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Legal Implications of the Virtual Enterprise

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LEGAL IMPLICATIONS OF THE VIRTUAL ENTERPRISE

by

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To My Parents

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"In the last decade of this century there will remain only two kinds of companies: the fast ones and the dead ones."

Andrew Grove, Intel-president[1]

I. Introduction

This thesis describes the legal implications and problems lawyers face when creating "Virtual Enterprises" that require non-traditional forms of legal services delivery.

Virtual Enterprises are similar to joint ventures and strategic alliances[2] in that they are formed by 2 or more separate entities to work together in the manufacturing or servicing markets, but Virtual Enterprises differ from these in that they are more informal, spontaneous partnerships that come together fast and break up fast.[3]

The term Virtual Enterprises derives from the computer industry where "virtual memory" describes a computer that acts as if it has more abilities and capabilities than it

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[1] *Neidische Esel,* DER SPIEGEL, May 24, 1993, at 200.

[2] This term will be used here as meaning a cooperative venture of two or more companies without forming a separate entity as opposed to a joint venture (*see infra* notes 87-94 and accompanying text), ROBERT P. LYNCH, THE PRACTICAL GUIDE TO JOINT VENTURES AND CORPORATE ALLIANCES 7 (1989).

[3] John A. Byrne et al., *The Virtual Corporation,* BUS. WK., Feb. 8, 1993, at 98, 103.

actually possesses.[4] "The Virtual Corporation seems to be a single entity with vast capabilities but really is the result of numerous collaborations assembled only when needed".[5]

The term is nevertheless used in some different ways. Davidow and Marlone in their book describe a corporation using all available advanced management and venturing devices but nevertheless remaining a separate entity.[6] In this context the term means more a "virtuous" than a "virtual" corporation.[7]

Nagel used the term to describe temporary alliances formed by fictional corporations in the year 2006 through electronic links which are nevertheless legally incorporated entities.[8]

I will use the term again in a slightly different way. The creation of a separate, legally incorporated entity creates a host of new problems which fast moving partners might want to avoid; a pure contractual relationship is therefore generally preferable for corporate partnering.[9]

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[4] *id.*

[5] *id.*

[6] WILLIAM H. DAVIDOW & MICHAEL S. MALONE, THE VIRTUAL CORPORATION 4-5 (1992).

[7] Byrne et al., *supra* note 3, at 103.

[8] 2 ROGER NAGEL & RICK DOVE, IACOCCA INSTITUTE AT LEHIGH UNIVERSITY, 21ST CENTURY MANUFACTURING ENTERPRISE STRATEGY 79 (1991).

[9] THOMAS F. VILLENEUVE ET AL., CORPORATE PARTNERING 1-6 (1992).

A description of the basic functional elements of the Virtual Enterprise is best started with a list of the most important reasons for forming such an enterprise which are similar to those for forming joint ventures and strategic alliances today. In essence, "companies will collaborate when cooperative arrangements better address their requirements than do go-it-alone strategies, traditional transactions or acquisitions".[10] Today, "Technologies are changing so fast that nobody can do it alone anymore".[11] "Alliances are both a cause and an effect of knowledge intense competition."[12] Companies today no longer have the complete knowledge and abilities to compete alone; the development of new products becomes so expensive that no one can assume alone the full risks.[13] Virtual Enterprises are especially useful in development and production of "computer hardware and software, biotechnology, telecommunications, industrial process control equipment and consumer electronics."[14] To be competitive in these markets,

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[10] *id.*

[11] Byrne et al., *supra* note 3, at 100.

[12] JOSEPH L. BADARACCO, JR., THE KNOWLEDGE LINK 10 (1991).

[13] 1 ROGER NAGEL & RICK DOVE, IACOCCA INSTITUTE AT LEHIGH UNIVERSITY, 21ST CENTURY MANUFACTURING ENTERPRISE STRATEGY 14 (1991).

[14] 1 NAGEL & DOVE, *supra* note 13, at 1-2.

corporations have to form alliances and new, redefined relationships.[15]

Based on these foundations and on the assumption that business in the future needs to be flexible or "agile",[16] I propose here the functional elements of the "Virtual Enterprise" which is the subject of this thesis:

- concurrent development, marketing and servicing of a highly sophisticated product with short life-cycle by two or more specialized companies.
- short lived, highly flexible enterprise.
- high levels of coordination and trust.
- comprehensive end results may not be identified in advance.
- distribution of rewards determined after the fact.
- ability to operate in context of participants being contemporaneous competitors on other endeavors as well as potential competitors on same product in the future.
- quick exploitation of a fast changing opportunity.

Unfortunately traditional legal services by lawyers dealing with business transactions and arrangements[17] are

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[15] Byrne et al., *supra* note 3, at 103; BADARACCO, *supra* note 12, at 11, 12, 79, 83; VILLENEUVE et al., *supra* note 9, at 1-17.

[16] 1 NAGEL & DOVE, supra note 13, foreword.

[17] VILLENEUVE et al., *supra* note 9, at 1-3.

unsuitable for such future alliances that require "looser, more open-ended contractual arrangements" instead of "highly specific, arms-length contracts."[18] "A corporate partnering arrangement is a system and an ongoing interdependent relationship and it must be considered in this context."[19] Lawyers therefore have to be able to support these relationships by creating appropriate arrangements.[20] A streamlined legal subsystem might be or should be created by government, but an analysis of the present situation will help in itself to create "rapid cooperation mechanisms" to support alliances.[21] Conversely, classical or neoclassical contract law with its emphasis on exact prediction of the future through contracts does not help very much in the area of joint ventures and other alliances. It neglects the ongoing relationship and its influence on the reality of the ongoing venture. Thus, relational contracting must be delivered by lawyers to serve these needs.[22]

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[18] BADARACCO, *supra* note 12, at 4.

[19] VILLENEUVE et al., *supra* note 9, at 1-3.

[20] *id.*

[21] 2 NAGEL & DOVE, *supra* note 8, at 55.

[22] Steven R. Salbu, *Joint Venture Contracts as Strategic Tools,* 25 IND. L. REV. 397, 424-427 (1991).

Creating a complex joint venture contract today takes five months to three years.[23] Writing these contracts is "an attorneys paradise"[24] but might not help the parties very much for their ongoing venture.[25] Meanwhile, changing opportunities in markets might require quick cooperation within days, based on trust and not on complete contracts.[26] Time has market value[27] and has therefore to be taken into account by the legal professionals. The "start up costs in time and legal resources" need to be reduced or removed.[28]

Legal systems are often constructed in a "horizontal" way, giving a complete and dogmatized picture of contract law, intellectual property law, trade secrets law etc. Special entities, like the Virtual Enterprise, need adjustment of these horizontal systems in a vertical way, linking the different systems together to support these entities and make them and the legal services more competitive.[29] "The role of the lawyer ... in assessing,

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[23] KATHRYN R. HARRIGAN, MANAGING FOR JOINT VENTURE SUCCESS 2-3 (1986); LYNCH, *supra* note 2, at 7.

[24] BADARACCO, *supra* note 12, at 99.

[25] *id.*, at 99 , 100.

[26] for an example, *see*: DAVIDOW & MALONE, *supra* note 6, at 21.

[27] *id.*, at 22.

[28] 2 NAGEL & DOVE, *supra* note 8, at 56.

[29] Salbu, *supra* note 22, at 426.

structuring, negotiating and implementing strategic alliances is to act as facilitator, guide, architect, advisor, interpreter, technician and mechanic ... in support of our business people and the business objectives."[30] This thesis discusses adjustment to the legal subsystems that need to be made to support the creation of "Virtual Enterprises".

An example of a "virtual corporation", forming many different Virtual Enterprises to reach its strategic goals, is Novell Inc., a Utah based Local Area Network (LAN) software developer.

Novell's NetWare LAN software has a marketshare in the microcomputer LAN software market of about 60 percent.[31] Novell is "executing a comprehensive strategy of acquisitions, alliances and new product-initiatives" to compete in the networking market.[32] Acquisitions have been used only in a few cases like the purchase of Digital Research in 1991,[33] Annatek in 1992[34] or the purchase of

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[30]Douglas G. Scrivner, *Strategic Alliances in the 1990s,* COMPUTER LAW., Dec. 1992, at 24, 30.

[31]Craig Stedman, *Novell Links DEC, 3Com to NetWare,* ELECTRONIC NEWS, Feb. 17, 1992, at 11.

[32]Evan I. Schwartz, *'The Industry Needs an Alternative'- But Will It Be Novell?,* BUS. WK., Feb. 1, 1993, at 69.

[33]Bill Machrone, *World-beating Strategies,* PC MAG., Sept. 15, 1992, at 87.

[34]Caryn Gillooly, *Novell Unwraps Distribution Product Plan,* NETWORK WORLD, Oct. 5, 1992, at 2, 67.

the Unix operating system from AT & T,[35] when it was necessary to fully combine the products of Novell and the acquired company.[36] A merger of Novell itself with Apple as a deepening of their relationship was considered harmful to Novell because a merger would be expensive, restrict Novell's products to Apple's marketshare of 15 % and harm its relationship with other hardware manufacturers.[37]

To compete nevertheless effectively in the computer market, Novell has established relationships and alliances with a whole variety of other corporations.[38] These industry partnerships and the development of its open network standard have led to an availability of many third party products, enhancing the value of its NetWare operating system.[39] Because Novell swears not to go into the applications business it could build trust in other software companies that traded technological information with Novell during these relationships.[40]

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[35]Shawn Willett, *Novell, USL Seek Tighter NetWare, Unix Integration*, INFO WORLD, Dec. 28, 1992/ Jan. 4, 1993, at 1, 96.

[36]Schwartz, *supra* note 32, at 69.

[37]Nico Krohn et al., *Apple, Novell Talk Strategic Alliance*, PC WK., Dec. 14, 1992, at 6.

[38]Schwartz, *supra* note 32, at 70.

[39]Dave Trowbridge, *Novell Grinning In the Catbird Seat*, COMPUTER TECH. REV., Feb. 93, at 1, 8-10.

[40]Evan I. Schwartz et al., *A Novell Approach For Striking At Microsoft*, BUS. WK., Jan. 11, 1993, at 28.

A review of the alliances Novell formed through 1992 and 1993 suggests 5 reasons why Novell sought these relationships:

a) Creation of Standards and New Architectures

Novell established relationships with various companies to create new standards and architectures as well as to counter the Microsoft dominance of the computer market. This anti-Microsoft objective led to alliances with 1) Apple[41] and IBM[42] that are intended to create new multiplatform object standards as alternatives to Microsoft's OLE 2.0 program,[43] 2) AT & T to link LAN's and private branch exchange (PBX) telephone systems, creating a new standard,[44] and 3) Apple and Borland will work together to develop and support a common communications standard,[45] Moreover, Novell, Apple, Borland and Lotus intend to create

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[41]Amy Cortese, *Apple, Novell strengthen ties: cross-platform technology is key to alliance*, PC WEEK, Dec. 28, 1992, at 1; Nico Krohn et al., *Apple, Novell talk strategic alliance*, PC WEEK, Dec. 14, 1992, at 6.

[42]Jane Morrissey, *Of Microsoft, IBM and the Future: a Conversation with Ray Noorda*, PC WEEK, Oct. 26, 1992, at 147.

[43]Amy Cortese, *Group Proposes OLE 2.0 Alternative*, PC WEEK, Feb. 8, 1993, at 16.

[44]Harris Collingwood, *An Anti-Microsoft alliance for AT&T*, BUS. WK., Jan. 18, 1993, at 40; Stuart Zipper, *AT&T, Novell Forge PBX/LAN Interface Links*, ELECTRONIC NEWS, Jan. 11, 1993, at 14; Paul M. Sherer, *Novell, AT&T tie NetWare to Phones*, PC WEEK, Jan. 11, 1993, at 16.

[45]*Apple Computer Inc.*, N.Y. TIMES, Feb. 5, 1992, at C3, D4.

together a Vendor Independent Messaging (VIM) interface standard which is delivered royalty free to 3-rd party application developers. Microsoft has been excluded from this important endeavor,[46] but is part of another alliance with Intel, Sun Tech and Sun Optics to create and distribute collectively a set of management application programming interfaces, leading to standardization.[47]

b) Expansion of NetWare Interoperability

To expand the interoperability of NetWare, its main product, to many different operating systems and applications, Novell created relationships with a broad range of companies to develop new products in this area. In 1992/93 these relationships involved:

-Sun Microsystems[48]

-Hyperdesk[49]

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[46] *4 Heavyweights Unite on OMI*, PC WEEK, Feb. 3, 1992, at 114; Jim Nash, *Industry Giants Agree on E-Mail Interface*, COMPUTERWORLD, Feb. 10, 1992, at 6.

[47] Paula Musich, *Vendors Unite to Design Management APIs; Group Seeks to Encourage Development of Administrative Applications*, PC WEEK, May 25, 1992, at 10; *Computer Network Pact*, N.Y. TIMES, May 20, 1992, at C 18; *Five Computer Firms to Create Standards to Improve Networks*, WALL ST. J., May 20, 1992, at B 11.

[48] Nico Krohn, *Novell-Sun Pact Will Bring NetWare 4.0 to SPARC*, PC WEEK, Feb. 15, 1993, at 8.

[49] Jamie Lewis, *Novell and HyperDesk: a Boon for Developers*, PC WEEK, Feb. 8, 1993, at 40.

-AT&T[50]

-Microsoft[51]

-Banyan[52]

-Texas Microsystems[53]

-Lotus[54]

-Hewlett Packard[55]

-IBM[56]

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[50]Collingwood, *supra* note 44, at 40; Zipper, *supra* note 44, at 14; Sherer, *supra* note 44, at 16.

[51]Jane Morrissey, *Microsoft & Novell: Can They Bury the Hatchet? Keeping a Peaceful Balance Has Become Increasingly Difficult as the Two Titans' Competitive Worlds Overlap*, PC WEEK, Jan. 11, 1993, at 17.

[52]Tom McCusker, *Novell Casts a Wider Net*, DATAMATION, Dec. 1, 1992, at 28; Nico Krohn, *Banyan, Novell Join Efforts on StreetTalk-NetWare Link: LAN leaders Plot Next Moves*, PC WEEK, June 22, 1992, at 1.

[53]Barbara Bourassa, *Systems Maker to Put NetWare On Micros*, PC WEEK, Nov. 30, 1992, at 3.

[54]Steve Higgins, *Lotus, Novell Strategic Alliance Still On Starting Block: Development Work On Notes NLM to Begin in 1993*, PC WEEK, Oct. 19 1992, at 6; Steve Higgins, *Lotus, Novell Sign Development Pact: NLM Version of Notes Is Expected*, PC WEEK, April 6, 1992, at 1.

[55]*Novell, HP Team Up on NetWare for PA-RISC*, PC WEEK, Oct. 12, 1992, at 3.

[56]Michele Dostert, *NetWare, Host Integration Still Elusive*, COMPUTERWORLD, Sept. 7, 1992, at 1; Jane Morrissey, *IBM and Novell Update Joint Technology Pact*, PC WEEK, August 31, 1992, at 1; Kevin Tolly, Nito Roque, *NetWare and Mainframes: A More Perfect Union*, DATA COMMUNICATIONS , Sep. 21, 1992, at 73-76; Bob Brown, *Year-Old IBM-Novell Deal Outperforming Expectations*, NETWORK WORLD, Feb. 10, 1992, at 2, 77.

-Memorex Telex[57]

-Microdyne[58]

-Ungermann-Bass and Networth[59]

-DEC[60]

-3Com[61]

-Compaq[62]

-Eastman Kodak[63]

-Cooperative Solutions[64]

-Computer Associates International[65]

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[57]Paula Musich, *Memorex Telex Bets on Novell for Turnaround*, PC WEEK, August 31, 1992, at 141.

[58]*Microdyne Corp.*, WASH. POST, August 17, 1992, at WB 9; *Microdyne Corp.*, WALL ST. J., August 11, 1992, at B 4.

[59] Joanie M. Wexler, *Smart Hubs to Pick Up Server Functions*, COMPUTERWORLD, May 11 1992, at 14; Paula Musich, *Hubs Will Gain NetWare Services*, PC WEEK, May 11, 1992, at 21; Bob Brown, *Vendor Trio Positions Hubs as LAN Servers*, NETWORK WORLD, May 11, 1992, at 1, 10, 63.

[60]Stedman, *supra* note 31, at 11; Jim Duffy, *DEC Announces LAN-Based Deals With Novell, Microsoft*, NETWORK WORLD, Feb. 17, 1992, at 4, 7.

[61]Stedman, *supra* note 31, at 11.

[62]Jim Nash, *Novell, Compaq Tighten Ties*, COMPUTERWORLD, Feb. 3, 1992, at 99; Jane Morrissey, *Novell, Compaq Sign NetWare Pact*, PC WEEK, Feb. 3, 1992, at 8.

[63]*With Eastman Kodak's Help, Novell*, PC MAGAZINE, Jan. 14, 1992, at 32.

[64]Karen D. Moser, *Joint Venture to Bring Transaction Processing to NetWare*, PC WEEK, Jan. 13, 1992, at 16.

[65]Caryn Gillooly, *CA, Novell Discuss Unicenter Strategy*, NETWORK WORLD, Aug. 24, 1992, at 11-12; Nico Krohn, *CA-Unicenter to Get NetWare Port.*, PC WEEK, August 24, 1992, at 16.

-Intel[66]

Most of these agreements were related to one or two products of Novell's partners. With IBM Novell created an agreement involving about 15 products which expanded within 18 months to 35 without the need of renegotiation of the agreement.[67] Only then, to speed up completion of some programs and to add six new projects, IBM and Novell had to renegotiate the agreement. To help independent software vendors to incorporate NetWare application programming interfaces into their system software, Novell also created relationships with these vendors, offering them assistance.[68]

c) Filling Product Gaps

To develop new products and fill product gaps, Novell formed alliances with:

-Hyperdesk, to bring object orientation to microcomputer-based LAN's.[69]

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[66]Timothy O'Brien, *Intel, Novell Unveil HMI-Compliant Hubs*, NETWORK WORLD, Feb. 3, 1992, at 19-20.

[67]Jane Morrissey, *IBM and Novell Update Joint Technology Pact*, PC WEEK, August 31, 1992, at 1.

[68]Nico Krohn, *Novell to Help ISVs create NetWare NLMs*, PC WEEK, Jan. 27, 1992, at 18.

[69]Lewis, *supra* note 49, at 40.

- IBM and BusTech, to develop a communications controller/host network controller.[70]

-Computer Associates International, to bring mainframe capabilities to LAN's to help in the downsizing of applications.[71]

-Ungermann-Bass and NetWorth, to develop new wiring hub products.[72]

-Eastman Kodak, to accommodate color photo files in LAN's and to manipulate images.[73]

-Serius, to create object oriented software.[74]

d) Distribution agreements

To facilitate the distribution of NetWare, e.g. in product packages, Novell formed distribution or resale agreements with:

-Gupta Technologies[75]

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[70]Paula Musich, *IBM Teams Up to Offer Host Network Connector*, PC WEEK, Nov. 2, 1992, at 7.

[71]Krohn, *supra* note 65, at 16.

[72]Musich, *supra* note 59, at 21.

[73]Nico Krohn, *Technology Lets LAN Users Manipulate Images: Kodak, Novell Project to Accommodate Color Photo Files in NetWare 3.2.*, PC WEEK, March 2, 1992, at 4; *With Eastman Kodak's Help, Novell*, *supra* note, at 32.

[74]Jim Nash, *For Start-up, $ 2 Million is Serius Money*, COMPUTERWORLD, Jan. 27, 1992, at 113.

[75]John Pallatto, *Novell, Gupta Sign Distribution Deal*, PC WEEK, June 8, 1992, at 22; Alison Eastwood, *Novell Maintains Enthusiastic Approach*, COMPUTING CANADA, July 6, 1992, at 55-56.

-Compaq[76]

-Retix[77]

e) Support alliances

To help the interoperability and distribution of NetWare, Novell also formed support alliances with many smaller partners.

"The (Alliance Program) offers the following to systems integrators: 1. early access to software under development, 2. custom modification to source code, 3. use of Novell's extensive testing facilities, 4. briefings and product strategy, and 5. discounts on Novell courses and Platinum-reseller level products."[78] This alliance program might also lead to standard creation.[79]

"The Regional Consultants Program is explicitly aimed at consultants who do not resell NetWare. Membership provides consultants with greater access to product information, support, educational discounts, and potential sales leads through Novell."[80]

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[76]Morrissey, *supra* note 62, at 8.

[77]Timothy O'Brien, *Retix Joins With Novell to Deliver X.400 to NetWare*, NETWORK WORLD, Nov. 2, 1992, at 31-34.

[78]Mark Schlack, *Novell Courts Integrators for Enterprise LANs*, SYSTEMS INTEGRATION BUSINESS, Jun. 1992, at 57-58.

[79]Scrivner, *supra* note 30, at 29.

[80]Schlack, *supra* note 78, at 57-58.

Legal service requirements and details for the formation of all these different enterprises depend very much on the specific goals of the enterprise and the therefrom resulting operating characteristics. This is discussed in the following analysis of the discrete legal service requirements.

II. Analytical Discussion of the Virtual Enterprise

A. Industries Most Reliant Upon Virtual Enterprises and Other Collaborative Agreements

As mentioned earlier, collaborations and strategic alliances are directly correlated with the speed of innovation and knowledge development and the growing difficulty of a single company to develop and produce a cost intensive product alone. The Virtual Enterprise will thus be employed most frequently in cost intensive, high technology areas, like development of "computer hardware and software, biotechnology, telecommunications, industrial process control equipment and state-of-the-art consumer electronic products."[81] Partners will be specialized companies, providing their "core competencies",[82] to create highly sophisticated products with short life cycles.

B. Range of Organizational Options

Collaborative mechanisms can be used (and are especially scrutinized for antitrust reasons[83]) for both horizontal

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[81] 1 NAGEL & DOVE, *supra* note 13, at 1-2.

[82] Byrne et al., *supra* note 3, at 98, 99.

[83] *see* e.g. ELEANOR M. FOX AND LAWRENCE A. SULLIVAN, CASES AND MATERIALS ON ANTITRUST 282 et seq., 522 et seq. (1989).

or vertical integration:[84] horizontal[85] in the meaning of collaboration between two or more manufacturers of similar products and vertical[86] in the meaning of a production chain linking between manufacturer, supplier and/or distributors. Apart from the Virtual Enterprise, many collaborative mechanisms are used to achieve various types of integration. Some are summarized here.

1. Joint Venture

Joint Ventures may be defined as "A union of two (rarely more than three) companies that pursues a common purpose, usually for profit"[87] or "partnerships in which two or more firms create a separate entity to carry out a productive economic activity and take an active role in its strategic decisions."[88] For purpose of this analysis, the following definition is used:

> "A joint venture is a cooperative business activity, formed by two or more separate organizations for strategic purposes, that creates an independent business entity and allocates ownership, operational

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[84] ANDREW J. SHERMAN, ONE STEP AHEAD 209 (1990).

[85] HARRIGAN, MANAGING, *supra* note 23, at 133; SHERMAN, *supra* note 84, at 209.

[86] HARRIGAN, MANAGING, *supra* note 23, at 131; SHERMAN, *supra* note 84, at 209.

[87] 2 NAGEL & DOVE, *supra* note 8, at 78.

[88] HARRIGAN, MANAGING, *supra* note 23, at 3.

responsibilities and financial risks and rewards to each member, while preserving their separate identity/autonomy."[89]

Joint Ventures are similar to partnerships but are distinguished from them in "that joint ventures are created for a single activity or project, whereas partnerships contemplate a continuing business relationship."[90] Juridical decisions have generally simply applied partnership law, which has provoked resistance and even a call for a separate joint venture statute.[91]

A distinctive element of a joint venture is that it creates a new entity with its own assets and management[92] which may be incorporated to avoid unlimited liabilities of the parent companies for the joint venture.[93] Choice of form may also depend on tax issues, regulatory filing and approval requirements, and problems related to third

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[89] LYNCH, *supra* note 2, at 7.

[90] John B. Power & Richard S. Kolodny, *Legal and Business Considerations on Choice of Entity, in* PARTNERSHIP & JOINT VENTURE AGREEMENTS, Chapter 2, § 2.08 [2] (Richard D. Harroch ed., 1992); A. Paul Ingrao, *Joint Ventures: Their Use in Federal Government Contracting*, 20 PUB. CONT. L. J. 399, 406 (1991).

[91] Adam B. Weissburg, *Reviewing the Law on Joint Ventures with an Eye Toward the Future,* 63 S. CAL. L. REV. 487, 488, 523 et seq. (1990).

[92] HARRIGAN, MANAGING, *supra* note 23, at 2-3; LYNCH, *supra* note 2, at 7.

[93] Power & Kolodny, *supra* note 90, § 2.08 [2]; Sara G. Zwart, *Innovate, Integrate and Cooperate: Antitrust Changes and Challenges in the United States and the European Economic Community*, 1989 UTAH L. REV. 63, 63.

parties, e.g. bank credits, contract assignments to the joint venture etc.[94]

Joint venture agreements are normally comprehensive in details which anticipate the issues expected to arise during the venture's operation of the joint venture.[95] Consequently, they may take from five months to three years to negotiate and draft.[96] Preliminary negotiations will generally be followed by a draft statement of intention,[97] a "prenuptial agreement."[98] A typical statement includes: "1. Spirit and purpose of the agreement ... 2. Realm of activity ... 3. Key responsibilities ... 4. Method for decisionmaking ... 5. Resource commitments ... 6. Assumptions of risks ... 7. Rights and exclusions ... 8. Anticipated structure."[99] Additionally, the parties may enter into confidentiality agreements, noncompetition agreements, and exclusivity agreements.[100] The final legal agreement lays down in binding terms the exact mechanisms and terms of the contract, relying on what was

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[94]Stephen I. Glover & Mary A. Wallace, *Drafting the Joint Venture Agreement, in* PARTNERSHIP & JOINT VENTURE AGREEMENTS, Chapter 7, § 7.02 [2] (Richard D. Harroch ed., 1992).

[95]*id.*, § 7.01; Zwart, *supra* note 93, at 70.

[96]HARRIGAN, MANAGING, *supra* note 23, at 179.

[97]LYNCH, *supra* note 2, at 147.

[98]KATHRYN R. HARRIGAN, STRATEGIES FOR JOINT VENTURES 363 (1986).

[99]LYNCH, *supra* note 2, at 148-149.

[100]LYNCH, *supra* note 2, at 150-153.

agreed upon in the statement of intent.[101] Often up to 80 percent of the contract negotiations are devoted to termination clauses and matters.[102]

The joint venture's actual activities follow an operations plan that is agreed upon before or when signing the legal agreement.[103] The agreements set up control mechanisms which ensure that the parties's objectives will be attained.[104] To prevent later problems the operations plan is supposed to:

> "-establish precise needs and requirements
>
> -ask the tough operational questions and build manager's commitment
>
> -determine if the strategic plan really makes sense when converted into day-to-day-operations."[105]

Though the joint venture is supposed to follow the outlined operational plan, problems often arise during the life of the joint venture. Smaller, operational problems frequently are solved within the existing relationship without the need to change contract terms.[106] Strategic or structural problems, however, may necessitate

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[101] *id.*, at 154.

[102] *id.*, at 155; HARRIGAN, STRATEGIES, *supra* note 98, at 365.

[103] LYNCH, *supra* note 2, at 161.

[104] HARRIGAN, MANAGING, *supra* note 23, at 77.

[105] LYNCH, *supra* note 2, at 162.

[106] LYNCH, *supra* note 2, at 214.

readjustment of the joint venture contract,[107] the joint venture contract itself may contain provisions which deal with the possible readjustment of the contract.[108]

To deal with these or other disputes between the parties, the contract will also provide for dispute resolution mechanisms, e.g. mediation or arbitration.[109]

Though all future circumstances are difficult to anticipate, the possible modifications and termination of the joint venture are frequently detailed in advance[110] since about 80% of the negotiation focus on this issue.[111] The agreement will lay down the circumstances and causes prompting termination as well as how exactly the joint venture will be liquidated or continued by other participants.[112] These termination clauses are deemed very important by lawyers,[113] avoid extensive termination litigation.[114]

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[107] LYNCH, *supra* note 2, at 214, 221 et seq.

[108] HARRIGAN, MANAGING, *supra* note 23, at 81.

[109] Glover & Wallace, *supra* note 94, at § 7.16 [1].

[110] LYNCH, *supra* note 2, at 255.

[111] *See supra* note 102 and accompanying text.

[112] Glover & Wallace, *supra* note 94, at § 7.15 [1]-[2]; HARRIGAN, STRATEGIES, *supra* note 98, at 365-367.

[113] *id.* at 365.

[114] LYNCH, *supra* note 2, at 255.

2. Joint Operating Agreement

In a joint operating agreement two or more corporations join some separate elements in one single "working entity". This entity is not supposed to develop new products or to engage in research and development, but simply operates the contributed elements for common use through the member corporations.[115] The controlling agreement resembles consortium and partnership agreements. The limited scope of activities minimizes coordination activities, making it easier to involve more than two participants.[116]

The participants normally draft a concise agreement that defines what is to be contributed to the "working entity" by the participants, how it will be managed, what the future contributions of the parties will be and when and how participants can terminate their membership in the agreement. The limited activity of the working entity makes it possible to foresee most of the future problems, and since the parties do not generally contribute proprietary knowledge, participant entry and exit poses few complications.[117]

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[115] 2 NAGEL & DOVE, *supra* note 8, at 78.

[116] *id.*

[117] *id.*

3. Research and Development Arrangement

While the joint venture is a separate business entity which is supposed to create new products and market them on their own, a research and development arrangement pools the research activities of the partners but gives them the chance to use the results independently.[118]

The high costs and risks of R & D may make it very difficult, especially for smaller companies, to develop new technology.[119] When companies choose this agreement, they enable themselves to access new technology without giving up independence to use this technology in their own way through a joint venture.[120] Therefore, while in the joint venture new information is used first hand by the joint venture, the R & D arrangement must deal with distributing the knowledge to the parties.[121]

The partners traditionally make a concise agreement which describes the operations of the R & D entity, its funding, termination and other problems similar to the joint venture, but leaving nevertheless enough flexibility for the

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[118]Andrew Pollack, *Uniting to Create Products*, N.Y. TIMES, Jan. 14, 1986, at D 1; HARRIGAN, STRATEGIES, *supra* note 98, at 23; HARRIGAN, MANAGING, *supra* note 23, at 199; LYNCH, *supra* note 2, at 23.

[119]LYNCH, *supra* note 2, at 24.

[120]Pollack, *supra* note 118, at D 1.

[121]HARRIGAN, STRATEGIES, *supra* note 98, at 349-350.

research.[122] Because R & D is dependent upon the employees provided, the performance of the R & D is even more influenced through the quality of people sent to the R & D entity. Consequently , trust and relationship building are critical objectives.[123] An example is the Microelectronics & Computer Technology Corporation (MCC), where the R & D entity rejected 90% of the member provided personnel as low quality and started hiring its own personnel.[124] However, such internalized personnel hiring made it more difficult for the partners to repatriate developed knowledge.[125] In essence, "embedded knowledge" can only be transferred through transfer of appropriate employees.[126]

Since R & D arrangements must deal specifically with intellectual property problems the partners must provide the R & D entity not only with financial support, but with large amounts of information and trade secrets, "embedded" in employees.[127] Also the rules for providing the partners

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[122] SCHRADE F. RADTKE & ADOLPH L. PONIKVAR, COOPERATIVE RESEARCH AND DEVELOPMENT 41-43 (1984).

[123] ZWART, *supra* note 93, at 71.

[124] David E. Sanger, *Computer Consortium Lags*, N.Y. TIMES, Sept. 5, 1984, at D 1, HARRIGAN, STRATEGIES, *supra* note 98, at 231.

[125] *id.*; Sanger, *supra* note 124, at D 1.

[126] BADARACCO, *supra* note 12, at 98-100.

[127] *id.* at 109.

in return with the newly developed knowledge through licensing or repatriation of employees needs to be defined in advance, while the use of this information is left in the partner's own hands.[128]

C. Operating Characteristics of Virtual Enterprises: An Illustration

Two companies, A-Corp. and B-Corp., both domestic, want to work together to develop and sell a new computer system that incorporates a network of computers and software to allow professionals, e.g. lawyers or doctors, to manage their different office tasks, link different communication machines together and link the professional to other offices. A-Corp. has developed special knowledge in the software area, while B-Corp. has acquired special knowledge in the hardware area. Both companies will contribute these "core" competencies to the new enterprise. They each had separately started to develop their own knowledge and products regarding these operating objectives, but concluded that it would be more efficient and timely to use the existing experiences of each other.

The new "joint" computer system will address a special market segment in which A- and B-Corporations' existing products do not compete. However, because the new product consists of a combination and further development of each's

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[128] PETER LORANGE & JOHAN ROOS, STRATEGIC ALLIANCES 11 (1992); HARRIGAN, STRATEGIES, *supra* note 98, at 231.

"old" products, there is a potential for competition with these "old" products.

The new product is defined in outline form, but details on the resulting product and on the efforts to be contributed by each company are undefined because A- and B-Corp. need to formulate a contract within a short time to get advantage over competitors likely to enter the targeted markets. Thus, the contract formulates certain rights but leaves many others only summarily defined to accommodate anticipated uncertainties and provide needed flexibility.

1. Information Sharing

To work efficiently, the companies need to participate in concurrent engineering, i.e. work on different parts at the same time rather than develop parts of the product in sequences. To ensure these parts fit together, the corporations must share considerable confidential information about their respective work activities which may include valuable proprietary information like trade secrets and copyrightable work products.

The most profitable use of the resources of both companies within this "contractual firm" requires a pattern of work product exchanges and integration that differs significantly from relationships with outside suppliers. In essence superior knowledge of inside resources of each other generates the superior performance of the collective

entities,[129] but this entails a fluid form of information sharing concerning the Virtual Enterprise that leaves many legal rights undefined.

2. Joint Use of Facilities

The companies come together because each of them does not itself possess all the "core competencies" and facilities to produce the new product, and to add what is needed would be time consuming, expensive, and make the enterprise less flexible. Therefore they share their already existing facilities to produce the new product.

3. Joint Contracting

The Virtual Enterprise is not incorporated or a partnership, it cannot therefore contract for itself, and the parents can also not act in agency for the enterprise. If the parties would contract independently with outside suppliers or customers, they would be held liable independently and would also be identified with the enterprise. But the Virtual Enterprise is planned to exist as a different unit or firm and will develop some unique identity, its product will be distinguished from the partner's old products. If the enterprise is to be known by this own identity or name and the enterprise's product being

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[129] Armen A. Alchian & Harold Demsetz, *Production, Information Costs and Economic Organization*, 62 AM. ECON. REV. 777 (1972), *reprinted in* ECONOMICS OF CORPORATION LAW AND SECURITIES REGULATION 19 (Richard A. Posner & Kenneth E. Scott eds., 1980).

identified with the enterprise and not the parent companies, the partners need to act for and on behalf of the Virtual Enterprise, jointly contracting with outside suppliers and consumers.

4. Development of Joint Marketing and Support/Service Efforts

The enterprise does not exist as a separate entity, incorporated and with own facilities like a joint venture or a "normal" corporation. The parent companies will therefore on their own and in co-work have to provide marketing and servicing for the new product. The new product will provide coverage for a new market segment, but nevertheless will or may compete with other already existing products of the two companies.[130] The parents will be able to either provide support in marketing and servicing together, e.g. offering and providing of sale facilities, offering the product in its own line of products.[131] A useful way might be to allow one parent to buy all rights of the enterprise's new product and market and service it alone.

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[130]Example: The Borland Office Package competes with already existing products from Borland and Wordperfect; *Borland and WordPerfect Corp. Introduce Product Suite; Companies Announce Strategic Alliance,* Business Wire, April 21, 1993, *available in LEXIS, Nexis Library, Business File.*

[131]Example: Borland offers the Borland Office Package, Wordperfect the Workgroup Extension Pack; *id.*

III. Analysis of Discrete Legal Service Requirements

The formation of the Virtual Enterprise will necessarily be based on some form of contract. An "electronic contract" in the form of a computerized "workflow" agreement that minimizes dependence upon lawyers would be optimal, but requires sophisticated electronic linkages and a very "streamlined" legal environment so that no detailwork by lawyers would need to be done.[132] Joint venture contracts today need adjustment to the specific market situation to avoid unnecessary and costly renegotiation later if the contract were too "rigid" or, conversely, too "relational".[133] This will be similar in the future for cooperative agreements and lets therefore expect that lawyers also in the future should and will be part of cooperative contracts formation.

Cooperative agreement contracts may be seen by the corporate managers as only nets for situations where something went wrong,[134] but a context sensitive contract

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[132] 1 NAGEL & DOVE, *supra* note 13, at 9, 39; 2 NAGEL & DOVE, *supra* note 8, at 55-56.

[133] Salbu, *supra* note 22, at 414.

[134] HARRIGAN, STRATEGIES, *supra* note 98, at 363.

can progressively influence the whole relationship and make it work better. Because different approaches to contracting may significantly influence enterprise planning and the evolution of future conditions,[135] the following material focuses on the approaches of greatest utility to lawyers forming Virtual Enterprises. These approaches are articulated in the context of a "contract typology"[136] defined by Ian Macneil. He defines contract as "the projection of exchange into the future"[137] and divides the different approaches towards this goal into classical, neoclassical and relational contracting.[138]

A. Classical Contract Law

The main goal of contract law, to facilitate exchange, is promoted in classical contract law by enhancing discreteness

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[135] Salbu, *supra* note 22, at 398.

[136] *id.*, at 399.

[137] Ian R. Macneil, *The Many Futures of Contracts* 47 S. CAL. L. REV. 691, 712-713 (1974) [hereinafter Macneil 1974].

[138] Ian Macneil, *Contracts: Adjustment of Long- Term Economic Relations under Classical, Neoclassical and Relational Contract Law,* 72 NW. U. L. REV. 854, 854 (1978) [hereinafter Macneil 1978]. Macneil now calls relational situations intertwined situations to give way the argument that any, even the most discrete transaction, exists within a relational setting: Ian R. Macneil, *Relational Contract Theory as Sociology : A Reply to Professors Lindenberg and de Vos,* 143 J. INSTITUTIONAL & THEORETICAL ECON. 272 (1987).

and presentiation.[139] The discreteness of the contract is enhanced by treating as irrelevant the identity of the parties, delimiting the nature of the transaction, setting rules for which acts establish the substantive content of the contract, limiting available remedies to make consequences clear, defining a sharp "in" or "out" of the contract and excluding third party participation in the contract.[140]

The clear limits and definitions of classical contract law make it inherently easier to predict the future of the contract and therefore inherently enhance presentiation.[141] In addition to this, directly aiming towards presentiation are additional techniques, which equate the legal effects of the transaction with the promises that formed it; by providing a concise body of law that deals with the areas not explicitly addressed in the

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[139]Macneil 1978, *supra* note 138, at 862; Salbu, *supra* note 22, at 400; OLIVER E. WILLIAMSON, THE ECONOMIC INSTITUTIONS OF CAPITALISM 69 (1985) [hereinafter WILLIAMSON 1985]. Presentiation is understood by Macneil -following the Oxford English Dictionary 133306 (1933)- as: "to make or render in place or in time; to cause to be perceived or realized as present". Ian R. Macneil, *Economic Analysis of Contractual Relations: Its Shortfalls and the Need for a "Rich Classificatory Apparatus"*, 75 NW. U. L. REV. 1018, 1019 (1981).

[140]Macneil 1978, *supra* note 138, at 863-864; WILLIAMSON 1985, *supra* note 139, at 69; Salbu, *supra* note 22, at 400.

[141]Macneil 1978, *supra* note 138, at 864.

promises and by emphasizing remedies based upon the expectations created throughout the original deal.[142]

Discreteness and presentiation, achieved throughout these means, will create a stable situation.[143] But stable situations might lead towards conservative market strategies. In today's more instable, fluid markets this might be dangerous and therefore classical contracting could deliver a "disservice" for corporate strategies of today.[144]

B. Neoclassical Contract Law

Between the extremes of very discrete transactions and relational, intertwined transactions lies the area of long-term contracts which is dealt with by neoclassical contract law.[145] In long term contracts often not all contingencies can be foreseen, adaptions to the new situation might be dealt with effectively only when the situation finally has ariven and participants might assert state-contingent claims, which lead to disputes.[146] To avoid a breakdown of the classical law system, some

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[142] *id.*

[143] Salbu, *supra* note 22, at 401.

[144] *id.*

[145] Macneil 1978, *supra* note 138, at 865; WILLIAMSON 1985, *supra* note 139, at 70.

[146] WILLIAMSON 1985, *supra* note 139, at 70.

flexibility planning is incorporated and dealt with by neoclassical contract law,[147] while it maintains a high degree of commitment and stability.[148]

Flexibility enhancing means used by neoclassical contract law are e.g. "Standards, Direct Third-Party Determination of Performance, One-Party Control of Terms, Cost-Terms, Agreements to Agree and Planning for Nondisruptive Dispute Settlement."[149]

The use of standards binds the parties and the contract to standards or indices set by an independent third party, e.g. the consumer index.[150] This constitutes an "indirect third party control."[151]

In direct third party control of provisions, an independent party will determine directly substantial content of the contract.[152] The contracting parties can use any third party; nevertheless increasingly common is the use of arbitration clauses which can defer the matter to certain arbitration chambers.[153] The available remedies

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[147] *id.*

[148] Salbu, *supra* note 22, at 401.

[149] Macneil 1978, *supra* note 138, at 866-876.

[150] *id.*, at 866.

[151] Salbu, *supra* note 22, at 402.

[152] Macneil 1978, *supra* note 138, at 866.

[153] Macneil, *id.*, at 866-868; Gerald Aksen, *Legal Considerations in Using Arbitration Clauses to Resolve Future Problems Which May Arise During Long-Term Business Agreements*,

can be broadened substantially by arbitration procedures.[154] Since the continuing relationship can be much more valuable than a mere damage award, a wider scope of remedies is very desirable.[155]

In one-party control of terms one party will be eligible to define substantial parts of the contract by his/her own choice; sometimes he/she may even decide independently to terminate or continue the relationship altogether.[156] In the latter case the drafters have to be careful to avoid the pitfalls of consideration-theory.[157]

The use of cost-terms binds the compensation of a provider of goods or services to the costs he bears while performing -which may be unforeseeable.[158] A downside of using cost-terms is that they do not encourage the party to reduce cost. Recoupment of costs is guaranteed and this may inevitably lead to inefficiency.[159]

In an "agreement to agree" the parties will leave undetermined parts of the contract, but agree in advance to

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28 Bus. Law. 595, 595 (1973).

[154]Aksen, *supra* note 153, at 601.

[155]*id.* at 597.

[156]Macneil 1978, *supra* note 138, at 868-869.

[157]*id.*, at 869.

[158]*id.*, at 869.

[159]Ingrao, *supra* note 90, at 417.

later agree upon these gaps.[160] Especially when these gaps relate to important parts of the contract, courts often have held that agreements to agree are not valid contracts and therefore unenforceable.[161] Use of these agreements is nevertheless not meaningless, because the prior commitment of the parties leads to a psychological situation in which the parties feel themselves more obliged to negotiate towards a final agreement. In most instances a final agreement is actually reached.[162]

To avoid immediate breakdowns of a transactional relationship because of unanticipated grievances, contracts often also provide for grievance resolution through arbitration clauses, a form of alternative dispute resolution.[163] A very important supportive function to avoid breakdown is delivered by such clauses which force or lead to continuation of the relationship throughout the dispute.[164]

By all these means the neoclassical system sublimates discreteness and presentiation to gain some flexibility,[165] but it still relies on the rule that the

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[160] Macneil 1978, *supra* note 138, at 870.

[161] *id.*

[162] *id.*

[163] Salbu, *supra* note 22, at 405.

[164] Macneil 1978, *supra* note 138, at 876 et seq.

[165] *id.*, at 885; Salbu, *supra* note 22, at 405.

creation of the transaction and the definition of its contents are done mainly through the full consent of the parties to the contract at the beginning; this limits adaptability in very relational contexts in which rules are formed throughout the existence of the relationship.[166]

C. Relational Contract Law

Relational contract law is a conscious response to the reality of commercial relations.[167] The increasing duration and complexity of contracts impedes even the possible adaptability of neoclassical contract law.[168]

Parting from the premise that only promise or consent are the most efficient ways to project future exchange, Macneil tries to establish a contractual system that is based on "relational expectations"[169] and that projects the future in nonprommissory ways:[170]

> "In a truly relational approach the reference point is the entire relation as it had developed to the time of the change in question ... This may or may not include

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[166] Macneil 1978, *supra* note 138, at 885.

[167] Salbu, *supra* note 22, at 405.

[168] WILLIAMSON 1985, *supra* note 139, at 71; Macneil 1978, *supra* note 138, at 901.

[169] Macneil 1974, *supra* note 137, at 715, 718.

[170] *id.*, at 719, 720, 726-735 *et passim*.

an 'original agreement'; and if it does, may or may not result in great deference being given it."[171]

Of critical importance in such relational oriented exchanges are the "relational norms" of "role integrity, preservation of the relation, harmonization of relational conflict, propriety of means and supracontract norms".[172] As relationships between the parties evolve, especially in volatile and turbulent circumstances, the need for flexibility in the transaction becomes more important than discreteness and presentation.[173] Instead of simply solving a dispute in a certain way and providing monetized remedies as substitutions, relational contract law favors the continuation of the relationship, especially through methods of alternative dispute resolution, like mediation and negotiation.[174] The "three basic contract interests of restitution, reliance and expectations"[175] which do not cease to exist in relational contract law will not be served just by the interpretation of an initial agreement,

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[171]Macneil 1978, *supra* note 138, at 890.

[172]Ian R. Macneil, *Values in Contract: Internal and External,* 78 Nw. U. L. Rev. 340, 361 (1983).

[173]Salbu, *supra* note 22, at 406.

[174]Salbu, *supra* note 22, at 407; Macneil 1974, *supra* note 137, at 741.

[175]Macneil 1978, *supra* note 138, at 898.

but by taking into account any behavior patterns which developed throughout the relationship.[176]

D. Transaction Cost Analysis of Contractual Approaches with a View Towards Virtual Enterprises

How should parties choose between the different contractual approaches and which one would serve best the creation of Virtual Enterprises? A initial, insightful answer to this question can be derived using transaction cost analysis which analyses the economics of single transactions instead of general market analysis.[177] Transaction cost analysis "explicitly addresses the question of how firms should define or set organizational boundaries in order to maximize the efficiency of economic exchange."[178] It tries to find the "most economical governance structure"for an abstractly described transaction.[179] The analysis focuses on the costs for creating a specific structure and the costs occurred by this structure throughout the lifetime of the relationship.[180]

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[176] *id.*

[177] Salbu, *supra* note 22, at 411.

[178] David E. Bowen & Gareth R. Jones, *Transaction Cost Analysis of Service Organization- Customer Exchange,* 11 ACAD. MGMT. REV. 428, 428-429 (1986).

[179] Oliver E. Williamson, *Transaction-Cost Economics: The Governance of Contractual Relations*, 22 J. L. & ECON. 233, 234-235 (1979) [hereinafter Williamson 1979].

[180] *id.*, at 239, 246.

The "three critical dimensions" which characterize transactions are, according to Williamson, uncertainty, frequency of transaction and the transaction specific investments involved.[181]

1. Transaction Specific Investments

The first important step in defining the appropriate governance structure is to assess the transaction specific investments likely to be required throughout the relationship[182] and identify those situations where the specific identity of the parties will likely have a major influence on costs, i.e. "idiosyncratic" investments in Williamsons nomenclature.[183]

If there are no specific "idiosyncratic" investments but just standardized transactions, the parties can easily rely on the market incorporating other suppliers and buyers and use highly discrete contracts.[184] If, however, the parties are best served by idiosyncratic investments whose full utility can be captured only in the context of a continuous relationship they must employ a contractual

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[181] *id.*, at 239.

[182] *id.*, at 239.

[183] *id.*, at 240.

[184] *id.*, at 239, 241.

framework that is relationship oriented,[185] i.e. "attenuate opportunism and ... infuse confidence".[186]

As noted earlier, Virtual Enterprises are formed by specialized companies in order to develop and build a highly sophisticated product. They rely on the specific knowledge and abilities of the partners, as brought into the enterprise or developed during its existence. The work and knowledge they contribute to the enterprise is therefore highly specific and not readily obtainable on the market. Virtual Enterprises are therefore highly idiosyncratic and dependent extensively on the quality of the relationship between the partners. A discrete, inflexible contract embodying a "Classical Contract Law" approach will not permit them to efficiently achieve their collective objectives.

2. Frequency

Creation of a specific governance structure within a relationship incurs generally more setup costs than writing a discrete, classical contract where the general governance structure is well known and can be easily and cheaply be implemented.[187] If parties would deal just once with each other these costs would not be recoverable; conversely the

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[185] *id.*, at 241.

[186] *id.*, at 242.

[187] *id.*, at 246; Salbu, *supra* note 22, at 416.

costs are recoverable throughout a longer relationship when behavioral patterns develop which make the working of the enterprise smoother and therefore more cost efficient than enforcement of classical contract provisions.[188] The more frequently parties deal with each other the more efficient therefore is the creation of a specific structure, based on a relational approach.[189]

A corporate alliance is a living entity and is not just created and consumed through one contract.[190] Accomplishment of the strategic goals of the enterprise requires the parties to confer frequently with each other. This will be in the long run more easy and efficient when the enterprise is open to the development of consultation and adjustment patterns and does not rigidly follow classical contract law provisions. The frequent, ongoing dealing of the parties through the existence of the Virtual Enterprise is therefore more efficient if the enterprise is organized in a more relationship-growing, open way.

3. Uncertainty

If circumstances are certain, the parties easily and without incurring many costs will be able to draft a highly

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[188] Williamson 1979, *supra* note 179, at 246, 259; Salbu, *supra* note 22, at 416.

[189] Williamson 1979, *supra* note 179, at 246; Salbu, *supra* note 22, at 416.

[190] VILLENEUVE et al., *supra* note 9, at 1-2.

discrete contract;[191] therefore there is no problem of choice of the governance structure under certainty.[192]

However, under uncertain circumstances two possibilities exist:

If the transaction is not idiosyncratic, the parties always can and will substitute each other through the market and do not need to rely on relation specific, expensive contracts, as noted.[193] Even if uncertainty exists, the parties still can easily rely on the market and are not dependent upon each other; they still do not need to build a specific relationship to satisfy their needs and incur transaction specific costs.[194] It would therefore be more costly and inefficient to establish a relationship; creation of a discrete contract under classical contract law for standardized transactions is therefore the most efficient structure even under uncertainty.[195]

The scene changes under idiosyncratic circumstances. As shown, idiosyncratic transactions call for a more relational approach to guarantee that the incurred transaction specific costs can be recovered throughout the relationship.[196]

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[191] Salbu, *supra* note 22, at 413.

[192] Williamson 1979, *supra* note 179, at 253-254.

[193] *see supra* notes 184-186 and accompanying text.

[194] Williamson 1979, *supra* note 179, at 254.

[195] *id.*

[196] *See supra* notes 185-186 and accompanying text.

Under uncertain circumstances, the need to work problems out will even increase due to the always new, unpredicted circumstances.[197] To sustain the ongoing relationship, the parties will need constant adjustment; the most economic approach will be very relational, open to a constant sequential "adaption machinery."[198]

The highly idiosyncratic character of the Virtual Enterprise, dealing under uncertain circumstances and creating a relationship that requires frequent communication, necessitates a highly relational approach to contracting that relies less on the original contract and more on contractual provisions susceptible to adaption as the relationship changes. To the extent the parties are sure about certain details, they may memorialize them in detailed provisions to avoid costs later when renegotiating otherwise clear details.[199] But their general approach should be relational.

E. Details

Even though the parties want to form a contract quickly, with a relational approach that facilitates readjustment

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[197] Williamson 1979, *supra* note 179, at 254.

[198] *id.*

[199] Salbu, *supra* note 22, at 414.

throughout the relationship, some details are needed at the start.[200] They are summarized below.

1. Aim/goal of the Virtual Enterprise

Initially, the partners need to outline the purpose of the Virtual Enterprise and its business scope. The definition of business scope includes 3 dimensions: "determination of products or services to be sold; selection of geographic markets in which to distribute outputs; and specification of the intended duration of the arrangement."[201] When a corporation is created the Revised Model Business Corporation Act (RMBCA) allows the articles of incorporation to describe a certain business scope;[202] if this not done, the corporation is presumed

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[200]Nagel and Dove in creating their "Virtual Corporation" through electronic links altogether without lawyers nevertheless ask the partners of the future enterprise to choose some provisions from a "menu" that provides them with some critical components, chosen depending on the purpose and type of the consortia. They list as menu: 1. Charter and Aim of the Organization; 2. Anti-Trust Considerations; 3.Size of Companies and Membership; 4. Membership responsibilities/Details; 5. Intellectual Property Rights; 6. Financial (and other) resources; 7. Tiering Relationship between Participants; 8. Government Role; 9. Definition of Output-Deliverables Expected; 10. Benefit and Equity Allocations; 11 Term and Break-up Details; Operating Principles/Mechanisms and Resource Decisions; 13. Staffing. 2 NAGEL & DOVE, *supra* note 8, at 55.

[201]Steven R. Salbu & Richard A. Brahm, *Strategic Considerations in Designing Joint Venture Contracts*, 1992 COLUM. BUS. L. REV. 253, 258.

[202]REVISED MODEL BUSINESS CORP. ACT § 2.02 (b) (2) (1992).

to be allowed to do "any lawful business."[203] If the parties would become very specific in the progress of business scope definition, they would insert stability and predictability to the enterprise,[204] but this would limit the flexibility of the enterprise and could lead even to termination of the agreement if outlined goals were reached.[205] Using a relational contract approach, the business scope of the enterprise should be left somewhat open as under § 3.01 (a) RMBCA so it may evolve throughout the relationship as the companies seek to use collaborative mechanisms to strengthen and use their competitive advantages[206] while pursuing certain objectives.[207] However, even where partners feel comfortable with open contracts where problem solutions are devised as problems arise, practical survey suggests that they need to agree at least on the enterprise's purpose[208] since an important success factor for corporate partnering is that the parties understand their mutual goals and business objectives,[209]

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[203] REVISED MODEL BUSINESS CORP. ACT § 3.01 (a) (1992).

[204] Salbu & Brahm, *supra* note 201, at 258-259.

[205] *id.*; HARRIGAN, MANAGING, *supra* note 23, at 178.

[206] HARRIGAN, STRATEGIES, *supra* note 98, at 324.

[207] *id.* at 323.

[208] *id.* at 335.

[209] VILLENEUVE ET AL., *supra* note 9, at 1-19; James A. Dobkin & Jeffrey A. Burt, *A Legal and Practical Overview of International Joint Ventures- The United States Perspective,*

and that this understanding about the scope and nature of the alliance continues throughout the relationship.[210]

The parties should therefore briefly outline the reasons for the formation of the cooperative agreement, setting forth the tentative strategic and financial desires of the partners and declaring how they want to communicate and build trust throughout their relationship.[211] They should outline some reasonably specific purposes along the three business scope dimensions and provide at the same time for contingencies that warrant adjustment if the situation changes, thereby retaining flexibility.[212] If the uncertain, volatile situations in which the Virtual Enterprise works make it difficult to define specific both the purposes of the enterprise in advance and the contingencies that warrant adjustment, the parties should also design a frequent review schedule in which they meet periodically, evaluate the situation and readjust the agreement.[213]

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in JOINT VENTURES WITH INTERNATIONAL PARTNERS Chapter 1, at 1-7 (James A. Dobkin & Jeffrey A. Burt eds., 1989).

[210] Dobkin & Burt, *supra* note 209, at 1-6; VILLENEUVE ET AL., *supra* note, at 1-19.

[211] LYNCH, *supra* note 2, at 149.

[212] Salbu & Brahm, *supra* note 201, at 260-261.

[213] *id.*, at 261.

2. Legal Structure

In a joint venture, the partners form a new entity which they both own and support.[214] Moreover, the joint venture owns directly its resources.[215] In a Virtual Enterprise the partners contribute their core competencies which they eventually want to retain for themselves. Additionally, the duration of the Virtual Enterprise is normally undefined and may be relatively short. Under these circumstances a pure contractual approach makes more sense.[216] Except as where managerial and operational independence of the enterprise requires an independent entity, a purely contractual relationship will be less troublesome for corporate partnering than creating and running a corporation.[217] But a contractual relationship brings with it also further advantages and disadvantages.

An advantage of a contractual arrangement or partnership is that earnings of the enterprise are taxed only once while in a regular corporation earnings are taxed double, at the corporation's and at the shareholder's level; this makes the contractual form more desirable than the corporate form when

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[214] *see supra* notes 87-94 and accompanying text.

[215] LORANGE & ROOS, *supra* note 128, at 12.

[216] *id.*, at 11; LYNCH, *supra* note 2, at 119.

[217] VILLENEUVE ET AL., *supra* note 9, at 1-6.

earnings are anticipated.[218] A corporation could avoid double taxation only when it would be eligible to operate as an S corporation, being treated for tax purposes like a partnership.[219] However, corporations may not take part in an S corporation as shareholders;[220] this limits the availability of the S corporation form for Virtual Enterprises to non-corporate partners. Furthermore, maximizing management efficiencies through a certain structure should play a more important role than maximizing tax savings.[221]

A shortcoming of the contractual form is that it submits the parties to unlimited liability for the enterprises's debts. Limited liability provided by incorporation might be desirable for the partners if the enterprise entails high risks which the partners, even combined, do not wish to undertake.[222] This might be the case if the partners would engage in a cost intensive research and development enterprise to develop new standards as opposed to "normal" risk when joining and combining already existing products. However, to avoid the risk of a creditor "piercing the

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[218]Glover & Wallace, *supra* note 94, § 7.02 [2] [a]; Dobkin & Burt, *supra* note 209, at 1-19.

[219]Power & Kolodny, *supra* note 90, § 2.08 [5].

[220]*id.*

[221]Lynch, *supra* note 2, at 122.

[222]Dobkin & Burt, *supra* note 209, at 1-6, 1-8.

corporate veil", the partners would need to capitalize the venture adequately and to operate it as a separate entity.[223]

Another problem of the contractual form is that it complicates accounting issues for the Virtual Enterprise because it does not exist as a separate entity. Financial consolidation and income recognition is made easier when the enterprise is incorporated.[224]

When dealing with third parties, the contractual agreement can be advantageous as well as disadvantageous. If a separate entity was formed, its viability might require the assignment of leases or other contracts to the new entity. This might need consent of third parties.[225] The parties might also find it difficult to transfer their own assets to the new entity if bank credit agreements restrict this transfer.[226] Moreover, the new entity might need to establish its own approved rules and structures before being able to deal with outsiders. Under these circumstances a contractual agreement is more convenient. The parties act together on behalf of the enterprise, thereby using their

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[223]Glover & Wallace, *supra* note 94, § 7.02 [2] [b]; Dobkin & Burt, *supra* note 209, at 1-19.

[224]J. Michael Schell & Marc J. Segalman, *New Deal Structures in the 1990's: Mergers of Equals and Strategic Alliances, in* CONTESTS FOR CORPORATE CONTROL 1991, at 575, 611 (PLI Corp. L. and Pract. Course Handbook Series No. 731, 1991).

[225]Glover & Wallace, *supra* note 94, § 7.02 [2] [d].

[226]*id.*

already existing facilities and approved structures and credit lines.[227] On the other hand the environment in which the Virtual Enterprise will operate might necessitate that it deals autonomously with outsiders -banks, suppliers, customers- so that it would have to be independent and perhaps incorporated.[228] The parties should therefore carefully consider how their enterprise is supposed to deal with outsiders: either if the Virtual Enterprise needs to act on its own and therefore needs to be created as a separate entity with all backup funding and requirements or conversely if the parties primarily want to act themselves for the enterprise, thereby eliminating the need for a new entity.

3. Capitalization and Resource Commitment

a. Initial Funding

At the formation of the Virtual Enterprise the parties need to provide some initial funding that matches the expected expenses from the outlined business scope. When a new corporation is founded, the parties explicitly identify which cash and non-cash assets -including employees and intellectual property- will have to be transferred to the new entity.[229] In the Virtual Enterprise, when the

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[227] Ingrao, *supra* note 90, at 409-411.

[228] HARRIGAN, STRATEGIES, *supra* note 98, at 336.

[229] Glover & Wallace, *supra* note 94, § 7.07 [1] [a].

parties join their core competencies to develop a new product they want to share their facilities and human resources. Transfer of assets to a new entity will generally not be needed, but to get the Virtual Enterprise going, the parties nevertheless will need to commit these resources as an initial funding. They might not foresee exactly what resources they will need, but just as they need to outline the business scope of the Virtual Enterprise, they need to outline the matching resource commitments. The parties should also agree how they want to share marketing and sales resources when marketing the new product to create synergies.[230] The evaluation of the partner's contributions could be done together with the benefit distribution in an after-the-fact way.[231] If a major cash infusion is needed for a specific project, the parties should define if they want to bear this funding themselves or if the enterprise should approach the credit market for this funding.[232]

b. Problem of Additional Capitalization and Credit

Since the partners do not know precisely how the Virtual Enterprise will evolve, they must contemplate the

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[230] HARRIGAN, STRATEGIES, *supra* note 98, at 332-333.

[231] *See infra* notes 346-354 and accompanying text.

[232] HARRIGAN, STRATEGIES, *supra* note 98, at 360.

possibility of needing additional major funding.[233] They may choose in advance or later between options of third party loans or equity investments, or loans or other capital infusions from the partners.[234] To avoid a potential impasse on this important point, the parties might subject that matter to the general dispute resolution procedure they establish.[235]

4. Responsibilities of Partners/Operation of the Virtual Enterprise

Managing a corporate alliance is not easy since there is not one hierarchical entity, but two or more independent entities working together intending to use their facilities jointly and share knowledge.[236] The partners therefore need to agree on their respective responsibilities and the way they want to operate and manage the alliance.[237] They need to pay at least as much attention to how they want to manage their relationship as to the financial agreements.[238]

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[233] Glover & Wallace, *supra* note 94, § 7.07 [2] [a].

[234] Glover & Wallace, *supra* note 94, § 7.07 [2] [a].

[235] *See infra* notes 380-390 and accompanying text.

[236] LORANGE & ROOS, *supra* note 128, at 19.

[237] LYNCH, *supra* note 2, at 122; Salbu & Brahm, *supra* note 201, at 291, Dobkin & Burt, *supra* note 209, at 1-10.

[238] HARRIGAN, STRATEGIES, *supra* note 98, at 357.

If the alliance involves a separate entity, the partners need to create a new board of directors or "steering committee", that can function as a project review committee.[239] They would need to agree on rules for setting up these groups, decisionmaking within these groups, questions of ownership or management control, and the dependency relationship between the new entity and the partners.[240]

If no separate entity is created, these problems do not need to be solved, but the parties nevertheless need to agree upon how to coordinate functions of the alliance, e.g. through a steering committee.[241] As far as possible, a clear definition of rights and obligations of the partners and the division of managerial control would stabilize the alliance and reduce later disputes.[242] Through creation of a steering committee, the partners will be able to communicate frequently, build trust within the relationship and adjust their operational goals and programs to new circumstances.[243] The committee will need to meet frequently and/or on request of the partners; it should be

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[239] LYNCH, *supra* note 2, at 123, 131.

[240] *id.* at 123 et seq.; Salbu & Brahm, *supra* note 201, at 291 et seq.

[241] LYNCH, *supra* note 2, at 122.

[242] VILLENEUVE ET AL., *supra* note 9, at 1-19; Salbu & Brahm, *supra* note 201, at 295.

[243] LYNCH, *supra* note 2, at 130/131.

outlined which changes the steering committee should be allowed to implement independently and immediately, and what major changes will need approval by the partners.[244]

5. Intellectual Property Rights

a. Protection of Already Existing Rights with the Partners

Corporate strategy is based on the exploitation of unique competitive advantages of the company.[245] When the partners form an alliance to develop a new product, combination of the knowledge and skills of the partners is intended and will therefore result in the transfer of knowledge.[246] In essence, information sharing is often a "key feature" of a strategic alliance.[247] This knowledge often resides in patents, formulas and other trade secrets.[248] If this knowledge represents the competitive advantage of the company, appropriation or uncompensated loss of this knowledge could be very harmful.[249] Because collaborative partners can become competitors for the

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[244] *id.*, at 131.

[245] BADARACCO, *supra* note 12, at 77.

[246] *id.*, at 12.

[247] Thurton R. Moore, *Corporate Partnering: Products Driven Structures, in* CORPORATE PARTNERING, at 183, 185 (PLI Patents, Copyrights, Trademarks & Literary Property Course Handbook Series No. 248, 1988).

[248] BADARACCO, *supra* note 12, at 13.

[249] *id.* at 135-136; Salbu & Brahm, *supra* note 201, at 273; HARRIGAN, STRATEGIES, *supra* note 98, at 365.

future, companies have to take precautions against transferring competitive advantages to their potential competitors.[250]

Often, intellectual property -this includes patents, copyrights, trade secrets and trademarks-[251] will already be part of the resource commitment, brought into the alliance as a "soft" resource.[252] The confidential information brought by each partner into the Virtual Enterprise should therefore be sufficiently defined.[253] The partners should limit their commitment to then existing intellectual property if they do not want to be obliged to also later provide newly, separately developed knowledge.[254]

To avoid the uncontrolled spreading of proprietary knowledge, the parties should also enter into a confidentiality agreement, forbidding leakage of the information, limiting use of the knowledge by the other partner to the specific enterprise and specifying how

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[250] 2 NAGEL & DOVE, *supra* note 8, at 43.

[251] Ingrao, *supra* note 90, at 413.

[252] LYNCH, *supra* note 2, at 148.

[253] *id.*, at 151.

[254] Weissburg, *supra* note 91, at 491-493.

knowledge should be used and controlled within the enterprise.[255]

But legal provisions protect knowledge only in a very limited way, there are no absolute safeguards against appropriation.[256] Careful selection of trustworthy partners and the building of trust within the relationship is generally most effective in controlling undesired exploitation of knowledge sharing.[257] In settings where knowledge grows old within short times, the best way to protect and to exploit this knowledge can also be to market it as fast as possible, perhaps even through the alliance.[258]

If a separate entity is created, the parties might need to assign their relevant intellectual property rights to the new entity. This assignment should outline the use, control and spreading of the proprietary knowledge.[259] In this case the parties will also have to provide for the division of intellectual property the entity might own in the case of termination. The parties need to agree which proprietary

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[255] LYNCH, *supra* note 2, at 150-151; Glover & Wallace, *supra* note 94, § 7.12 [1]; Salbu & Brahm, *supra* note 201, at 273-276; Dobkin & Burt, *supra* note 209, at 1-16 to 1-17.

[256] HARRIGAN, STRATEGIES, *supra* note 98, at 342.

[257] HARRIGAN, STRATEGIES, *supra* note 98, at 342; Salbu & Brahm, *supra* note 201, at 273; BADARACCO, *supra* note 12, at 95.

[258] BADARACCO, *supra* note 12, at 47.

[259] Salbu & Brahm, *supra* note 201, at 274-276; Dobkin & Burt, *supra* note 209, at 1-12 to 1-14.

rights will be transferred back to the original owner or will be cross-licensed among the partners, which rights developed within the new entity will be assigned or licensed to which partner and who will be entitled on improvements on previously owned rights.[260]

If no new entity is founded, proprietary knowledge does not need not to be transferred to this entity. During the life of the alliance and in the case of termination the intellectual property should generally stay with the party that owned it previously.[261] If the parties shared knowledge and further use of this knowledge is necessary for the partner or will forseeably happen, the parties might also consider licensing this knowledge.[262] Licensing agreements can be especially valuable in technology-volatile settings to exploit the now existing but only temporary competitive advantages of the companies as fast as possible.[263] If both sides are in this position, the parties might therefore consider a crosslicensing agreement as a backdrop for the case of termination of the alliance.

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[260] Dobkin & Burt, *supra* note 209, at 1-14 to 1-15.

[261] Ingrao, *supra* note 90, at 413.

[262] Salbu & Brahm, *supra* note 201, at 274.

[263] HARRIGAN, STRATEGIES, *supra* note 98, at 325.

b. Dealing with Newly Developed Rights of the Enterprise

The partners of an alliance work together to develop a new product. In this process they may create new proprietary knowledge which is either truly new or derivative from already existing knowledge.[264] The parties should try to deal with this in advance and define ownership and use of this new knowledge. Virtual Enterprises frequently operate in high technology areas where ownership and contribution of proprietary knowledge is hard to be traced and volatile.[265] Thus, addressing the problems in advance will help the parties later to exploit their contributed knowledge and the newly developed technologies.[266] If a new entity was created, intellectual property developed within this entity will be owned by it[267] and the parties will have to provide for distribution of these rights in case of termination.[268]

Without a provision in the contractual partnering agreement concerning intellectual property rights, the rights of the parties would be determined by common law and

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[264]Mark L. Gordon, *Key Issues in Contracting for the Development of Joint or Divided Products, in* 12TH ANNUAL COMPUTER LAW INSTITUTE, at 407, 411 (PLI Patents, Copyright, Trademarks and Literary Property Course Handbook Series No. 301, 1990).

[265]*id.*, at 412.

[266]*id.*, at 413.

[267]HARRIGAN, STRATEGIES, *supra* note 98, at 342.

[268]*See supra* notes 259-260 and accompanying text.

statutory regulations.[269] For a work under protection of the copyright laws, which includes computer software,[270] a joint product in which two authors merged their ideas will be jointly owned by both and can be independently exploited.[271] A major problem here is to differentiate this joint product from a collective work in which the contributions of the parties could be separated and would be owned separately.[272] Another problem is how to determine the status and ownership of a derivative work and its relationship to the owner of the original work.[273]

Jointly created trade secrets would also be jointly owned by the partners.[274] But the scope of the resulting rights and obligations regarding their use and protection would be quite unclear and lead to high uncertainty about the rights among the partners.[275] A derivative trade secret would also be owned jointly by the developers,[276] but similar questions arise about secrecy, rights of the developers and

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[269]Gordon, *supra* note 264, at 414.

[270]*id.*, at 415-416.

[271]*id.*, at 419-420.

[272]*id.*, at 420-421.

[273]*id.*, at 421-424.

[274]*id.*, at 426-427.

[275]*id.*, at 427.

[276]*id.*, at 428.

the relationship to the owner of the previously existing materials.[277]

Jointly developed patents would also be jointly owned by the parties; all owners are allowed to use the patent absolutely independently.[278] This unlimited exploitation right could lead to problems between the partners.[279] For example, if a derivative patent is invented, again problems about the relationship with the inventor arise.[280] These unsolved problems become even more complex, when different intellectual property right protection mechanisms apply to one product.[281]

In light of these problems the Virtual Enterprise-partners should anticipate the categories of property rights issues inherent in their particular collaboration and enter into an adequate agreement, insofar as this is possible under time constraints and uncertain circumstances.[282] These efforts would normally start with a procedural framework, including definitions and administrative procedures such as development monitoring and progress reports to trace the use

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[277] *id.*, at 429.

[278] *id.*, at 430.

[279] *id.*, at 433.

[280] *id.*, at 433-434.

[281] *id.*, at 434.

[282] *id.*, at 435.

and development of the proprietary knowledge.[283] The parties then can create a structure that properly allocates the ownership rights.

In Virtual Enterprises the partners work together and contribute their complimentary abilities. As far as the parties develop separately parts of the new product, the fairest outcome might be to let both parties own what they developed, but this might be problematic when it is difficult to separate each party's inputs.[284] Joint ownership for these kinds of products might thus be preferable.[285] However, if the parties intend to compete in the same market with the new product, unlimited rights to use the product for both parties might harm them,[286] e.g. joint copyright ownership in mutually developed software.[287] In such a situation ownership of the product by one party with a limited or unlimited license agreement to the partner, perhaps also cross-license agreements, might provide a better balance.[288]

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[283] *id.*, at 435-443.

[284] *id.*, at 453.

[285] *id.*, at 452.

[286] *id.*, at 452.

[287] Joseph T. Adams, *Corporate Partnering for Software Development and Marketing, in* 14TH ANNUAL COMPUTER LAW INSTITUTE, at 553, 561 (PLI Patents, Copyrights, Trademarks and Literary Property Course Handbook Series No. 344, 1992).

[288] *id.*, at 561; Gordon, *supra* note 264, at 447-451.

Virtual Enterprises are often developed among parties that are or may be future competitors, making joint ownership of intellectual property a major organizational issue. If technically possible, they should therefore agree to retain ownership of their contributions or, if this is necessary, try to assign ownership to one partner or divide ownership up and license/crosslicense the owned proprietary knowledge to the other partner. Whatever general approach the parties choose, they should remind themselves that in the volatile and unpredictable high-technology setting where Virtual enterprises will operate, very specific planning for future developed proprietary knowledge will nearly be impossible.[289] The parties must thus rely upon a different than the traditional transactional approach,[290] preferably a relational approach, relying upon trust in the relationship and upon procedural planning that allows the solution of problems as they appear throughout the relationship rather than relying upon "substantial" planning that fixes all terms in advance.[291]

This wisdom of a relationship approach may be most compelling if the parties intend to create a new standard and the focus of their enterprise is on research and development. Here division of jointly developed proprietary

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[289] BADARACCO, *supra* note 12, at 99.

[290] *id.*, at 100.

[291] Salbu, *supra* note 22, at 419-420.

knowledge needs to be completely thought out. If they intend only to further develop their already existing knowledge and thereby create a new product, the problems are not as great, but should nevertheless be addressed. The partners could retain their ownership in the proprietary knowledge. As far as they can anticipate that contributions to the new, joint product can be separated, they should also own this part of the new product. For the parts that can not be divided - perhaps for the whole new product- they should assign the ownership to the party that will predictably have the most interest in owning that part, combined with a license to the other partner. This could also result in division of ownership among the partners and a complementary cross-licensing agreement. Disputes could be made subject to "relationship upholding" alternative dispute resolution mechanisms.[292]

6. Employees

As mentioned above, part of the resource commitment will be the assignment of people by the partners to the Virtual Enterprise. People belong to the "core competencies of companies.[293] Managing and developing these "human resources" is at least as important for a strategic alliance

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[292] *See infra* notes 380-390 and accompanying text.

[293] LORANGE & ROOS, *supra* note 128, at 149.

as financial resources[294] and it is crucial for the partners to assign the relevant people that will make the Virtual Enterprise work.[295]

Since Virtual Enterprises are normally short-lived when compared to "full blown" joint ventures, the partners usually assign to the Virtual Enterprise already employed people instead of hiring new personnel[296] When people remain linked to their company, they will be loyal to their company throughout a stable relationship while identifying themselves with the current project.[297] The return of the employees to their old company will allow the company to invest in its employees in order to create a well educated work force that represents its core competencies.[298]

If no separate entity is created, the employees will stay and work generally in their company, although they will be assigned to the project or sometimes be "loaned" to the partner.[299] If a new entity is created, this entity might either hire the assigned people as its own employees or obtain them through an employee leasing contract.[300] This

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[294] LORANGE & ROOS, *supra* note 128, at 150.

[295] BADARACCO, *supra* note 12, at 141.

[296] LORANGE & ROOS, *supra* note 128, at 153.

[297] 1 NAGEL & DOVE, *supra* note 13, at 16.

[298] *id.*, at 10; LORANGE & ROOS, *supra* note 128, at 164.

[299] LORANGE & ROOS, *supra* note 128, at 153/154.

[300] Glover & Wallace, *supra* note 94, § 7.05 [4] [a].

assignment to a new entity or a project creates for the employees certain problems whose seriousness is related to the duration of the assignment and "deepness" of removal from the normal position on the employer company.[301]

Employees may develop certain skills which may not have an alternative application back in the old company after termination of the Virtual Enterprise.[302] But for the Virtual Enterprise to be successful, its supporting personnel must be enthusiastic about the arrangement.[303] To minimize their worry about dismissal and insure they do not end up with a competitor, the partners should carefully plan how to "retrieve" these people after completing their Virtual Enterprise duties.[304] The partners could for example give their employees a "right of return"[305] or provide career planning for their employees[306] which

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[301] LORANGE & ROOS, *supra* note 128, at 151-164.

[302] *id.*, at 154, 160.

[303] Thomas F. Villeneuve & Daniel M. Kaufmann, *Creating Successful Technology-Based Corporate Partnering Agreements*, COMPUTER LAW., Sept. 1992, at 10, 14; VILLENEUVE et al., *supra* note 9, at 1-18.

[304] LORANGE & ROOS, *supra* note 128, at 154-155.

[305] Harold L. Schneider, *Commercial Joint Ventures-Structural and Contractual Considerations, in* COMMERCIAL JOINT VENTURES ALI-ABA VIDEO LAW REVIEW (Q 176) 1, 1 (1989).

[306] LORANGE & ROOS, *supra* note 128, at 162.

demonstrate how their engagement in the Virtual Enterprise will be rewarding in both the short and long term.[307]

A related problem is the fear of loss of benefits. If employees are assigned completely to a new entity, this entity would then have to provide payroll services, health plans and pension plan benefits.[308] This could have an adversarial effect on their already existing and acquired employee benefits.[309] It would therefore be preferable - as far as possible- that the employees remain on their old employer's payroll[310] or at least retain benefits in their old employer's programs while being temporarily assigned to the new entity.[311] In essence the employees should be completely protected against loosing any benefits because of an assignment for the Virtual Enterprise.[312]

Another problem can arise when one or more of the partners has contractual arrangements with unionized employees. Job classifications and exact work rules can make the employee inflexible and non adaptive for change.[313]

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[307] Villeneuve & Kaufmann, *supra* note 303, at 14; VILLENEUVE et al., *supra* note 9, at 1-19.

[308] Glover & Wallace, *supra* note 94, § 7.05 [4] [a].

[309] Schneider, *supra* note 305, at 1.

[310] Glover & Wallace, *supra* note 94, § 7.05 [4] [a].

[311] HARRIGAN, STRATEGIES, *supra* note 98, at 351.

[312] LORANGE & ROOS, *supra* note 128, at 161.

[313] BADARACCO, *supra* note 12, at 57-58.

This "organizational rigidity" of the labor unions hampers the flexible adaptability needed in today's volatile markets.[314] Thus, the companies should try to establish a mutually dependent relationship with their unions.[315] Job descriptions have to become intentionally vague and unions and employers should develop a co-destiny relationship.[316] If a recaltricant union blocks this development the only remaining chance for the company might be to try to de-certify the union.[317] In sum, before forming a Virtual Enterprise, the partners have to make sure that their union relationships and contracts will not hamper the flexibility and adaptability to work effectively within the Virtual Enterprise. Toward this end, the partners could insert a provision into the contract that addresses these problems and undertakes to resolve them individually so as to comply with the Virtual Enterprise agreement among the partners.[318] For example, they could outline in their contract which key personnel will contribute to the Virtual Enterprise and who will be sent to the other's facilities. The parties would then provide that this personnel will remain on the payroll of each partner -including all

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[314] DAVIDOW & MALONE, *supra* note 6, at 209.

[315] *id.*, at 187.

[316] *id.*, at 214.

[317] *id.*, at 263.

[318] Adams, *supra* note 287, at 585.

benefits- and shall return after termination to the original employer. They could also obligate each other to make sure that their employees are contractually available to complete the necessary work within the Virtual Enterprise.

7. Definition and Handling of Output

Partners in cooperative agreements that are competitors generally have an incentive to cheat on the other partner to gain a competitive advantage.[319] In corporate alliances, partners therefore often want to make sure that the other partner puts adequate efforts into technology development and marketing.[320] Partners will often want to design the obligations as specific as possible, considering every contingency.[321]

As far as possible, partners should define the deliverables and set up quality and acceptance criteria.[322] They should set up "timetables" or "horizon points" to review performance progress.[323] In anticipation that a partner may default on his obligations,

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[319] OLIVER E. WILLIAMSON, MARKETS AND HIERARCHIES: ANALYSIS AND ANTITRUST IMPLICATIONS 242-243 (1975).

[320] HARRIGAN, STRATEGIES, *supra* note 98, at 374.

[321] HARRIGAN, MANAGING, *supra* note 23, at 178.

[322] Adams, *supra* note 287, at 570; Moore, *supra* note 247, at 188.

[323] SHERMAN, *supra* note 84, at 210; HARRIGAN, STRATEGIES, *supra* note 98, at 364.

the partners should provide for remedies,[324] e.g. giving the other partner the right to take over the whole enterprise, withdraw from it or terminate the agreement[325]. Unfortunately, Virtual Enterprise arrangements, as described, often are not able to be very specific. Without precise performance standards, they have to use a relational contracting approach which uses general performance standard terms and requires different performance control mechanisms than a discrete transactional contract.[326] Thus, setting goals rather than defining specific performance works better under uncertain circumstances.[327] Setting these goals and making them an active and driving force in the alliance is best done by openly stating the expectations of the partners as well as refining and specifying these so that the partners can live up to them in a non-disruptive way.[328] The parties should therefore in this situation obligate each other to use their

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[324] SHERMAN, *supra* note 94, at 210.

[325] Schneider, *supra* note 305, at 7; Ingrao, *supra* note 90, at 417.

[326] Charles J. Goetz & Robert E. Scott, *Principles of Relational Contracts*, 67 VA. L. REV. 1089, 1092-1093 (1981).

[327] LYNCH, *supra* note 2, at 132.

[328] *id.*, at 107/108.

"best efforts" to reach the intended goals[329] and to cooperate under a "general fiduciary duty."[330]

To reduce the remaining conflicts of interest between the partners, they should then set up monitoring and "bonding" mechanisms.[331] Monitoring on one hand is done through direct supervision of performance, e.g. auditing and determination of compliance with certain performance standards.[332] But specifically in technological alliances it is difficult to assess if the technological performance of a partner meets the requirements.[333] The partners will be satisfied and the alliance successful when they work together in an effective trust relationship and both have an interest in the success of the alliance.[334] The parties should thus have mutual ongoing incentives to work fairly together[335] and achieve compliance with the open structured performance standards such as reciprocal penalties, reciprocal rewards or bundling commitments.[336]

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[329] Goetz & Scott, *supra* note 326, at 1117.

[330] *id.*, at 1126.

[331] *id.*, at 1130.

[332] *id.*, at 1130.

[333] HARRIGAN, STRATEGIES, *supra* note 98, at 341.

[334] *id.*, at 341, 369.

[335] VILLENEUVE et al., *supra* note 9, at 1-19.

[336] Salbu & Brahm, *supra* note 201, at 296-298.

Penalties are reciprocal when they are exacted as one partner fails to fulfil a certain obligation; the partner gets punished.[337] But in a Virtual Corporation exact obligations are hard to define; it is therefore hard to describe events that are supposed to be violations and that trigger penalties. Nevertheless, penalty clauses can be valuable as symbolic signs of commitment and of the "moral" obligations of the parties.[338]

In reciprocal awards, the parties define certain acts, e.g. accomplishment of a certain goal or technical development, that will lead to a transfer of a benefit to the other partner and therefore will be rewarded.[339] Rewards may include the extended transfer or licensing of intellectual property rights through the partner, special access to outputs from the enterprise, reimbursement of costs or an enlarged share in profits from the enterprise.[340]

Commitment bundling links together the obligations of the parties - the duty of one partner needs only to be fulfilled if the other partner has already fulfilled his obligation.[341] This allows the partners a flexible

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[337] *id.*, at 299.

[338] *id.*, at 299-300.

[339] *id.*, at 300.

[340] *id.*, at 301.

[341] *id.*, at 301.

response depending on the circumstances without resort to legal mechanisms.[342]

Similar to these bundling commitments would be situations in which the parties are interdependent apart from the alliance.[343] These other dependencies would give the partners incentives to fulfill their obligations with best efforts not to endanger the whole relationship.[344] In that case, using a "mutual hostage" situation, the partners would need less performance monitoring for the single alliance.[345]

8. Benefit Allocation

In a joint venture the partners will define in advance exactly how to spread risk and rewards.[346] This will be part of the exact distribution of responsibilities, risks and rewards .[347] The reward system is based upon detailed

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[342] *id.* at 301-302. An example here is the alliance between Motorola and Toshiba in which Motorola promises to release microprocessor technology incrementally as Toshiba fulfills its promise to enhance Motorola's market share in the Japanese semiconductor market; see Gary Hamel et al., *Collaborate with Your Competitors- and Win,* HARV. BUS. REV., Jan.-Feb. 1989, at 133, 139.

[343] Salbu & Brahm, *supra* note 201, at 302.

[344] *id.*, at 303.

[345] *id.*, at 303.

[346] LYNCH, *supra* note 2, at 132.

[347] *id.*, at 135-136.

promises and regulations.[348] Unfortunately, in the Virtual Enterprise the exact responsibilities and contributions of the parties are not completely defined, but left to the evolving relationship, relying heavily on the defined goals. The parties cannot set up exactly which efforts are needed to reach these goals, instead they depend heavily on incentive schemes. Under circumstances where it is impossible to predict exactly the contribution each party has to give to finish the work, fixed reward terms would often end up in gross inequities.[349] Adjustment mechanisms have therefore to be set up to accommodate these changing circumstances[350] such as establishing tentative reward shares subject to arbitral adjustments.[351]

The parties can also agree to reimburse the partners for their expenses and that they share in the profits depending on their "agreed upon value-added contributions."[352] For example, they could agree to use incoming revenue first to reimburse the partners for their costs and divide the remaining profits depending on the value each of them contributed to the end-result. Cost reimbursement might already have been implemented as a performance incentive

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[348] 2 NAGEL & DOVE, *supra* note 8, at 84.

[349] Aksen, *supra* note 153, at 599.

[350] *id.*

[351] *id.*

[352] 1 NAGEL & DOVE, *supra* note 13, at 16-17.

scheme which is a typical neoclassical flexibility instrument.[353] Finally, decisions about reimbursement could be made subject to a dispute resolution mechanism.[354]

9. Antitrust Considerations

Virtual Enterprise partners are often already actual competitors or/and will be competitors in the future. Under the antitrust conspiracy doctrine, any collaboration between competing companies concerning their competitive efforts within mutual or potentially mutual markets, can be a conspiracy in restraint of trade.[355] If the alliance is incorporated, it can be scrutinized under Section 7 of the Clayton Act and would be illegal if it would substantially lessen competition. If it was not incorporated it could still be illegal under Section 1 of the Sherman Act if it was a conspiracy in restraint of trade.[356]

This scrutinization of cooperative mechanisms has been challenged as outdated due to reliance on late 19th century

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[353] *See supra* notes 339-340 and accompanying text.

[354] *See infra* notes 380-390 and accompanying text.

[355] Joseph F. Brodley, *Antitrust Law and Innovation Cooperation*, 4(3) J. ECON. PERSPECTIVES 97 (1990), *reprinted in* COLLABORATION AMONG COMPETITORS 911, 916 (Eleanor M. Fox & Thomas T. Halverson eds., 1991).

[356] Harry M. Reasoner & Ann Lents, *U.S. Antitrust Analysis of Joint Ventures, in* COMMERCIAL JOINT VENTURES ALI-ABA VIDEO LAW REVIEW (Q 176) 85, 87 (1989).

and early 20th century concepts of competition.[357] It is argued that global competition requires cooperation among domestic companies now inhibited by earlier interpretations of the antitrust laws,[358] and thus changes are needed;[359] far reaching proposals have been made.[360] In contrast, others have noted that rigorous domestic competition is essential for global competitiveness[361] and that current antitrust law interpretation and enforcement allows enough innovative collaborations if facilitated with minor changes and reforms.[362]

Within the context of this disagreement about reform, the parties to a contract need to determine possible antitrust implications that could void their agreements before closing the contract.[363] From this perspective the standards for collaborative agreements are ambiguous.[364]

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[357] 1 NAGEL & DOVE, *supra* note 13, at 41.

[358] *id.*; Thomas M. Jorde & David J. Teece, 4(3) J. Econ. Perspectives 75 (1990), *reprinted in* COLLABORATION AMONG COMPETITORS 887, 887 (Eleanor M. Fox & Thomas T. Halverson eds., 1991).

[359] 1 NAGEL & DOVE, supra note 13, at 41.

[360] Jorde & Teece, *supra* note 358, 903 *et seq.*

[361] MICHAEL E. PORTER, THE COMPETITIVE ADVANTAGE OF NATIONS 117-122, esp. 122 (1990).

[362] Brodley, *supra* note 355, at 911.

[363] Dobkin & Burt, *supra* note 209, at 1-7; HARRIGAN, STRATEGIES, *supra* note 98, at 37.

[364] Jordon & Teece, *supra* note 358, at 899.

Because these agreements are generally aimed to advance innovation and create efficiencies, generally a rule of reason is applied.[365] Anticompetitive effects are weighed against efficiencies and other business justifications in order to determine if the intended efficiencies will lead to competitively overly restrictive results.[366] If parties in a vertical relationship rely upon resale price maintenance, this would be viewed as per se illegal,[367] but non-price vertical restrictions that are part of a cooperative agreement and aimed towards efficiencies are usually okay under the rule of reason, following the Department of Justice Vertical Restraint Guidelines, 12.4 (issued Jan. 23, 1985).[368] In determining anticompetitive effects in horizontal settings, first the relevant geographic and product markets are determined.[369] Next it is determined whether the agreement reduces existing or potential competition between the partners in the market that the enterprise will serve.[370] For the potential competition analysis in the new market, a parallel to a

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[365] *id.*; Reasoner & Lents, *supra* note 356, at 85-86.

[366] Robert Pitofsky, *A Framework for Antitrust Analysis of Joint Ventures*, 54 ANTITRUST L.J. 893, 913 (1986).

[367] FOX & SULLIVAN, *supra* note 83, at 523 et seq.

[368] VILLENEUVE et al., *supra* note 9, at 3-45.

[369] Reasoner & Lents, *supra* note 356, at 86, 88-89.

[370] Pitofsky, *supra* note 366, at 896 *et seq.*

merger between the partners is made using the Department of Justice Merger Guidelines and the HHI index.[371] If a merger would be allowed, a collaborative agreement will be allowed; if a merger would not be allowed, anticompetitive effects are presumed.[372] Achievement of market power or monopoly would weigh heavily against the agreement.[373]

Weighing against possible existing competitive restraints are assessments of resulting competitive efficiencies through the integration of efforts between the partners and of whether the intended product would have otherwise been developed by any of the parties at all.[374] Of course, these redeeming aspects are tempered by assessments of whether such efficiencies and other pro-competitive effects could have been achieved by lesser restricting means.[375]

As a practical matter collaborative agreements between smaller firms used to gain efficiencies and to create innovations, are not challenged by the antitrust enforcement agencies.[376] Alliances in the high-technology area by

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[371] Reasoner & Lents, *supra* note 356, at 86, 92.

[372] *id.* at 86

[373] VILLENEUVE et al., *supra* note 9, at 3-46.

[374] Pitofsky, *supra* note 366, at 904 *et seq.*; VILLENEUVE et al., *supra* note 9, at 3-46.

[375] VILLENEUVE et al., *supra* note 9, at 3-46, Pitofsky, *supra* note 366, at 911.

[376] Brodley, *supra* note 355, at 917; LYNCH, *supra* note 2, at 114.

even large companies are not challenged either.[377] Contractual agreements also attract less antitrust attention than cases in which a new entity is created.[378] Furthermore, parties using relational contracting with less precise provisions, encounter less antitrust risk because the contract 1) specifies goals and objectives rather than concrete actions that could be attacked, 2) is flexible and allows the partners to change the agreement if markets and antitrust considerations change and 3) generally allows easier termination.[379]

From a practical standpoint, Virtual Enterprises are created by companies to create innovations and products in high technology markets where they would alone not be able to compete. Often the market share will be too low to imply anticompetitive effects. Therefore, if the parties create reasonable provisions and do not set up overrestrictive or unrelated collateral agreements that restrict their competition beyond what is necessary to achieve the intended goals, Virtual Enterprises should not meet Antitrust problems.

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[377] John Markoff, Microsoft and 2 Cable Giants Close to an Alliance, N.Y. TIMES, June 13, 1993, at Section 1, p.1.

[378] LYNCH, *supra* note 2, at 114.

[379] Salbu & Brahm, *supra* note 201, at 285-287.

10. Dispute Resolution Mechanisms

Virtual Enterprises are formed to reach strategic goals and to make the competitive advantages of both sides work together. However, the interests of partners in the Virtual Enterprise are rarely identical and thus disputes are likely to arise.[380] The classical contract approach relies on litigation with the goal to decide and to end the dispute.[381] The neoclassical approach is not as adversarial, but does use arbitration to end a dispute, with resulting costs and a mechanism that are somewhat similar to litigation.[382]

Unfortunately successful continuation of a relationship after the use of these adversarial procedures may be endangered;[383] in effect sacrificed for the sake of dispute solution.[384] As stressed throughout this paper, the success of the Virtual Enterprise will very much depend on a trustful, ongoing relationship. Too many details have to be left open in the contract to achieve speed and flexibility of the enterprise. The parties therefore need

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[380] HARRIGAN, STRATEGIES, *supra* note 98, at 373.

[381] Macneil 1978, *supra* note 138, at 891.

[382] *id.*; VILLENEUVE et al., *supra* note 9, at 1-20.

[383] Macneil 1978, *supra* note 138, at 891.

[384] Salbu, *supra* note 22, at 407.

to create an effective dispute resolution mechanism that will not destroy the relationship.[385]

Non-adversarial mechanisms such as negotiation and mediation are thus preferable for the Virtual Enterprise.[386] Understanding the "give and take needed in business", the parties should be able to settle any disputes.[387] In successful joint ventures, deadlock is somehow always avoided by managers through negotiation.[388] Most effective are escalating provisions that will bring disputes first to lower levels, e.g. members of the partner's executive boards and only after failure here to a higher level, e.g. the presidents of the parents.[389] This avoids making issues to "points of principle" at an early stage that finally will separate the partners.[390]

11. Termination

Since the Virtual Enterprise is designed to achieve specific goals which may be accomplished quickly or become

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[385] Dobkin & Burt, *supra* note 209, at 1-10.

[386] Salbu, *supra* note 22, at 407.

[387] WILLIAMSON 1975, *supra* note 319, at 107.

[388] HARRIGAN, STRATEGIES, *supra* note 98, at 366.

[389] Scrivner, *supra* note 30, at 31; Ingrao, *supra* note 90, at 418.

[390] Scrivner, *supra* note 30, at 31.

irrelevant to the partners' business strategies, appropriate provisions need to be made for its termination[391] and consequential distribution of rights and assets.[392] Specific events that normally trigger termination include expiration of the defined term of the alliance, mutual consent of the parties, material breach of the contract through one partner, occurrence of certain events (like fulfillment of purpose, major change in anticipated competitive circumstances etc), bankruptcy of a partner and election through either partner to terminate.[393]

Since Virtual Enterprise partners frequently are unable to predict how the alliance will fare, setting of arbitrary terms is seldom prudent.[394] The other termination criteria lie on a continuum including mutual consent of the parties, certain events and convenience of a single party. Reliance on specifically described termination events much like reliance upon a specific date is normally undesirable because of uncertainty about the business significance of future events.[395] Conversely if managers of an alliance can successfully deal with upcoming problems unencumbered by

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[391]Kathrin R. Harrigan, *Joint Ventures and Competitive Strategy*, 9 STRAT. MGMT. J. 141, at 145 (1988).

[392]Dobkin & Burt, *supra* note 209, at 1-11.

[393]Schneider, *supra* note 305, at 10.

[394]LYNCH, *supra* note 2, at 155-156; HARRIGAN, STRATEGIES, *supra* note 98, at 367.

[395]HARRIGAN, STRATEGIES, *supra* note 98, at 366.

artificial deadlines, they may find it best to terminate finally upon mutual consent once the intended purpose of the alliance is achieved.[396] It might be argued that termination due to breach of contract or the occurrence of a specific event creates high exit barriers that would motivate continuation of the relationship, but prolonging the life of an ailing alliance is best viewed as a classical punishment provision.[397] Depending on how the Virtual Enterprise partners perceive the need of flexibility, they should therefore lower exit barriers, perhaps even incorporating a convenience termination clause for enhancing flexibility. Termination at the convenience of one partner might be problematic and dangerous for the remaining partner,[398] but might have to be necessarily available for the partners operating under highly uncertain circumstances.[399]

In the latter case, the protection of the partner comes through careful planning of rights and assets division and perhaps compensation for completed work.[400] Termination consequences should be laid down for each kind of

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[396] *id.*

[397] Salbu & Brahm, *supra* note 201, at 292.

[398] Adams, *supra* note 287, at 582.

[399] HARRIGAN, STRATEGIES, *supra* note 98, at 324.

[400] Adams, *supra* note 287, at 582.

termination event to fit the specific circumstances.[401] The division of intellectual property rights should follow the above outlined rules,[402] confidential material should be returned and confidentiality continued for the future.[403] If a new entity with its own assets is founded, the partners need to provide either for the division of assets or liabilities or for a buyout at a certain price by one of the partners.[404] In case liquidation is intended, the parties should agree upon a liquidation procedure.[405] A possible division system would be the "Russian roulette system" which does not have fixed buyout or evaluation terms because after termination one partner will divide the "pie" up and the other will choose between the pieces.[406] If no new entity was founded, division of assets or liabilities of the "child" is not needed, but the partners might consider providing for compensation if one of them incurred special expenses or liabilities during the alliance.[407]

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[401] VILLENEUVE et al., *supra* note 9, at 1-20.

[402] *See supra* notes 245-292 and accompanying text.

[403] Dobkin & Burt, *supra* note 209, at 1-28 n.28.

[404] LYNCH, *supra* note 2, at 156; HARRIGAN, STRATEGIES, *supra* note 98, at 365-366.

[405] Glover & Wallace, *supra* note 94, § 7.15 [2]; Schneider, *supra* note 305, at 11.

[406] HARRIGAN, STRATEGIES, *supra* note 98, at 367.

[407] Ingrao, *supra* note, at 417-418.

The future of the employees working for the alliance upon termination has already been discussed; they should generally remain with or return to their original employer.[408] How the parties should deal with intellectual property has also been discussed previously.[409] Similarly, if the partners foresee other problems arising from the enterprise's activities, they should also try to provide appropriate clauses.[410]

In the view of the many details that need to be left open in Virtual Enterprise contracting, including such important issues like the obligations of the partners and the exact division of benefits, partners in a Virtual Enterprise must provide in a similar way for termination uncertainties. They need to outline some crucial provisions and then make the termination issues dependent on the situation as evolved throughout the relationship; expectations of the parties as expressed in the contract and as evolved should prevail over specified provisions laid down under highly uncertain circumstances. Negotiation and dispute resolution should also be applied to the termination mechanisms and consequences of the Virtual Enterprise.

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[408] *See supra* notes 293-318 and accompanying text.

[409] *See supra* notes 245-292 and accompanying text.

[410] HARRIGAN, STRATEGIES, *supra* note 98, at 366.

IV. Conclusion

Contemporary competitive strategies, especially in high technology areas, frequently dictate that companies concentrate on their core competencies and team up with partners for the supply of complementary resources and knowledge, thereby creating Virtual Enterprises. To support the development, maintenance and termination of such enterprises, lawyers must supply unconventional, flexible legal services. The volatile competitive environment in which Virtual Enterprises function requires especially a more flexible, relational approach to contracting that supports relationships and helps the business partners to achieve their strategic goals. Contracts still need to be formulated in some detail to support the enterprise and protect the partners, but many important questions need to remain open if the partners want to remain flexible and want to promptly form and dissolve the enterprise. The solution of these questions must be sought throughout relationship's life; procedural provisions are therefore at least as important as substantive provisions. This contractual approach might be unfamiliar for lawyers, but will be needed to maintain the competitiveness of legal services and businesses today and in the future.

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