm reflect how the social benefits corporations provide to society are based on the nexus of contracts.

Interestingly, Coase alludes to Von Thünen’s theory and elaborates one corollary of how the geographic economic model and the efficiency of the firm overlap in respect to an entrepreneur attempting firm coordination doctrine.⁸³ He notes that the cost of organizing behavior increases the further away that activity occurs from the market.⁸⁴

⁷⁸ *Id.* at 289.

⁷⁹ *Id.* at 290.

⁸⁰ *Id.* at 289.

⁸¹ *See generally* Coase, *supra* note 75.

⁸² Coase, *supra* note 75, at 403-05.

⁸³ *Id.* at 402.

⁸⁴ *Id.* at 403.

However, Coase limits the economic effect of Von Thünen to conclude that the firm will trade additional products not produced within the geographic areas. This paper contends that the increase in efficiency will increase the geographic area of economic development.⁸⁵

Coase describes how efficiency increases when human behavior is orchestrated in a firm. He elaborates “within a firm . . . market transactions are eliminated and in place of the complicated market structure . . . is substituted the entrepreneur-co-ordinator, who directs production.”⁸⁶ This centralized directed production contrasts to the state of the market economy, which “[o]ver the whole range of human activity and human need, supply is adjusted to demand, and production to consumption, by a process that is automatic, elastic and responsive.”⁸⁷ Integral to different industries is the “vertical” integration to organize different factors of production and provide “lumps of conscious power in this ocean of unconscious co-operation.”⁸⁸ Coase argues that the “conscious power” manifests itself in the form of the “entrepreneur-co-ordinator,” which eliminates the inefficiencies of the “market transactions” between economic actors.⁸⁹

Coase’s demonstrates the efficiency of the firm reflects the idea of the corporation as a “nexus of contracts,” formalizing the relationship of the members within the firm as an efficient method of orchestrating human behavior.⁹⁰ Coase states, “a firm therefore, consists of the system of relationships which comes into existence when the direction of resources is dependent on an entrepreneur.”⁹¹ He directly alludes to legal relationships that orchestrate the human behavior for a common purpose including the master – servant, employer – employee, and agent – factor.⁹² Further, Coase points to the reduction of contracts between members of a firm as evidence that the reduction of transaction costs within a firm.⁹³ He directly a firm to a system of contracts that operates as one operating agreement for an extended duration.⁹⁴ Additionally, Coase states that such agreements reduce risk between actors as well as restricting the course of action of its members for a period of time and notes the importance of such agreements to provide services.⁹⁵ However, the principle of efficiency from contract has limits, and the size of a firm will grow to where the addition of more transactions to the firm has negative

⁸⁵ *Id.*

⁸⁶ *Id.* at 388.

⁸⁷ *Id.* at 387 (quoting D.H. Robertson)(internal quotations omitted).

⁸⁸ *Id.* at 388.

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.* at 393.

⁹² *Id.* at 403-05.

⁹³ *Id.* at 391.

⁹⁴ *Id.* (In no uncertain terms stating, “. . . if one contract is made for a longer period, instead of several shorter ones, then certain costs of making each contract will be avoided.”)

⁹⁵ *Id.* at 391-92.

returns.⁹⁶ He defines this phenomenon as “diminishing returns to management” that ultimately limit the size of the firm.⁹⁷

In an empirical study, Kogut and Zander, apply Coase’s observations about the efficiency of the firm to the multi-national corporation and expand the idea of regularizing the firm member. The study demonstrated how the corporation’s social benefit was the institutional knowledge or in the words of the author “ownership advantage.”⁹⁸ Elaborating on Coase’s description of how a firm operates, the authors described the firm as a “social community” that:

[t]hrough repeated interactions, individuals and groups in a firm develop a common understanding by which to transfer knowledge from ideas into production and markets . . . Cooperation within an organization leads to a set of capabilities that are easier to transfer with the firm than across organizations⁹⁹

This reinforces the view that the firm operates as a “social community” that internalizes market transactions providing predictability by regularizing human interactions.¹⁰⁰ Or in the words of Coase:

With uncertainty entirely absent, every individual being in possession of perfect knowledge of the situation, there would be no occasion for anything of the nature of responsible management or control of productive activity. Even marketing transactions in any realistic sense would not be found. The flow of raw materials and productive services to the consumer would be entirely automatic.¹⁰¹

Additionally, firms gain and transfer institutional knowledge. Companies develop this institutional knowledge consisting of how “information is coded and action

⁹⁶ *Id.* at 394.

⁹⁷ *Id.* at 395 (quoting N. Kaldor, “The Equilibrium of the Firm” *Economic Journal*, March 1934, and E. A. G. Robinson, “The Problem of Management and the Size of the Firm,” *Economic Journal*, June, 1934).

⁹⁸ Bruce Kogut & Udo Zander, *Knowledge of the Firm and the Evolutionary Theory of the Multinational Corporation*, *JOURNAL OF INTERNATIONAL BUSINESS STUDIES* 625, 638 (1993) (discussing the purpose of the multi-national firm).

⁹⁹ *Id.* at 626-27; *see also* Bruce Kogut, *National Organizing Principles of Work and the Erstwhile Dominance of the American Multinational Corporation*, *INDUS. AND CORP. CHANGE* 285, 291 (1992) (stating that “[t]he social structure of network is also an expression of knowledge, for members to this network are competitively stronger due to their cooperative ties with each other”).

¹⁰⁰ Kogut & Zander, *supra* note 98, at 626.

¹⁰¹ Coase, *supra* note 75, at 399.

coordinated,” which enables “design transfer.”¹⁰² Figuratively, the transfer is the capability to organize the factors of production to create a product.¹⁰³ This is achieved because corporate framework eases the “transfer of capabilities” within the firm rather than between organizations.¹⁰⁴ Ultimately, the authors conclude that the efficiency of the “transfer of capabilities” determines the size and growth of firms, which compromises the advantage of the firm.¹⁰⁵

In the context of the firm operating internationally, the paper indicates that a firm’s expansion into a foreign country depends on how “learning how to manage operations and sales in a new environment.”¹⁰⁶ Of course there is a cost to undertake this expansion, but firms with experience and knowledge can achieve this more efficiently.¹⁰⁷ This corporate form allows for specialization to occur to and provide the benefits of efficiency providing support to the liberal contract interpretation of the corporate model.

Thus, economic doctrines support that legal statutes achieve what they were designed to accomplish: social utility. Essentially, Coase’s doctrine of the firm expanded by Kogut and Zander demonstrates that firms achieve efficiencies from the organization and regularization of human behavior. Applying those efficiencies to Von Thünen’s doctrine of spatial geography demonstrates that when more efficient modes of transportation are applied to geographic area of economic exploitation the geographic area increases in size. Thus, providing more goods to the market. In legal terms, the corporation functions as a “nexus of contracts” that provides legal rights to its members to organize human behavior over differences of distance, time, and information. These rights provide the coordination of individual actors necessary to achieve the purpose for which the sovereign granted authority to the corporation and fulfills the contract. By enforcing the rights of the corporation against its members, the corporation can complete its duty to the state.

III. Convergence: The Age of Amazon and the Next Reformation

*Changes like the telephone and the telegraph, which tend to reduce the cost of organizing spatially will tend to increase the size of the firm.*¹⁰⁸

The previous two sections demonstrate that the corporation creates social benefits for society because it transcends differences of distance, time, and information. However,

¹⁰² Kogut & Zander, *supra* note 98, at 626-7, 636 (internal quotations omitted)(stating that transfer is easier within the framework of a corporation rather than between separate entities).

¹⁰³ *Id.* at 627.

¹⁰⁴ *Id.*

¹⁰⁵ Kogut & Zander, *supra* note 98, at 638-39.

¹⁰⁶ *Id.*, at 640.

¹⁰⁷ *Id.*

¹⁰⁸ Coase, *supra* 75, at 397.

the Internet revolutionizes this phenomenon. The Internet framework, also, functions to transcend the differences of distance, time and information due to a process of convergence. Ironically, nothing supports this conclusion better than Amazon, the self-proclaimed “store of everything.”¹⁰⁹ The business model of Amazon is apparently to absorb every other business model using the infrastructure of the Internet. Examining the role of Amazon, a corporation (ironically), demonstrates that the social benefits provided are no longer unique to the corporation and allow society to question its role.

a. Convergence: the Process of Innovation from Unification

Viewing the corporation as a social institution that provided social benefits previously not available such as distant international trade that, previously, was not possible. This was possible because the corporation orchestrated and organized human behavior over differences in geography, distance, and information. However, the corporation is no longer unique in its ability to coordinate human behavior across differences in distance, time, and information. The infrastructure of the Internet effectively allows for instant communication between any two locations on the planet with applications that limited human behavior and regularized those interactions.

Ithiel de Sola Pool coined the term “convergence” to describe the process by which communication innovation challenged the traditional legal framework and social structures.¹¹⁰ His study focused on how society regulated different forms of communication balancing society’s individual rights of expression with the right to control the medium.¹¹¹

This process of convergence by which the Internet dissolves the differences of geography, time, and information is not new, rather it is an ongoing process of human innovation. Preceding the Internet in that line of innovation is the printing press, telegraph, and television, and arguably, the corporation. This line of innovation has continuously challenged and reformed the framework of social organizations that preceded it.¹¹²

In “Technologies of Freedom,” de Sola Pool refers to the Internet, however, at the time of publication, the Internet was not mature enough to provide examples to demonstrate the effect that the Internet does and will continue to have.¹¹³ However, general principles regarding the precursors of innovation can perhaps plot the future

¹⁰⁹ Brad Stone, *The Everything Store: Jeff Bezos and the Age of Amazon* 24-5 (2014) (explaining that Bezos, founder of Amazon, figured that someone would be the intermediary of the Internet).

¹¹⁰ *Id.* at 39, 54-72, 214 (discussing how industries competed, regulation of speech, and challenges to copyright).

¹¹¹ *Id.* at 97, 226-51 (detailing the ‘common carrier’ regulation scheme of the telegraph favored by the U.S. Congress and future of freedom of expression).

¹¹² ITHIEL DE SOLA POOL, *TECHNOLOGIES OF FREEDOM* 226 (1983).

¹¹³ *Id.* at 198.

effects the Internet will have on society.¹¹⁴ Specifically, the book demonstrates how innovation in communication technology reduces differences in geography, time, and information causing previously independent institutions to compete.¹¹⁵ Additionally, he introduces the concept of the “value-added network,” a network that increases in value for the increase in membership.

An example of convergence illustrated in the book was the effect of the telegraph on newspapers.¹¹⁶ The telegraph undermined the competitive advantage of large papers capable of supporting a large network of correspondents that could report international news.¹¹⁷ Instead, current events could be broadcast from anywhere to anywhere instantaneously provided there was a telegraph connection.¹¹⁸ Smaller papers located in secondary markets could generate articles about international events contemporaneously with their larger rivals located in big cities.¹¹⁹ In this limited example, a technological innovation undermines an established business model and changes how society operates.

This process of convergence described above, increases by orders of magnitude with the Internet, which house a digital manifestation of virtually every good or service.¹²⁰ And no company developed its business model more closely to the architecture to the Internet more than Amazon, which built its business model around the framework of the Internet and exploiting the principle of convergence of economic innovation.

b. The Reformation and the Age of Amazon

No example better demonstrates the process of convergence on the Internet better than Amazon. Reviewing Brad Stones authoritative novel, *The Everything Store: Jeff Bezos and the Age of Amazon*, reveals how the business model of Amazon follows the path of convergence. There are two primary effects: first, the company uses the framework of the Internet to completely transcend differences in distance, time and information to greatly reduce marginal transportation costs, and second, Amazon’s network has a value in itself from every person who uses the application of Amazon as a marketplace.

¹¹⁴ *Id.* at 41 (predicting the dominance of electronic media).

¹¹⁵ *Id.* at 39 (explaining how technological advances converged electrical media with print, broadcast, and ‘computer networks’).

¹¹⁶ *Id.* at 93.

¹¹⁷ *Id.*

¹¹⁸ *Id.*

¹¹⁹ *Id.* at 93.

¹²⁰ *See generally* Foer, *supra* note 2.

i. Spatial Geography and the Endless Market

De Sola Pool, described the economic cost model for a firm operating on a cable system network infrastructure similar to the Internet.¹²¹ He identifies:

The great bulk of the cost of a cable system is the sunk investment from constructing it. The marginal cost of putting a tape on an otherwise idle channel is minuscule. Charging an impecunious customer anything one can get above marginal cost may be rational, but unless the operator receives much more . . . bankruptcy for the cable system will follow. The viewers or the time leasers among them must somehow cover the average, not just the marginal cost.¹²²

This pricing model closely resembles Amazon's commercial strategy in multiple ventures attempted by Amazon. For example, Amazon's business strategy included the "negative operating cycle."¹²³ The "negative operating cycle" allowed the company to accept credit card payments almost immediately from customers for products that had to be paid months later.¹²⁴ Additionally, and perhaps more importantly:

The company could also lay claim to a uniquely high return on invested capital. Unlike brick-and-mortar retailers, whose inventories were spread out across hundreds or thousands of stores around the country, Amazon had one website, and, at the time, a single warehouse and inventory. Amazon's ratio of fixed costs to revenue was considerably more favorable than that of its offline competitors. In other words, Bezos and Covey argued, a dollar . . . plugged into Amazon's infrastructure could lead to exponentially greater returns than a dollar that went into the infrastructure of any other retailer in the world.¹²⁵

Abstractly, the growth cycle was based completely on small marginal profits from increasing amounts of consumers that increased the profitability of its fixed costs was constantly.¹²⁶ This idea was woven into the fabric of new business ideas.¹²⁷ Thus, due

¹²¹ See Stone, *supra* note 3, at 182.

¹²² *Id.*

¹²³ *Id.* at 57.

¹²⁴ *Id.* at 57-8.

¹²⁵ *Id.* at 58.

¹²⁶ *Id.*

¹²⁷ *Id.* at 57, 126 (connecting the introduction of yearly fixed cost shipping for customers to increased growth).

to the high nature of fixed costs and possibility of low margins on products, profits are generated mainly from the scarcity value achieved by the reduction of costs. Other tactics to increase the market share and consequently, the scarcity value of Amazon included raising the value of each individual order.¹²⁸ More market share by order and per customer allowed Amazon to negotiate lower prices from vendors and save on shipping costs, both, which increase the scarcity value (difference between price sold and cost to produce) relative to the market price of the good (and profit).¹²⁹ Further, savings from suppliers always have a direct benefit from the bottom line.¹³⁰ In fact, the ability to learn and replicate this model was credited to the success of many aspects of many of the “low-margin businesses.”¹³¹

Connecting this example to Von Thünen’s spatial economics demonstrates how the Internet essentially realigns producers and consumers to allow direct access to each. The Internet “converges” actors and dissolves differences between consumers and producers. Marginal transportation and storage costs are substantially reduced and the scarcity value is optimized in every transaction by overcoming differences in distance, time, and information.

ii. “Value Added Networks” and the Applications that Facilitate Interaction

The concept of profits driven by market share was described in Technologies of Freedom, as “Value-Added Networks,” which increase with every additional user of the network.¹³² In the context of the Internet, the value added is great due to the function of the Internet to transmit large amounts of data from to another user in a vertically integrated company.¹³³ Similarly, in Stone’s account of the rise of Amazon,

The high-tech community was getting a lesson in the dynamics of network effects---products or services become increasingly valuable as more people use them. In online marketplaces, the network effect was pervasive; sellers stuck around for access to a critical mass of buyers, and vice versa.¹³⁴

If the abstract idea of Value-Added Networks was not understood explicitly, it was always implicitly part of the Amazon business model and reflected in the ethos of the

¹²⁸ *Id.* at 188.

¹²⁹ *Id.* (crediting the introduction of Amazon yearly fixed-price shipping to reducing “Amazon’s transportation costs by double-digit percentages.”)

¹³⁰ *Id.* at 245 (citing how Amazon implemented tough negotiating tactics to win low prices from suppliers).

¹³¹ *Id.* at 221.

¹³² *See de Sola Pool, supra* note 112, at 79

¹³³ *Id.*

¹³⁴ *Id.* at 58.

company: “get big fast.”¹³⁵ The company measured its success by its share of the market and amount of customers rather than short-term profitability.¹³⁶ Logically, because of the reduced transaction cost and value added networks, anyone could convert any market to a negative operating cycle. However, Amazon did not incentivize its value solely in terms of the architecture of the Internet, an architecture, which bridged differences in time, distance, and geography. In fact, many of the smaller applications of the company mirrored the structure of the Internet: categorizing huge amounts of information in a decentralized and flexible format. Examples include digitizing books, Amazon’s adoption of service-oriented architecture, crowd funding, and cloud services.¹³⁷ In describing the success of his cloud services, Amazon founder Jeff Bezos compared the service to another common network: the energy grid.¹³⁸

. . . if you wanted to have electricity, you had to build your own little electric power plant, and a lot of factories did this. As soon as the electric power grid came online, they dumped their electric power generator, and they started buying power off the grid.¹³⁹

Those cloud services essentially became a super computer available to all companies at a variable price dependent on usage and Amazon absorbs the fixed cost of building and maintaining the system.¹⁴⁰ The development of those web based services provided the infrastructure necessary for “thousands of Internet start-ups.”¹⁴¹

In the Amazon example, the parallels of the endless market and the “value-added network” to the efficiencies captured by the firm are evident. In each, increased regularized communication with a predictable patten of interaction allows specialization between members. However, what the firm achieves by a legal framework that provides individual rights to members to compel behavior is achieved by the behavioral limitations imposed by the architecture of the Internet and the software of the applications that use it.

The architecture of the Internet dissolves the differences between geography, time, and information. Perhaps no Amazon application better demonstrates that such as the “price check” application that allowed a consumer to check the price of any merchandise in a physical store to the price on Amazon.¹⁴² With a smart phone, a consumer could access a perfect market where instantly, the price of good could be compared to a number of other retailers located throughout the country (using Amazon marketplace for resellers). As Bezos himself declared bottlenecks and “gatekeepers” to

¹³⁵ *Id.* at 57.

¹³⁶ *Id.* at 69.

¹³⁷ *Id.* at 197-99, 201, 217-18, 221.

¹³⁸ *Id.* at 221.

¹³⁹ *Id.*

¹⁴⁰ *Id.* at 221-23.

¹⁴¹ *Id.*

¹⁴² *Id.* at 316.

society slow innovation and when everyone has access to the market diverse ideas may work.¹⁴³

Thus, Amazon operates as an application that exploits the architecture of the Internet to provide the endless market and value-added network to bridge differences of time, distance, and information. The value of this convergence between different economic actors is demonstrated in Coase's theory of the firm that allows economic actors to increase efficiencies from repeated interactions and specialization. On a larger scale, this process is transforming the Internet

IV. Conclusion

As policymakers attempt to regulate a society rapidly transforming itself to the medium of the Internet, they should reform social institutions and organizations. In the case of the corporation, the framework of the Internet is supplanting the value and function of the corporation of society. The original underlying logic, which encouraged sovereign to relinquish authority in exchange of a social benefit from the company sparked the creation of the first corporations is not relevant. Amazon is an Internet application that absorbs the rents created by business models because the framework dissolves geographic difference and transaction costs. The framework of the Internet undermines social rents created by the corporate model because it transcends differences of distance, time, or knowledge. Arguably, the Internet provides perfect information, instantaneously, to anyone anywhere that is connected.

This cultural transformation is just beginning and is not limited to e-commerce. Perhaps, society senses the redundancy of traditional forms social organization and views the corporate form less as a tool to achieve the otherwise unachievable and rather a limitation constraining human expression. This paper deals strictly with a legal and economic interpretation of the corporation and sociological effects of innovation. However, the trends could be applied to sociological development and the evolution of cultural norms.

¹⁴³ *Cf. Id.* at 314 (referring to creative pursuits, but equally applicable to the economics and business).