

DIGITAL RISK & AMBIGUITY IN INSURANCE: TENSION BETWEEN PARTY INTENT & RISK- SHIFTING

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Digital risks are a continuously developing and evolving aspect of conducting business in the modern world. As high-profile losses to organizations are incurred via data theft or loss, insurers have attempted to fill the gap by providing both digital-risk coverage in general corporate-liability policies and specialized insurance policies, such as cyber insurance. However, the traditional paradigm of insurance interpretation presents significant challenges to both insurer and insured when attempting to translate terminology to the digital realm. Can digital “risk” truly be adequately covered? If a coverage dispute gets litigated, courts must interpret the contract to determine whether a risk event was covered. In doing so, courts face tension between prioritizing party intent in interpreting such contract terms or prioritizing risk-shifting to protect third parties. This Note surveys such litigation by categorizing cases using four axes of digital risk and analyzing trends to ascertain whether a court’s priorities in interpreting such insurance can be predicted. Two solutions to remedy any interpretation issues are discussed, each with potential shortcomings and pitfalls.

TABLE OF CONTENTS

INTRODUCTION.....	272
I. DIGITAL RISK & TRADITIONAL INSURANCE TERMS: TWO PARADIGMS.....	275
II. INADEQUACY OF GCL POLICIES & SPECIALIZED POLICIES IN DEFINING DIGITAL RISK TERMS.....	278
III. METHODOLOGY FOR LITIGATION TREND ANALYSIS.....	280
A. The Four Axes of Digital Risk.....	280

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B. Distinguishing between GCL Policies and Specific Policies	280
C. Categorizing Cases Along Four Axes	281
D. Determining Whether Party Intent or Risk-Shifting Was Emphasized	282
IV. LITIGATION ANALYSIS & PREDICTIONS.....	283
A. Categorization Overview	283
B. Categorized Litigation (through October 2019)	284
C. Comparative Trends Between GCL Policy and Specific Policy Litigation	285
D. GCL Policy Litigation.....	286
1. Litigation surrounding ambiguity frequently involves nonmalicious negligence.	286
2. Courts that prioritize risk-shifting utilize broad coverage principles and construe exceptions narrowly.	288
3. Courts emphasizing risk-shifting construe a duty to defend much more broadly.	289
4. Courts emphasizing party intent regularly utilize the “eight corners” doctrine in litigation.	290
E. Specialized Policies & Cyber-Risk Insurance Litigation.....	291
1. Litigation surrounding ambiguity frequently involves malicious third- party impacts.	291
2. Courts emphasizing party intent typically do not utilize statutory sources to better define ambiguous terms in the event of external malicious risk.	292
V. THE PROCESS OF INTERPRETATION: OVERALL TREND ANALYSIS.....	293
VI. POTENTIAL ISSUES & FUTURE SOLUTIONS	295
A. Problems & Predictability	295
B. Going Forward: Suggested Solutions	296
1. Establish a New Vernacular Specific to Cyber Insurance	297
a. A New Common Vernacular May Exist Outside Common Law Plain- Language Interpretation	300
2. Do Nothing: Allow Ex Ante Negotiation for Cyber Insurance Terms ...	301
a. Difficulty: Are All Parties Truly Sophisticated?	302
b. The Information Problem Puts Both Parties at a Disadvantage	303
CONCLUSION	304

INTRODUCTION

Businesses face constantly evolving risks when operating in the digital world. Malicious parties, whether internal or external, are constantly developing new digital attack methods to access and use information for personal gain.¹ This

1. Trend analysis in cyberattack vectors has indicated that not only are the particular types of attacks myriad in nature, but the targets of those attacks have become much more variegated in recent years, incorporating both Industrial Control Systems & Supervisory Control and Data Acquisition systems and other “nontraditional” methods of control. See Peter Wood, *Trends in Cyber Attack Vectors*, 60 ITNOW 40, 40–41 (June 2018) (discussing the current threat landscape in cybersecurity and developing evolutions in exploits); see also

constant risk of data loss, data theft, or data leakage has led to corresponding coverage disputes and litigation.² Insurers have responded to this by either modifying general corporate-liability insurance contracts (“GCL Policies”) or developing new, specialized contracts, such as cyber insurance contracts (“Specialized Policies”), in an attempt to fill the gap by providing coverage for cyber risks as they are realized.³

This constantly evolving risk environment often runs up against terms and limits of these insurance contracts, leading to litigation as to whether a given event was inside the scope of coverage of existing policies and thus whether an insurer has the duty to defend or indemnify the insured against potential third-party lawsuits or damages incurred in a cyber incident.⁴ In these situations, courts have the unenviable task of interpretation of these terms.⁵

Chris B. Simmons et al., *AVOIDIT: A Cyber Attack Taxonomy*, 9 ANN. SYMP. ON INFO. ASSURANCE 2, 4–6 (2014) (creating a systematic methodology to taxonomize and organize the various cyberattacks against business entities).

2. Beyond a wide variety of developing personal lawsuits, shareholder derivative litigation has evolved as a developing methodology for shareholders to attempt to hold organizations liable for a data breach as it occurs. Benjamin Dynkin & Barry Dynkin, *Derivative Liability in the Wake of a Cyber Attack*, 28 ALB. L.J. SCI. & TECH. 23, 39 (2018) (surveying derivative litigation involving breach of the duty of care in cyberattack scenarios).

3. Traditionally, organizations would rely upon GCL policies to cover damages from cyberattacks; however, in the past few years, specialized cyber insurance policies have developed to operate as an “overlay” on top of GCL policies. See David J. Baldwin, Jennifer Penberthy Buckley & D. Ryan Slaugh, *Insuring Against Privacy Claims Following a Data Breach*, 122 PENN. ST. L. REV. 683, 708–09 (2018).

4. See generally *Big 5 Sporting Goods Corp. v. Zurich Am. Ins. Co.*, 635 F. App’x 351 (9th Cir. 2015) (litigation arising from a question as to whether potential violations of California statute precluded coverage for a given cyber incident); *Innovak Int’l, Inc. v. Hanover Ins. Co.*, 280 F. Supp. 3d 1340 (M.D. Fla. 2017) (litigation arising from a question as to whether the terms of coverage included publication of material from a negligent or malicious insider or exclusively from malicious third parties); *Zurich Am. Ins. Co. v. Sony Corp. of Am.*, No. 651982/2011, 2014 N.Y. Misc. LEXIS 5141 (N.Y. Sup. Ct. Feb. 21, 2014) (litigation arising from a question as to whether “publication” as defined in coverage must have a root in an insider or outsider for purposes of indemnification).

5. *Moulton v. American Life Ins. Co.*, 111 U.S. 335, 340–41 (1884) (“If, upon a reasonable interpretation, such was the contract, the duty of the court is to enforce it according to its terms”); *Liverpool & London & Globe Ins. Co. v. Kearney*, 180 U.S. 132, 138 (1901) (“[The court] only interprets the contract so as to do no violence to the words used, and yet to meet the ends of justice.”); see *P.F. Chang’s China Bistro, Inc. v. Fed. Ins. Co.*, No. CV-15-01322-PHX-SMM, 2016 WL 3055111, at *3 (D. Ariz. May 31, 2016) (discussing that ambiguity in provisions of a cyber insurance policy is a question of law).

Insurance agreements are contracts,⁶ and as such, courts turn to a variety of methods to determine the intent of the parties in a litigated contract dispute.⁷ Courts interpreting these contracts must balance a tension between upholding party intent and avoiding injustice to either party.⁸ While the former approach focuses exclusively upon respecting the intent of the parties;⁹ the latter attempts to maximize risk-shifting on aggregate from the insured to the insurer, thus protecting those parties that may have little or no *ex ante* bargaining power (such as tort victims).¹⁰

Unfortunately, both GCL Policies and Specialized Policies, as written and interpreted by courts, fail to adequately protect individuals under a risk-shifting regime. This Note intends to analyze existing trends in litigation by categorizing risk along two distinct axes: *internal vs. external threats* and *malicious vs. nonmalicious*

6. 44 FRANCIS C. AMENDOLA ET AL., C.J.S. INSURANCE § 1 (2019) (“Insurance is best defined as a contract whereby one undertakes to indemnify another against loss, damage, or liability arising from an unknown or contingent event, and is more broadly defined to be a contract by which one party for consideration assumes particular risks of the other party and promises to pay him or her or his or her nominee a certain or ascertainable sum of money on a specified contingency.”).

7. 27 WILLISTON ON CONTRACTS § 70:26 (4th ed. 2019) (“The remedy of reformation is available to reform insurance contracts under the same principles as any other contract”); *id.* § 70:59 (“Courts are somewhat more willing to consider reforming an insurance policy in light of generally applied equitable principles, custom and practice in the trade, and rules of contract constructions”).

8. *Kearney*, 180 U.S. at 138 (“[The court] only interprets the contract so as to do no violence to the words used, and yet to meet the ends of justice.”); *Farmers Auto Ins. Ass’n v. St. Paul Mercury Ins. Co.*, 482 F.3d 976, 979 (7th Cir. 2007) (reforming the literal interpretation of terms would “enable the insured to trigger coverage any time it wanted a windfall”); *May Dept. Stores Co. v. Federal Ins. Co.*, 305 F.3d 597, 600 (7th Cir. 2002) (finding that the unlikelihood a party would agree to an interpretation is not a controlling reason, but a relevant one, in interpretation), *abrogated on other grounds by RTP LLC v. ORIX Real Estate Capital, Inc.*, 827 F.3d 689 (7th Cir. 2006).

9. *See Conway Corp. v. Ahlemeyer*, 754 F. Supp. 596, 599 (N.D. Ill. 1990) (quoting *United Airlines, Inc. v. City of Chicago*, 507 N.E.2d 858, 861 (Ill. 1987)) (finding that a court’s “primary objective” in interpreting a contract is to determine party intent); *United States v. Thorson*, 300 F. Supp. 2d 828, 833 (W.D. Wis. 2003) (finding the goal in insurance contracts is to determine party intent).

10. Courts often frame an interpretation reforming terms to incorporate risk-shifting under the premise of acting in a “just” or “sensible” manner. *See State Farm Mut. Auto. Ins. Co. v. Mashburn*, 15 So. 3d 701, 704 (Fla. Dist. Ct. App. 2009) (quoting *Gen. Star Indem. Co. v. W. Fla. Vill. Inn, Inc.*, 874 So. 2d 26, 29 (Fla. Dist. Ct. App. 2004)) (finding that a construction of a contract should be “reasonable, practical, sensible, and just”); *IDG, Inc. v. Cont’l Cas. Co.*, 275 F.3d 916, 921 n.2 (10th Cir. 2001) (quoting *VBF, Inc. v. Chubb Grp. of Ins. Cos.*, 263 F.3d 1126, 1231 (10th Cir. 2001)) (utilizing the “reasonable expectations doctrine” to determine that coverage exists if the insurer creates a reasonable expectation for the insured that coverage exists); *TICO Ins. Co. v. March*, 155 F. Supp. 2d 441, 446 (E.D. Pa. 2001) (citing *Reliance Ins. Co. v. Moessner*, 121 F.3d 895, 903 (3d Cir. 1997)) (“[T]he proper focus for determining issues of insurance coverage is the reasonable expectations of the insured.”).

sources.¹¹ By categorizing litigation in this manner, this Note explores whether a degree in predictability can assist both insured and insurer in eliminating ambiguities in insurance policies.

Part I introduces the tension between existing paradigms of insurance policy interpretation. Courts facing potential ambiguity in insurance policies can choose to prioritize party intent, similar to other types of contracts, or can prioritize the unique characteristics of insurance contracts to emphasize risk-shifting. Part II discusses potential issues in litigation regarding both GCL Policies and Specialized Policies. Part III introduces the methodology of categorizing existing case law along the four axes of digital risk. Part IV and Part V discuss both category-specific trends and overall trends in litigation to establish whether certain interpretation methods lead to predictable results. Finally, Part VI explores two potential solutions to the interpretation issues in digital risk: establishing a new vernacular for digital risk or allowing the market to continue to develop.

I. DIGITAL RISK & TRADITIONAL INSURANCE TERMS: TWO PARADIGMS

Insurance represents a contract between the insured and the insurer. The contract delineates contingencies that potentially trigger the duty of the insurer to either defend the insured in the event of litigation or indemnify and pay claims that may arise.¹² For example, a homeowner's insurance policy may delineate a house fire as a contingency; in the event of a fire, the insurer will indemnify for damages and potentially defend against third-party injury claims.¹³ Terms related to coverage establish the outer limits of an insurance contract.¹⁴ Terms establishing coverage limits categorize either which property will be covered or the types of contingencies that trigger an insurer's duties ("risk").¹⁵

Disputes over the scope of these limiting terms, or coverage disputes, are one of the most frequent sources of insurance litigation.¹⁶ This litigation becomes

11. James E. Scheuermann, *Cyber Risks, Systemic Risks, and Cyber Insurance*, 122 PENN. ST. L. REV. 613, 630–33 (2018).

12. AMENDOLA ET AL., *supra* note 6.

13. *Fireman's Fund Ins. Co. v. Great Am. Ins. Co. of N.Y.*, 822 F.3d 620, 632–33 (2d Cir. 2016) (measuring an insurance contract's purpose by both the types of contingency insured against and the risk assumed). Note that a "liability contract" can include both contracts of indemnity against loss (in which the insured is compensated for the direct loss in monetary terms) or a contract of insurance against liability for loss (covering third-party claims). See AMENDOLA ET AL., *supra* note 6, § 19.

14. See AMENDOLA ET AL., *supra* note 6 § 19 ("Where, however, the policy plainly shows an intention only to pay the loss or damages for which insured was liable and has been compelled to pay, it is a contract of indemnity against loss or damage by reason of liability.").

15. See *Fireman's Fund Ins. Co.*, 822 F.3d at 635–37 (utilizing both the nature and types of risk involved in a transaction and the purpose of the insurance contract to ascertain whether a particular insurance contract was a marine insurance contract).

16. *Tubize Chatillon Corp. v. White Transp. Co.*, 11 F. Supp. 91, 97 (D. Md. 1935) (distinguishing between the contract's coverage of liability for loss and indemnity for loss in a contract which merely stipulated a "liability contract"); *Jones v. S. Marine & Aviation*

more frequent when coverage disputes involve technical concepts or specific terminology.¹⁷ Courts deciding coverage litigation face a unique choice: should the policy be interpreted using the over-arching principle of ascertaining party intent, or should the court protect an insured party in a manner that maximizes the amount of risk shifted away from the insured and toward the insurer? A court's decision may differ significantly depending upon the approach utilized. In the house-fire example, if coverage dictates that "real property" is covered, but the term is ambiguous, courts may come to different decisions depending on the approach.¹⁸

A court prioritizing intent may find the evidence indicates that while the insured desired a garage to be included in the "real property,"¹⁹ the insurer intended only the house to be covered and not the garage.²⁰ A court focusing on party intent will not create a new contract, but may consider factors such as the parties' relationship, subject matter, and purpose in entering the contract.²¹ However, determining party purpose can lead to additional ambiguity.²² Ultimately, the insurer's "purpose" is to profit via risk amortization, whereas the insured's "purpose" is to gain security and assurance of protection from contingencies.²³

Underwriters, Inc., 888 F.2d 358, 360–64 (5th Cir. 1989) (finding that whether a policy is an indemnity policy, liability policy, or both depends upon the intention of the parties as contained within the language in the policy).

17. For a comprehensive survey of litigation involving technical terminology specific to digital risk, see Margaret E. Reetz et. al., *Cyber Risks: Evolving Threats, Emerging Coverages, and Ensuing Case Law*, 122 PENN. ST. L. REV. 727 (2018).

18. In particular, the determination as to whether the policy is "personal" or runs with the land in property insurance will be significant. See *Redfield v. Cont'l Cas. Corp.*, 818 F.2d 596, 606–07 (7th Cir. 1987) (holding that since the goal of a property insurance contract is to indemnify against loss of the property itself, transfer of title to a bankruptcy trustee was irrelevant as to coverage). *But see Bradley v. Allstate Ins. Co.*, 620 F.3d 509, 520–21 (5th Cir. 2010) (holding that only the value of real property would be an appropriate measure for coverage, not personal property from loss due to Hurricane Katrina).

19. *Bradley*, 620 F.3d at 520 (litigation concerning the valuation of included property affected by Hurricane Katrina).

20. *Id.* at 521 (determining that the purpose of property insurance is to place the policyholder in the equivalent position had the incident triggering coverage never occurred).

21. *Bailey v. Fed. Ins. Co.*, 214 F. Supp. 3d 1228, 1234 (N.D. Ala. 2016) (applying Alabama law to an insurance contract for parties appearing in diversity jurisdiction); *Royal Ins. Co. of Am. v. Duhamel Broad. Enters., Inc.*, 170 F. App'x 438, 441 (8th Cir. 2006) (holding that an insurance policy may not be reformed unless an insured can present clear and convincing evidence that such contract does not express the true intent of the parties).

22. *Buddy Bean Lumber Co. v. Axis Surplus Ins. Co.*, 715 F.3d 695, 698 (8th Cir. 2013) (quoting *Parker v. S. Farm Bureau Cas. Ins. Co.*, 292 S.W.3d 311, 315 (2009)) (construction given to insurance contract should be a "practical, reasonable, and fair" one to eliminate ambiguity); *R & J Enterprizes v. Gen. Cas. Co. of Wis.*, 627 F.3d 723, 726 (8th Cir. 2010) (an insurance contract should carry out the intent of the parties at the time of the contract formation); *Knoll Pharm. Co. v. Auto. Ins. Co. of Hartford*, 210 F. Supp. 2d 1017, 1022 (N.D. Ill. 2002); *Am. Online, Inc. v. St. Paul Mercury Ins. Co.*, 347 F.3d 89, 93 (4th Cir. 2003).

23. AMENDOLA ET AL., *supra* note 6.

Insurance contracts are considered contracts of adhesion.²⁴ The insurer will generally dictate the terms of the policy; the insured has little or no bargaining power.²⁵ The insurer will generally possess far more knowledge of terms than the insured.²⁶ Courts have used these principles to more liberally construe terms in favor of the insured and against the drafter, placing the burden on the insurer to draft a clear policy.²⁷ A court may also scrutinize these contracts more closely to avoid injury to the public or third parties.²⁸

Courts utilize “risk-shifting,” a unique and necessary characteristic of insurance contracts, to scrutinize policies.²⁹ Under risk-shifting, one party to a

24. *Mansur v. PFL Life Ins. Co.*, 589 F.3d 1315, 1319 (10th Cir. 2009) (citing *Dodson v. St. Paul Ins. Co.*, 812 P.2d 372, 376–77 (Okla. 1991)) (“An insurance policy is considered a contract of adhesion in Oklahoma . . . and is construed in favor of the insured when ambiguity remains after applying the rules of construction.”); *Capella Univ., Inc. v. Exec. Risk Specialty Ins. Co.*, 617 F.3d 1040, 1045 (8th Cir. 2010) (quoting *Gen. Cas. Co. of Wis. v. Wozniak Travel, Inc.*, 762 N.W.2d 572, 575 (Minn. 2009)) (insurance contracts of adhesion will have terms of inclusion broadly construed and words of exclusion narrowly construed).

25. *Depositors Ins. Co. v. Estate of Ryan*, 637 F. App’x 864, 873 (6th Cir. 2016) (quoting *Alcazar v. Hayes*, 982 S.W.2d 845, 851 (Tenn. 1998)) (“[A]n insurance policy is a contract of adhesion drafted by the insurer.”); *C&C Family Tr. 04/04/05 v. AXA Equitable Life Ins. Co.*, 654 F. App’x 429, 433 (11th Cir. 2016) (citing *Barrett v. Nat’l Union Fire Ins. Co. of Pittsburgh*, 696 S.E.2d 326, 330–31 (Ga. 2010)) (“Insurance policies are liberally construed in favor of the insured and the object to be accomplished by the policy.”).

26. *Union Ins. Soc’y of Canton, Ltd. v. William Gluckin & Co.*, 353 F.2d 946, 951 (2d Cir. 1965) (citing *Arbuckle v. Lumbermens Mut. Cas. Co. of Ill.*, 129 F.2d 791, 793 (2d Cir. 1942)) (“The terms of an insurance policy are usually what the insurance company chooses to make them. That is the rationale of the general rule that any ambiguity is to be resolved liberally in favor of the insured.”); *Nat’l Gen. Ins. Co. v. Pierce*, No. 2:10-CV-2059 JCM-GWF, 2011 WL 3030911, *2 (D. Nev. 2011) (finding that the language of a contract is typically selected by the insurer only after deliberation by experts and legal advisers employed exclusively in the interest of the insurance company).

27. This established principle, known as *contra proferentem*, is literally defined as “against the offeror”—in the event of ambiguity in terms, the rule may be applied to policy language. *Kunin v. Benefit Tr. Life Ins. Co.*, 910 F.2d 534, 540 (9th Cir. 1990); *M. Fortunoff of Westbury Corp. v. Peerless Ins. Co.*, 432 F.3d 127, 142 (2d Cir. 2005) (finding that *contra proferentem* can only be utilized after consideration of extrinsic evidence to determine intent); *Morgan Stanley Grp. v. New Eng. Ins. Co.*, 225 F.3d 270, 276 (2d Cir. 2000) (resolving ambiguity against the drafter in insurance is *contra proferentem*).

28. *See CGS Indus., Inc. v. Charter Oak Fire Ins. Co.*, 720 F.3d 71, 77 (2d Cir. 2013) (stating ambiguities will be construed to find coverage where policy terms permit it in accord with public policy); *Schubert v. Auto Owners Ins. Co.*, 649 F.3d 817, 830 (8th Cir. 2011) (conflicts in provisions will be construed in the most liberal manner possible to avoid forfeiture as contrary to public policy); *McCauley Enter., Inc. v. N.H. Ins. Co.*, 716 F. Supp. 718, 720 (D. Conn. 1989).

29. *See Helvering v. Le Gierse*, 312 U.S. 531, 539 (1941) (“Historically and commonly insurance involves risk-shifting and risk-distributing.”); *Ritter v. Mut. Life Ins. Co. of N.Y.*, 169 U.S. 139, 158 (1898) (finding that risk-shifting and distribution are essential elements in an insurance contract when coverage was disputed under a life insurance policy); *Beech Aircraft Corp. v. United States*, 797 F.2d 920, 922 (10th Cir. 1986) (quoting *Helvering*,

contract shifts its risk of loss to the other; under an insurance policy, risk is shifted away from the insured and to the insurer.³⁰ Risk-shifting may be a key to ascertaining party intent: an insured likely intends for most risk to be shifted to the insurer, and the insurer intends to minimize the quantity of risk shifted.³¹ The degree of risk-shifting emphasized by a court can potentially lead to significantly different outcomes if the language in a policy is ambiguous.³² If litigation occurs over “real property” in a homeowner’s insurance policy, a court prioritizing risk-shifting and other factors over party intent may find that denial of coverage caused injustice to the insured.³³ To avoid such injustice, the court may reverse denial of coverage, finding that the parties truly intended for risk to be shifted, entitling the insured to indemnification.³⁴

II. INADEQUACY OF GCL POLICIES & SPECIALIZED POLICIES IN DEFINING DIGITAL RISK TERMS

Courts interpret insurance policies using a method similar to interpretation of other contracts.³⁵ A court will first look to the plain and ordinary meaning of potentially ambiguous terms to determine whether this meaning resolves the ambiguity.³⁶ If plain and ordinary meaning does not resolve the ambiguity, the parties may then present extrinsic evidence to indicate the intent of the agreement.³⁷

312 U.S. at 539); *Steere Tank Lines, Inc. v. United States*, 577 F.2d 279, 280 (5th Cir. 1978) (finding that absent elements of risk-shifting and risk-distribution, a contract cannot be considered an insurance contract) *cert. denied*, 440 U.S. 946 (1979).

30. *Beech Aircraft Corp.*, 797 F.2d at 922 (“Risk-shifting” means one party shifts his risk of loss to another, and “risk-distributing” means that the party assuming the risk distributes his potential liability, in part, among others.”).

31. *See id.*

32. *Compare Schubert*, 649 F.3d at 831 (granting summary judgment for insured under policy of avoiding forfeiture) *with CGS Indus., Inc.*, 720 F.3d at 83–84 (vacating and remanding trial court decision for insured).

33. *See supra* note 18.

34. *See IDG, Inc. v. Cont’l Cas. Co.*, 275 F.3d 916, 921 n.2 (10th Cir. 2001) (utilizing the “reasonable expectations doctrine” to determine that coverage exists if the insurer creates a reasonable expectation for the insured that coverage exists); *State Farm Mut. Auto. Ins. Co. v. Mashburn*, 15 So. 3d 701, 704 (Fla. Dist. Ct. App. 1st Dist. 2009) (quoting *Gen. Star Indem. Co. v. W. Fla. Vill. Inn, Inc.*, 874 So. 2d 26, 29 (Fla. Dist. Ct. App. 2004)) (holding that a construction of a contract should be “reasonable, practical, sensible, and just”).

35. 16 WILLISTON, *supra* note 7, § 49:14 (“While it is true that some aspects concerning contractual interpretation and construction are unique to insurance contracts, as a general principle, insurance contracts are subject to the same rules of construction and interpretation that apply to all written contracts.”).

36. *Id.* (“Terms used in the policy, like those in other contracts, will be accorded their plain and ordinary, popular, or commonly accepted meaning, unless it appears from the policy itself or by usage that the parties intended to use the words in a special or technical sense.”).

37. 2 STEVEN PLITT ET AL., *COUCH ON INSURANCE* § 21:1 (3d ed. 2019) (“In ascertaining what terms and conditions of an insurance policy are intended to mean, the court undertakes a series of analytical steps: (1) the court determines whether the terms at issue are defined in the policy or have a meaning that is plain on its face; (2) if the terms are not defined

This evidence includes both aspects of the parties' relationship, such as prior dealings, and industry-specific use of terms.³⁸ The burden is on the insured to prove coverage.³⁹ If the insured can prove using extrinsic evidence that the meaning was to be included in coverage the burden will shift to the insurer to rebut the presumption of coverage.⁴⁰ If ambiguity still remains, a court will then turn to canons of contract interpretation, such as *contra proferentem*, to construe the terms against the drafter.⁴¹

In a constantly evolving environment, digital risk presents significant challenges to this process.⁴² Terms which would otherwise have seemingly plain meaning may be complicated. For example, does coverage for "risk" include all known digital risk as it exists at the time of the contract signing, or does it incorporate "risk" as defined by regulatory standards or frameworks?⁴³ What might

and are susceptible to more than one plausible interpretation, the court scrutinizes each interpretation for reasonableness in light of the context in which the terms are used and in light of other provisions of the policy and in that regard, if one interpretation would require the court to disregard other provisions of the policy, it is not reasonable and must be rejected; (3) if competing interpretations each remain plausible, then the court resorts to the rule of construction that ambiguities are resolved against the insurer.").

38. This mirrors the parol evidence rule utilized in contract interpretation. A commonly utilized description of the sources of extrinsic evidence allowed to determine ambiguity is a case that is a cornerstone of first-year contracts classes and involves the definition of "chicken." *See* *Frigalimint Importing Co. v. B.N.S. Intern. Sales Corp.*, 190 F. Supp. 116, 118–19 (S.D.N.Y. 1960) (discussing types of extrinsic evidence to be considered, including trade usage and prior relationship of the parties).

39. 17A PLITT ET AL., *supra* note 37, § 254:11 ("Generally speaking, the insured bears the burden of proving all elements of a prima facie case including the existence of a policy, payment of applicable premiums, compliance with policy conditions, the loss as within policy coverage, and the insurer's refusal to make payment when required to do so by the terms of the policy.").

40. *Id.* § 254:12 ("Until a prima facie case of coverage is shown, the insurer has no burden to prove a policy exclusion. The insurer bears the burden of proving the applicability of policy exclusions and limitations or other types of affirmative defenses, in order to avoid an adverse judgment after the insured has sustained its burden and made its prima facie case.").

41. I BARBARA O'DONNELL, *LAW AND PRACTICE OF INSURANCE COVERAGE LITIGATION* § 1:18 (2018) ("Courts first consider whether the relevant policy provisions are free from ambiguity, such that they may be enforced according to their plain terms, perhaps on summary judgment, without the need to consider extrinsic evidence under the parol evidence rule, or apply *contra proferentem* to construe ambiguities in favor of coverage.").

42. Laurie A. Kamaiko, *Emerging Cyber Risk: Can Insurers 'Hack' It?*, MONDAQ (Dec. 6, 2017), <http://www.mondaq.com/unitedstates/x/653120/Security/Emerging+Cyber+Risk+Can+Insurers+Hack+ItEmerging+Cyber+Risk+Can+Insurers+Hack+It> (discussing challenges to insurers regarding adequately defining "risk" in an increasingly connected world).

43. For example, one could utilize the categorization of "threat events" contained within the NIST Cybersecurity Framework to define "risk" in a contract. *See, e.g.*, NAT'L INST. OF STANDARDS & TECH., *Guide for Conducting Risk Assessments* tbl.E-1, <https://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-30r1.pdf> (last visited Jan. 29, 2020). If a duty to defend incorporates "risk," but the term is included in a

happen if the plain and ordinary meaning of a term is unambiguous in the eyes of the court but does not adequately meet the meaning intended by either the insurer or the insured? Further, if digital risks present externalities to third parties—namely data loss to customers of an insured business—does this process of contract interpretation meet the goals of either reaching party intent or shifting risk away from unintended parties?

III. METHODOLOGY FOR LITIGATION TREND ANALYSIS

A. *The Four Axes of Digital Risk*

One particularly common methodology to compartmentalize and analyze digital risk involves segregating risk among four axes.⁴⁴ Risk is first split along two significant axes to classify its principal types: (1) the source of the risk, whether it is an internal or external risk; and (2) the state of mind associated with the risk, whether it was maliciously caused or not.⁴⁵ By segregating these risks into either “malicious,” “nonmalicious,” “external,” or “internal,”⁴⁶ a framework can be created upon which a survey and analysis of court interpretations of certain types of cyber risk can be facilitated. For example, distinctions can be drawn between the categories of risk involved in a given cyber incident and whether court interpretation prioritizing party intent or maximizing aggregate risk-shifting would better serve the goal of covering insured parties, or, in the alternative, whether courts should allow market forces to continue to operate.

By surveying litigation regarding coverage in both GCL Policies and Specialized Policies, trends in courts’ analysis can be ascertained. Regarding interpretation in a coverage dispute, a court can first decide if a contract is a general corporate liability policy or a specialized cyber insurance policy. The cases can then be further analyzed to determine which of Scheuermann’s categories of risk were involved in the dispute. Finally, by determining whether the court utilized a “pure” intent approach or emphasized risk-shifting, the survey can predict whether these risks would be more effectively covered and whether potential injustice to the public could be avoided.

B. *Distinguishing between GCL Policies and Specific Policies*

An organization choosing to cover cyber risk via insurance currently has two distinct options. It can either incorporate cyber-risk terminology as an addendum to a GCL Policy, which covers risk more broadly, or it can obtain a separate Specialized Policy covering cyber risks. As cyber insurance is a relatively

representation, under the principles of contract drafting the definition of “risk” would indicate a statement of fact that existed only at the time of the drafting, rather than any future “risk” that may develop. See TINA L. STARK, DRAFTING CONTRACTS: HOW AND WHY LAWYERS DO WHAT THEY DO 12 (2d ed. 2014) (citing RESTATEMENT (SECOND) OF CONTRACTS § 159 (1981)).

44. Scheuermann, *supra* note 11, at 629.

45. *Id.*

46. *Id.*

new and developing market, the use of GCL Policies is still practiced by most organizations.⁴⁷

Selecting one type of policy or another can come with specific drawbacks. For example, an organization choosing a Specialized Policy may hope to benefit from a carrier's specific risk amortization or information relevant to the realization of a cyber risk.⁴⁸ However, this could lead to an increase in information asymmetry between an insurer, which possesses more specialized knowledge, and the insured.⁴⁹ Adding cyber-risk clauses to an existing GCL Policy may be more convenient and easier for an organization to manage, but the lack of specialized information and understanding about the nature of cyber risk may lead to confusion between both the insured and the insurer, as both parties may not adequately understand the opposing party's intent in desiring that certain terms be included or excluded.

To begin the survey of litigation, the first step is to distinguish between the types of insurance contracts at issue—is the court being asked to consider a cyber-risk provision within a GCL Policy or a Specialized Policy in itself? By making this distinction, one can immediately ascertain whether more litigation has arisen regarding GCL Policies or Specialized Policies. By further categorizing and distinguishing cases utilizing the steps below, one can inquire as to whether Specialized Policies, as litigated, are interpreted using a different methodology than GCL Policies to determine whether such Specialized Policies are more effective at protecting both insured and insurer.

C. Categorizing Cases Along Four Axes

Utilizing four axes also distinguishes general types of risk that were the source of litigation among each broad type of insurance coverage. Those four categories are as follows: risk from malicious external sources; risk from malicious internal sources; risk from nonmalicious external sources; and risk from nonmalicious internal sources.⁵⁰

For example, a malicious third party externally penetrating a network perimeter and stealing private customer information would constitute a malicious

47. The first “true” cyber insurance policy was developed by AIG in 1997 as “a third party liability policy only.” Brian D. Brown, *The Ever-Evolving Nature of Cyber Coverage*, *INS. J.* (Sep. 22, 2014), <https://www.insurancejournal.com/magazines/mag-features/2014/09/22/340633.htm>; John Loveland, *Cyber Insurance: “I Don’t Think It Means What You Think It Means,”* RSA CONFERENCE (Feb. 13, 2017), <https://www.rsaconference.com/industry-topics/presentation/cyber-insurance-i-do-not-think-that-word-means-what-you-think-it-means> (indicating that as of 2016, more than 60 providers were available in the United States).

48. Angelica Marotta et al., *Cyber-Insurance Survey*, 24 *COMPUTER SCI. REV.* 35 (2017) (describing the relationship between assessed risk profiles and premiums charged, indicating that higher risk profiles would necessitate higher premiums).

49. See generally Ranjan Pal et al., *Will Cyber-Insurance Improve Network Security? A Market Analysis*, *IEEE INFOCOM* (July 8, 2014), <https://ieeexplore.ieee.org/abstract/document/6847944>.

50. Scheuermann, *supra* note 11, at 631–33.

external source of risk,⁵¹ whereas a corporate insider copying data offsite to sell to a competitor would constitute a malicious internal source.⁵² A lightning strike damaging physical property would constitute a nonmalicious external source of risk,⁵³ whereas a negligent employee who stores privacy-compliant data in an unencrypted format constitutes a nonmalicious internal risk source.⁵⁴

Thus, a court facing a significant potential danger to the public as a whole, such as a malicious external attack on a network, may utilize a risk-shifting approach to correct potential injustices. By contrast, in a situation involving a nonmalicious source, such as the ubiquitous lightning strike, a court may consider the lack of danger to the public, and thus may be more likely to give latitude to prioritizing the intent of the parties.

D. Determining Whether Party Intent or Risk-Shifting Was Emphasized

Within each category, an analysis of each case can determine whether the court gave priority to determining party intent in forming the insurance contract, and thus the scope of the coverage, or whether the court incorporated some form of risk-shifting prioritization to construe the terms of the insurance contract against the insurer and toward protecting the public and the insured.

For example, a court will directly state that under the law being applied, terms must be construed in a manner that will give the highest priority to the intent of the parties.⁵⁵ Courts that do not directly state this principle, however, will use key phrases such as “reasonable expectations of the parties” or will generally state that interpretation will not be “constrained” in a particular manner.⁵⁶ Courts that emphasize risk-shifting, however, will not directly state potential impacts of interpretation upon third parties; these courts will avoid key terms and phrases used by party-intent courts and, instead, will emphasize canons of interpretation, which more broadly interpret terms.⁵⁷ For example, a court prioritizing risk-shifting will

51. *Id.* at 631.

52. *Id.* at 631–32.

53. *See id.* at 632–33.

54. *Id.* at 632.

55. *Am. Online, Inc. v. St. Paul Mercury Ins. Co.*, 207 F. Supp. 2d 459, 465 (E.D. Va. 2002) (“Virginia law treats an insurance policy as a contract that should be construed to give effect to the intent of the parties.”); *Recall Total Info. Mgmt., Inc. v. Fed. Ins. Co.*, 83A.3d 664, 670 (Conn. App. Ct. 2014) (citing *Nat’l Grange Mut. Ins. Co. v. Santaniello*, 961 A.2d 387, 393 (Conn. 2009)) (“[T]he determinative question is the intent of the parties . . .”).

56. *P.F. Chang’s China Bistro, Inc. v. Fed. Ins. Co.*, No. CV-15-01322-PHX-SMM, 2016 WL 3055111, at *4 (D. Ariz. May 31, 2016) (“The insured bears the burden of proving the applicability of the reasonable expectations doctrine at trial.”); *First Bank of Del., Inc. v. Fid. & Deposit Co. of Md.*, C.A. No. N11C-08-221-MMJ-CCLD, 2013 WL 5858794, at *8 (Del. Super. Ct. Oct. 30, 2013) (“Courts must consider the reasonable expectations of the insurance policy purchaser.”).

57. *Ciber, Inc. v. Fed. Ins. Co.*, No. 16-CV-01957-PAB-MEH, 2018 WL 1203157, at *2 (D. Colo. Mar. 5, 2018) (“Under Colorado law, the duty to defend is separate and distinct from an insurer’s obligation to indemnify its insured.”); *Travelers Indem. Co. of Am. v. Portal Healthcare Sols., LLC*, 35 F. Supp. 3d 765, 769 (E.D. Va. 2014) (citing *Brenner v. Lawyers*

emphasize that “exceptions are to be construed narrowly and coverage is to be construed broadly” or that “the duty to defend is triggered even when there is a potential for liability.”⁵⁸ By comparing these key phrases to the overall result and intent of the decision, a court’s position emphasizing either risk-shifting or party intent becomes clear.

IV. LITIGATION ANALYSIS & PREDICTIONS

A. *Categorization Overview*

Through categorization, one can perform analysis to determine particular trends in court interpretations of both GCL Policies and Specialized Policies. For example, as Specialized Policies involve technical expertise and knowledge, these contracts should be drafted to more effectively define risk, leading to less overall litigation over ambiguity in digital risk terms. Further, the specialized and more intricate use of terminology within a specific coverage policy would arguably lead courts to uphold an interpretation that prioritizes party intent over risk-shifting. As a corollary, the opposite should hold true for GCL Policies; as these contracts are frequently negotiated and written by non-specialists in technology, additional ambiguities should arise, leading to more litigation and a tendency for courts to emphasize risk-shifting.

Title Ins. Corp., 397 S.E.2d 100, 102 (Va. 1990)) (“Under Virginia law, an insurer’s duty to defend an insured “is broader than its obligation to pay” or indemnify an insured.”).

58. *Eyeblaster, Inc. v. Fed. Ins. Co.*, 613 F.3d 797, 802–03 (8th Cir. 2010) (narrowly interpreting exclusions when an end user alleged that software damaged his computer, leading to loss of use); *Netscape Commc’ns Corp. v. Fed. Ins. Co.*, 343 F. App’x 271, 272 (9th Cir. 2009) (reversing the District Court’s decision to deny coverage when code allegedly damaged end user PCs by finding the District Court interpreted an exception too broadly).

B. Categorized Litigation (through October 2019)

GCL POLICY LITIGATION		
RISK FROM MALICIOUS EXTERNAL SOURCES		
<i>Case</i>	<i>Party Intent</i>	<i>Risk-Shifting</i>
<i>First Bank of Delaware, Inc. v. Fidelity and Deposit Co. of Maryland</i> , 2013 WL 5858794 (Sup. Ct. Del. 2013)	X	
<i>Camp's Grocery, Inc. v. State Farm Fire & Cas. Co.</i> , 2016 WL 6217161 (M.D. Ala. 2016)	X	
<i>Taylor & Lieberman v. Fed. Ins. Co.</i> , 681 F. App'x 627 (9th Cir. 2017)	X	
<i>Spec's Family Partners, Ltd. v. Hanover Ins. Co.</i> , 739 F. App'x 233 (5th Cir. 2018)		X
RISK FROM NONMALICIOUS EXTERNAL SOURCES		
<i>Am. Guarantee & Liability Ins. Co. v. Ingram Micro, Inc.</i> , 2000 WL 726789 (D. Ariz. 2000)		X
RISK FROM MALICIOUS INTERNAL SOURCES		
<i>Liberty Corp. Capital Ltd. v. Security Safe Outlet</i> , 577 F. App'x 399 (6th Cir. 2014)		X
RISK FROM NONMALICIOUS INTERNAL SOURCES		
<i>State Auto Prop. And Cas. Ins. Co. v. Midwest Computers & More</i> , 147 F. Supp. 2d 1113 (W.D. Okla. 2001)	X	
<i>Am. Online, Inc. v. St. Paul Mercury Ins. Co.</i> , 207 F. Supp. 2d 459 (E.D. Va. 2002)	X	
<i>Netscape Commc'ns Corp. v. Fed. Ins. Co.</i> , 343 F. App'x 271 (9th Cir. 2009)		X
<i>Eyeblaster, Inc. v. Fed. Ins. Co.</i> , 613 F.3d 797 (8th Cir. 2010)		X
<i>Recall Total Info. Mgmt., Inc. v. Fed. Ins. Co.</i> , 83 A.3d 664 (Conn. App. 2014)	X	
<i>Travelers Indem. Co. of Am. v. Portal Healthcare Sols., LLC</i> , 35 F. Supp. 3d 765 (E.D. Va. 2014)		X
<i>Ciber, Inc. v. Fed. Ins. Co.</i> , 2018 WL 1203157 (D. Colo. 2018)		X

Figure 1: Litigation Involving Coverage Disputes in GCL Policies

SPECIALIZED POLICY LITIGATION		
RISK FROM MALICIOUS EXTERNAL SOURCES		
<i>Case</i>	<i>Party Intent</i>	<i>Risk-Shifting</i>
<i>Retail Ventures, Inc. v. Nat. Union Fire Ins. Co. of Pittsburgh</i> , 691 F.3d 821 (6th Cir. 2012)	X	
<i>Travelers Prop. Cas. Co. of Am. v. Fed. Recovery Servs., Inc.</i> , 103 F. Supp. 3d 1297 (D. Utah 2015)	X	
<i>P.F. Chang's China Bistro, Inc. v. Fed. Ins. Co.</i> , 2016 WL 3055111 (D. Ariz. 2016)	X	
<i>Apache Corp. v. Great Am. Ins. Co.</i> , 662 F. App'x 252 (5th Cir. 2016)	X	
<i>Principle Sols. Group, LLC v. Ironshore Indem., Inc.</i> , 2016 WL 4618761 (N.D. Ga. 2016)		X
<i>Aqua Star (USA) Corp. v. Travelers Cas. Surety Co. of Am.</i> , 2016 WL 3655265 (W.D. Wa. 2016)	X	
<i>Am. Tooling Ctr., Inc. v. Travelers Cas. Surety Co.</i> , 895 F.3d 455 (6th Cir. 2018)		X
RISK FROM NONMALICIOUS EXTERNAL SOURCES		
<i>Am. Guarantee & Liab. Ins. Co. v. Ingram Micro, Inc.</i> , 2000 WL 726789 (D. Ariz. 2000)		X
RISK FROM MALICIOUS INTERNAL SOURCES		
<i>Pinnacle Processing Grp, Inc. v. Hartford Cas. Ins. Co.</i> , 2011 WL 5299557 (W.D. Wa. 2011)	X	
RISK FROM NONMALICIOUS INTERNAL SOURCES		
<i>Pestmaster Servs., Inc. v. Travelers Cas. Sur. Co. of Am.</i> , 2014 WL 3844627 (C.D. Ca. 2014)	X	

Figure 2: *Litigation Involving Coverage Disputes in Specialized or Cyber Insurance Policies*

C. Comparative Trends Between GCL Policy and Specific Policy Litigation

There are a limited number of cases involving coverage disputes for digital risk; of those cases,⁵⁹ a slight majority centers around particular riders or other

59. See *supra* Figure 1 & Figure 2. Litigated disputes involving coverage specific to digital risk have only reached the courts 23 times in total, with the majority of cases being settled out of court. While insurance law is traditionally state law, these types of insurance policies enter federal court almost universally through diversity jurisdiction.

coverage statements that exist in GCL Policies.⁶⁰ This may indicate that on aggregate, more ambiguous or disputed terms are present when a GCL Policy includes a digital-risk-coverage statement. This may also indicate the stark contrast between the traditional paradigm of insurance interpretation and the need for a new methodology of interpreting digital-risk coverage—if general corporate-liability riders covering digital risk are more frequently litigated, there may be a less nuanced understanding of the changing nature of digital risk between the insured and the insurer. The largest group of disputes regarding digital-risk coverage in general corporate liabilities policies occurred during a gap period, from roughly 2002–2013,⁶¹ in which Specialized Policy insurers had not fully entered the market and GCL Policy insurers may have been struggling with the rapidly evolving nature of risk.⁶²

Specialized Policies, such as cyber insurance policies or crime policies, have been litigated less frequently.⁶³ Those cases that led to disputes over coverage generally involved large data breaches or high-value attacks potentially impacting a large number of consumers.⁶⁴ This could indicate that Specialized Policy insurers are more carefully drafting insurance contracts, leading to coverage being provided when it is necessary or potentially settled without need for litigation.⁶⁵

D. GCL Policy Litigation

1. Litigation surrounding ambiguity frequently involves nonmalicious negligence.

The most frequently litigated issue surrounding GCL Policy coverage can be categorized within the “nonmalicious” axis, whether an external event, such as a power outage leading to loss of server use,⁶⁶ or an internal event, such as a claim that a piece of internally developed software caused damage to a third party’s computer.⁶⁷ GCL Policy litigation most frequently involves not a determination of

60. GCL policies involving the requisite criteria have reached a final decision 13 times versus 10 final decisions for cyber-specific policies. However, both categories of policies have a body of litigation from approximately 2000–2018, indicating that each are being litigated with a roughly equivalent frequency. *See supra* Figure 1 & Figure 2.

61. *See supra* Figure 1. While there has been slightly more litigation surrounding GCL policies and digital risk after 2013, litigation is generally evenly distributed, with seven cases prior to 2013 and only six after.

62. The first specialized digital-risk policy was not offered until 1997, and cyber insurance carriers did not enter the market until after 2010. *See Brown, supra* note 131.

63. *See supra* Figure 1 & Figure 2 and *infra* note 66.

64. *See* PONEMON INSTITUTE, *infra* note 134; *see also* Pompon, *infra* note 134.

65. *See* Lauri Floresca, *Data Breach Settlements: A New Cost in Cyber Risk*, WOODRUFF SAWYER (Nov. 10, 2014), <https://woodrufflaw.com/cyber-liability/cyber-cost/> (“The year 2014 brought six notable settlements in data breach cases Now that a few companies have settled, plaintiffs will be emboldened to bring more suits.”).

66. *Am. Guar. & Liab. Ins. Co. v. Ingram Micro, Inc.*, No. 99-185-TUC-ACM, 2000 WL 726789, at *1 (D. Ariz. Apr. 18, 2000) (“As a result of a power outage, Ingram’s computer systems were rendered inoperable. Ingram made a claim under its policy to American and American denied the claim.”).

67. *Eyeblaster, Inc. v. Fed. Ins. Co.*, 613 F.3d 797, 799 (8th Cir. 2010) (“A computer user sued Eyeblaster, alleging that Eyeblaster injured his computer, software, and

what property was covered, but rather whether a particular event was a cause defined within the scope of coverage. For example, “property damage” or “direct physical damage” is a frequently disputed term within a GCL Policy when digital risk is realized;⁶⁸ courts are tasked with determining the definition of these terms to ascertain whether an event occurred within coverage.⁶⁹

This frequency could indicate that there is a paradigmatic problem in “translating” digital risk terminology in a GCL Policy. For example, a frequently disputed point in other areas of insurance litigation is whether a certain act was malicious or negligent—if the act was merely negligent, a court may determine that the act is not covered as against public policy, as the insured party could control the risk most effectively.⁷⁰ In the digital context, however, the difference between “malicious” activity and “negligent” activity can be much harder to determine.⁷¹ For

data after he visited an Eyebalster website.”); *Am. Online, Inc. v. St. Paul Mercury Ins. Co.*, 347 F.3d 89, 91 (4th Cir. 2003) (describing multiple class actions against AOL for bugs in software potentially causing “property damage” to end-users PCs); *Netscape Commc’ns Corp. v. Fed. Ins. Co.*, No. C-06-00198-JW, 2007 WL 2972924, at *1 (N.D. Cal. Oct. 10, 2007) (discussing end-users claim that “smart download profiling” activities by AOL were in violation of the Electronic Communications Privacy Act and Computer Fraud and Abuse Act), *rev’d in part*, 343 F. App’x 271 (9th Cir. 2009).

68. *E.g., Eyebalster, Inc.*, 613 F.3d at 800 (“Eyebalster asserts on appeal that the district court erred in failing to address coverage under the General Liability policy for ‘loss of use of tangible property that is not physically injured’”); *Ciber, Inc. v. Fed. Ins. Co.*, No. 16-CV-01957-PAB-MEH, 2018 WL 1203157, at *3–4 (D. Colo. Mar. 5, 2018) (discussing whether “loss of use” constitutes “property damage” under a GCL policy); *Am. Online, Inc. v. St. Paul Mercury Ins. Co.*, 207 F. Supp. 2d 459, 462 (E.D. Va. 2002) (“First, the Court holds that computer data, software and systems are not ‘tangible’ property in the common sense understanding of the word.”); *State Auto Prop. & Cas. Ins. Co. v. Midwest Computs. & More*, 147 F. Supp. 2d 1113, 1115–116 (W.D. Okla. 2001) (discussing whether computer data is “tangible personal property” as stated in a GCL policy); *Am. Guar. & Liab. Ins. Co.*, 2000 WL 726789, at *1 (“Pending before the Court are cross-motions for partial summary judgment on the issue of whether a 1998 power outage caused ‘direct physical loss or damage from any cause, howsoever or wheresoever occurring’ to Ingram’s computer system.”).

69. *E.g., Ciber, Inc.*, 2018 WL 1203157, at *3 (citing *Eyebalster, Inc.*, 613 F.3d at 802 to determine whether a claimed loss was use of tangible property); *State Auto Prop. & Cas. Ins. Co.*, 147 F. Supp. 2d at 1116 (applying the Webster’s Ninth New Collegiate Dictionary definition of ‘tangible’ to inform a decision about coverage).

70. GCL Policies that cover specific torts will often lead to disputes as to whether the intent element of the tort is met. For example, malicious prosecution policies may only provide coverage if a malicious intent element is found. Thomas R. Newman & Shannon Boettjer, *Malicious Prosecution: Coverage Under the GCL Policy*, 84 DEF. COUNS. J., Apr. 2017 1, 16 (“While insurance is generally thought of as covering only harm that is fortuitous rather than intentionally caused by the insured, Coverage B, Personal Injury, of the GCL Policy (and similar personal injury coverage in other policy forms) provides coverage for ‘offenses’ that are intentional torts.”).

71. DAVID S. WALL, SYMANTEC, ORGANIZATIONAL SECURITY AND THE INSIDER THREAT: MALICIOUS, NEGLIGENT AND WELL-MEANING INSIDERS (2011), http://www.symantec.com/content/de/de/about/downloads/press/WP_Organizational_Security_and_the_InsiderThreat_Malicious_Negligent_and_Well-Meaning_FINAL.pdf

example, an IT employee may maliciously sell trade secrets to a competitor—clearly a malicious act—or may merely negligently fail to secure a database, leading to the same trade secrets being discovered.⁷² Concepts such as degrees of fault in other contexts may not adequately define actions in the digital realm, and as such may lead to additional litigation within a GCL Policy.

“Property damage” serves an illuminating purpose in this regard. As GCL Policies covered physical property, courts have used this foundation to assert that data is not covered property.⁷³ An insurance policy that creates coverage for “loss of property,” absent any clarifying conditions or exceptions, may be interpreted similar to other types of risk in a GCL Policy. As data is intangible, a court emphasizing party intent and utilizing standard canons of contract interpretation may utilize a plain language interpretation of “property” to determine that coverage was not intended for such loss.⁷⁴

2. Courts that prioritize risk-shifting utilize broad coverage principles and construe exceptions narrowly.

Courts utilize risk-shifting as a potential method to protect both the insured and the general public in approximately half of GCL Policy disputes.⁷⁵ However, these courts consistently emphasize a single principle: risk-shifting can be achieved by interpreting coverage broadly and construing exceptions as narrowly as possible.⁷⁶ As mentioned above, the insured has the initial burden of proving that a certain term was included within coverage, with the burden then shifting to the

(“The fly in the ointment here is that not all insider precipitated incidents are malicious, so they do not neatly fit into the good guy/bad guy binary . . .”).

72. *Id.* at 10 (categorizing insiders as “data-leakers” who leak information, whether for ethical or unethical reasons).

73. *Eyeblaster, Inc.*, 13 F.3d at 800 (“Eyeblaster asserts on appeal that the district court erred in failing to address coverage under the General Liability policy for ‘loss of use of tangible property that is not physically injured . . .’”); *Am. Online, Inc.*, 207 F. Supp. 2d at 462 (“First, the Court holds that computer data, software and systems are not ‘tangible’ property in the common sense understanding of the word.”).

74. *Am. Online, Inc.*, 207 F. Supp. 2d at 465 (“Virginia law treats an insurance policy as a contract that should be construed to give effect to the intent of the parties.”); *id.* at 466 (“Because the Policy does not define ‘tangible,’ the court turns to the plain meaning of the word tangible.”).

75. *See supra* Figure 1. Courts emphasized principles of risk-shifting in seven digital-risk-coverage disputes under a GCL policy versus six disputes emphasizing the principle of party intent.

76. *Spec’s Family Partners, Ltd. v. Hanover Ins. Co.*, 739 F. App’x 233, 238 (5th Cir. 2018) (citing *Great Am. Ins. Co. v. Calli Homes, Inc.*, 236 F. Supp. 2d 693, 703 (S.D. Tex. 2002)) (“Where an underlying petition includes allegations that ‘go beyond’ conduct covered by an exclusion, the duty to defend is still triggered.”); *Eyeblaster, Inc.*, 613 F.3d at 802 (citing *SCSC Corp. v. Allied Mut. Ins. Co.*, 536 N.W.2d 305, 313–14 (Minn. 1995)) (“Under Minnesota law, an insured is entitled to have its case considered by the fact-finder once it has established a prima facie case. The insurer then has the burden to prove that an exclusion applies . . . [e]xclusions are narrowly interpreted against the insurer.”); *see Netscape Commc’ns Corp. v. Fed. Ins. Co.*, 343 F. App’x 271, 272 (9th Cir. 2009) (finding the district court interpreted a GCL exclusion “too broadly” in upholding denial of coverage).

insurer to prove that the exception applies.⁷⁷ This creates a methodology with which a court can reach risk-shifting goals, as a party claiming a duty to defend or indemnity will be more capable of proving that the disputed term was covered.⁷⁸ The insurer's exceptions will be construed much more narrowly, leading to a potentially increased burden to rebut the presumption of coverage in such a framework.

While courts have both emphasized risk-shifting and utilized a narrow construction strategy when the cause of risk is a malicious external source,⁷⁹ such emphasis and strategy is not confined to that category—courts have utilized this process in risk-shifting when loss is caused by nonmalicious internal sources as well.⁸⁰ It thus appears that courts are not emphasizing risk-shifting as a methodology to specifically protect victims of cybercrime within a GCL Policy.

3. Courts emphasizing risk-shifting construe a duty to defend much more broadly.

Those courts emphasizing risk-shifting additionally establish a dichotomy between the duty to defend and the duty to indemnify.⁸¹ Courts emphasizing risk-shifting do so exclusively within the realm of the duty to defend—emphasizing that the duty to defend should be much more broadly construed than the duty to

77. See generally *Eyeblaster, Inc.*, 613 F.3d 797.

78. See *Ciber, Inc. v. Fed. Ins. Co.*, No. 16-CV-01957-PAB-MEH, 2018 WL 1203157, at *2 (D. Colo. Mar. 5, 2018) (quoting *Cotter Corp. v. Am. Empire Surplus Lines Ins. Co.*, 90 P.3d 814, 829 (Colo. 2004)) (“Where policy exclusions are implicated, the insurer bears the burden of establishing that the allegations in the complaint are solely and entirely within the exclusions in the insurance policy.” (internal quotations omitted)).

79. See *Spec's Family Partners, Ltd.*, 739 F. App'x at 234, 238 (interpreting conduct that “goes beyond” an exclusion triggers the duty to defend when a third party breached a merchant's credit card data).

80. *Eyeblaster, Inc.*, 613 F.3d at 799–802 (narrowly interpreting exclusions when an end user alleged that software damaged his computer, leading to loss of use); *Netscape Commc'ns. Corp.*, 343 F. App'x at 272 (reversing the district court's decision to deny coverage when code allegedly damaged end user PCs by finding the court interpreted an exception too broadly).

81. *Spec's Family Partners, Ltd.*, 739 F. App'x at 237 (citing *Gilbane Bldg. Co. v. Admiral Ins. Co.*, 664 F.3d 589, 594 (5th Cir. 2011)) (“The Policy in this case involves two different duties: the duty to defend and the duty to indemnify.”); *Liberty Corp. Capital Ltd. v. Sec. Safe Outlet*, 577 F. App'x 399, 404 (6th Cir. 2014) (quoting *James Graham Brown Found., Inc. v. St. Paul Fire & Marine Ins. Co.*, 814 S.W.2d 273, 280 (Ky. 1991)) (“The duty to defend is broader than the duty to indemnify . . . [t]here is a duty to defend ‘if there is any allegation which potentially, possibly or might come within the coverage of the policy.’”); *Eyeblaster, Inc.*, 613 F.3d at 801 (citing *SCSC Corp. v. Allied Mut. Ins. Co.*, 536 N.W. 2d 305, 316 (Minn. 1995)) (“Under Minnesota law, an insurer's duty to defend is distinct from and broader than its duty to indemnify the insured.”); *Ciber, Inc.*, 2018 WL 1203157, at *2 (citing *Hecla Mining Co. v. N.H. Ins. Co.*, 811 P.2d 1083, 1086 n.5 (Colo. 1991)) (“Under Colorado law, the duty to defend is separate and distinct from an insurer's obligation to indemnify its insured.”); *Travelers Indem. Co. of Am. v. Portal Healthcare Sols., LLC*, 35 F. Supp. 3d 765, 769 (E.D. Va. 2014) (quoting *Brenner v. Lawyers Title Ins. Corp.*, 397 S.E.2d 100, 102 (Va. 1990)) (“Under Virginia law, an insurer's duty to defend an insured ‘is broader than its obligation to pay’ or indemnify an insured.”).

indemnify in the event of loss of an insured.⁸² In the event of a pure first-party loss, such as the loss of use of servers on the premises of the insured,⁸³ courts are much more likely to construe the duty to indemnify more stringently.⁸⁴ This may be due to the sophistication of the parties—in the event of a first-party loss, the parties had an opportunity to negotiate the terms; in the event indemnification was necessary, the *ex ante* negotiation process could have been utilized.⁸⁵ In the event of a tort claim, however, third parties do not have the opportunity to negotiate,⁸⁶ and by more broadly construing the duty to defend, courts emphasizing risk-shifting may be creating additional opportunities to ensure that public good is upheld.⁸⁷

4. *Courts emphasizing party intent regularly utilize the “eight corners” doctrine in litigation.*

Alternatively, courts that emphasize party intent regularly utilize plain language interpretation of potentially ambiguous terms in order to narrowly interpret coverage in the event of litigation.⁸⁸ One frequent example is the “eight corners”

82. *Eyeblaster, Inc.*, 613 F.3d at 801 (construing the duty to defend more broadly than the duty to indemnify); *Travelers Indem. Co. of America*, 35 F. Supp. 3d at 769 (establishing that the duty to defend is broader than the duty to indemnify).

83. *Ciber, Inc.*, 2018 WL 1203157, at *2 (“[T]he duty to defend arises where the alleged facts even *potentially* fall within the scope of coverage.”).

84. *Id.* (“[T]he duty to indemnify does not arise unless the policy *actually* covers the alleged harm.”).

85. This process is labeled as the “sophisticated insured” exception; an insurer argues that because a sophisticated party had an opportunity to negotiate the terms, exceptions to risk-shifting principles should apply. *See* Hazel Glenn Beh, *Reassessing the Sophisticated Insured Exception*, 39 TORT TRIAL & INS. PRAC. L.J. 85, 93 (quoting commentators stating that construing policies against the drafter should not be applicable when policies were negotiated by parties with substantially equal bargaining power).

86. The tension between insurance liability and recovery for third parties in tort has been long standing. *See* Walkovszky v. Carlton, 223 N.E.2d 6, 12–13 (N.Y. Ct. App. 1966) (Keating, J., dissenting) (arguing that the sufficiency of minimum insurance coverage rates for piercing the corporate veil are not adequate when considering a tort victim).

87. *See id.* (arguing that insurance policy provisions should not be an exclusive means to uphold the principle in tort that victims should be compensated for their loss).

88. *Taylor & Lieberman v. Fed. Ins.*, 681 F. App'x. 627, 629 (9th Cir. 2017) (citing *Emp'rs Reinsurance Co. v. Superior Court*, 74 Cal. Rptr. 3d 733, 744 (Ct. App. 2008) (“We interpret words in accordance with their ordinary and popular sense, unless the words are used in a technical sense or a special meaning is given to them by usage.”); *Camp's Grocery, Inc. v. State Farm Fire & Cas. Co.*, No. 4:16-CV-0204-JEO, 2016 WL 6217161, at *6 (N.D. Ala. Oct. 25, 2016) (“Such promises to pay the insured’s ‘direct loss’ unambiguously afford first-party coverage only and do not impose a duty to defend or indemnify the insured against legal claims for harm allegedly suffered by others”); *First Bank of Del., Inc. v. Fid. & Deposit Co. of Md.*, C.A. No. N11C-08-221 MMJ CCLD, 2013 WL 5858794, at *5 (Del. Sup. Ct. Oct. 30, 2013) (“When the language of an insurance contract is clear and unequivocal, a party will be bound by its plain meaning.”); *Am. Online, Inc. v. St. Paul Mercury Ins. Co.*, 207 F. Supp. 2d 459, 465 (E.D. Va. 2002) (“As in the case of any other contract, the words are given their ordinary and customary meaning when they are susceptible of such construction.”); *Recall Total Info. Mgmt., Inc. v. Fed. Ins. Co.*, 83 A.3d 664, 670 (Conn. App. Ct. 2014) (“If the terms of the policy are clear and unambiguous, then the

doctrine within the duty to defend.⁸⁹ In the event of litigation that potentially implicates an insurer's duty to defend, courts that emphasize party intent look only to the "eight corners" of both the insurance policy itself and the complaint as it was filed.⁹⁰ Comparing the terms in the policy to those terms within the complaint, courts state that if the terms in the complaint do not adequately represent the terms within the contract, the complaint must be dismissed.⁹¹ Thus, a complaint for negligent software coding which led to an inability to use a computer for a period of time could be considered insufficient for coverage,⁹² as the complaint did not use terms which adequately related to the description of coverage within a general corporate-liability policy.⁹³

E. Specialized Policies & Cyber-Risk Insurance Litigation

1. Litigation surrounding ambiguity frequently involves malicious third-party impacts.

Risk from malicious external sources dominates litigation involving Specialized Policies, with 70% of cases involving a malicious third party infiltrating and breaching a business' network.⁹⁴ As such, Specialized Policies address losses due to crime or breach, and the duty to indemnify is more frequently litigated, with only a single case involving the duty to defend.⁹⁵ As the average estimated value of

language, from which the intention of the parties is to be deduced, must be accorded its natural and ordinary meaning"); *State Auto Prop. & Cas. Ins. Co. v. Midwest Computs. & More*, 147 F. Supp. 2d 1113, 1115 (W.D. Okla. 2001) ("[A]n insurance policy is a contract. If the terms are unambiguous, clear and consistent, they are to be accepted in their ordinary sense and enforced to carry out the expressed intentions of the parties.").

89. *Am. Online, Inc.*, 207 F. Supp. 2d at 465 (quoting *Fuisz v. Selective Ins. Co. of Am.*, 61 F.3d 238, 2442 (4th Cir. 1995)) ("The 'eight corners rule' requires review of (1) the policy language to ascertain the terms of the coverage and (2) the underlying complaint to determine whether any claims alleged therein are covered by the policy.").

90. *Id.*

91. *Id.*

92. *Id.* at 462.

93. *Id.* at 465.

94. *See supra* Figure 2; of the ten major cases involving litigation of coverage in specialized or cyber insurance policies, seven cases involved risk from malicious external sources.

95. For cases primarily involving the duty to indemnify, see *P.F. Chang's China Bistro, Inc. v. Fed. Ins. Co.*, No. CV-15-01322-PHX-SMM, 2016 WL 3055111, at *1 (D. Ariz. May 31, 2016) (arising from a dispute over coverage for direct, consequential, and legal loss resulting from cyber security breaches); *Apache Corp. v. Great Am. Ins. Co.*, 662 F. App'x 252, 252 (5th Cir. 2016) (arising from a dispute over indemnification for \$2.4 million direct loss); *Am. Tooling Ctr., Inc. v. Travelers Cas. & Sur. Co.*, 895 F.3d 455, 457 (6th Cir. 2018) (arising from a dispute over indemnification for an \$834,000 loss); *Retail Ventures, Inc. v. Nat'l Union Fire Ins. Co. of Pittsburgh*, 691 F.3d 821, 824 (6th Cir. 2012) (arising from a dispute over indemnification for over \$6.8 million for a data breach); *Principle Sols. Grp., LLC v. Ironshore Indem., Inc.*, No. 1:15-CV-4130-RWS, 2016 WL 4618761, at *1 (N.D. Ga. Aug. 30, 2016) (arising from a dispute over indemnification for over \$1.1 million for a data breach); *Aqua Star (USA) Corp. v. Travelers Cas. and Sur. Co.*, No. C14-1358RSL, 2016 WL 3655265, at *1 (W.D. Wash. July 8, 2016) (arising from a dispute for

litigated data breaches in this category is significantly higher than in other categories,⁹⁶ often exceeding millions of dollars, this seems to indicate that organizations are more willing to broadly litigate a variety of terms and ambiguities within coverage. These disputes frequently involve multiple terms within the contract and involve multiple claimants,⁹⁷ often class actions or high-value data-loss estimates;⁹⁸ as such, this indicates that a rational insured would be more willing to litigate the issues with a less significant chance of recovery or indemnification.

2. Courts emphasizing party intent typically do not utilize statutory sources to better define ambiguous terms in the event of external malicious risk.

Courts faced with the challenge of interpreting third party malicious risk may have an advantage in defining ambiguous terms: such risk is often in violation of both state and federal statutes. However, these courts routinely fail to use these statutes. For example, a third party maliciously sending a phishing email to wire money may violate the Federal Computer Fraud and Abuse Act.⁹⁹ While this provides an extrinsic source of information for determining whether an act constitutes a crime, courts predominantly utilize the definitions for crime or fraud established within the policy itself, construing the terms in their ordinary or plain meaning.¹⁰⁰ If a Specialized Policy mentions that risk will be shifted and coverage will exist in the event of the occurrence of such crime, courts will then conduct an additional analysis to determine whether the event falls under the umbrella of the crime itself.¹⁰¹ By determining whether the event falls under the ambit of a particular

indemnification for \$713,890 as a result of a data breach). For duty to defend, see *Travelers Prop. Cas. Co. v. Fed. Recovery Servs., Inc.*, 103 F. Supp. 3d 1297, 1297 (D. Utah 2015) (arising from a dispute over a duty to defend regarding third party claims for loss in a data breach).

96. See *supra* note 103. Of the six cases involving the duty to indemnify, the smallest amount in contention regarding malicious third-parties was \$713,890, whereas the highest amount in content was over \$6.8 million.

97. See *P.F. Chang's China Bistro, Inc.*, 2016 WL 3055111, at *1 (litigation involving a cyber insurance policy tied to service agreements for credit card services for over six million credit card transactions); *Am. Tooling Ctr., Inc.*, 895 F.3d at 457–58 (litigation involving outsourcing invoices and wire transfer portal for multiple corporations); *Retail Ventures, Inc.*, 691 F.3d at 824 (litigation involving multiple entities of Designer Shoe Warehouse and a third-party card processing organization).

98. See *infra* note 103, for estimated claims, varying between \$713,890 to over \$6.8 million.

99. Intentionally accessing a computer without authorization and obtaining information in financial records constitute a federal crime. 18 U.S.C. § 1030(a)(2)(A) (2018).

100. *Apache Corp.*, 662 F. App'x at 254–55 (describing the “Computer Fraud” provision of a specialized crime insurance policy and finding under the plain meaning within the contract the terms were unambiguous); *Brightpoint, Inc. v. Zurich Am. Ins. Co.*, No. 1:04-CV-2085-SEB-JPG, 2006 WL 693377, at *1 (S.D. Ind. Mar. 10, 2006) (discussing disputed coverage under a specific Computer Fraud/Wire Transfer policy); *Retail Ventures, Inc.*, 691 F.3d at 824–26 (describing a Blanket Crime Policy and utilizing plain meaning of its terms to hold lack of ambiguity).

101. See *supra* note 10, describing cases that utilize this methodology.

cybercrime, the court can then use this determination to conclude whether a disputed term is within the coverage of the policy.¹⁰²

V. THE PROCESS OF INTERPRETATION: OVERALL TREND ANALYSIS

In analyzing each case, no matter the category of risk or policy type, a pattern of analysis emerges when courts consider ambiguities in the event of digital risk. While courts universally utilize canons of contract interpretation to construe insurance coverage and arrive at a particular outcome interpretation,¹⁰³ a court nonetheless has considerable leeway in determining whether a litigated digital loss falls within the scope of coverage. This leeway, coupled with the desire to prioritize either party intent or risk-shifting,¹⁰⁴ can present both pitfalls to insured parties looking for coverage and an opportunity to better understand interpretation of ambiguities in the drafting and *ex ante* negotiation stages of insurance contracting.

Courts universally begin the analysis of a disputed term by discussing whether the plain meaning of terms within the contract will adequately resolve the issue of coverage denial.¹⁰⁵ This presents a significant hurdle to the insured if a court prioritizes party intent. As in each case, courts prioritizing party intent heavily emphasized narrow construction of ambiguities to reinforce the presumption of the plain-language interpretation's sufficiency.¹⁰⁶ Those courts which emphasize risk-shifting, however, have more broadly construed ambiguities to overcome this principle, particularly in the category of malicious third-party risk.¹⁰⁷

102. *Id.*

103. *See generally* *Retail Ventures, Inc.*, 691 F.3d at 831 (emphasizing party intent while utilizing the canon of plain meaning). *Cf. Ciber, Inc. v. Fed. Ins. Co.*, No. 16-CV-01957-PAB-MEH, 2018 WL 1203157, at *3 (D. Colo. Mar. 5, 2018) (emphasizing risk-shifting by utilizing *contra profrentem* to construe ambiguous terms against the drafter).

104. *See supra* Figure 1 & Figure 2, for a breakdown of cases between emphasis on party intent or risk-shifting principles.

105. *See generally* *Taylor & Lieberman v. Fed. Ins. Co.*, 681 F. App'x 627, 629 (9th Cir. 2017) (beginning analysis with a determination that insurance terms will be given the plain and ordinary meaning to uphold party intent). *Cf. Spec's Family Partners v. Hanover Ins. Co.*, 739 F. App'x 233, 237 (5th Cir. 2018) (beginning analysis by stating that terms will be given their plain meaning but utilizing extrinsic evidence to construe against the drafter under risk-shifting principles).

106. *See* *Pinnacle Processing Grp., Inc. v. Hartford Cas. Ins. Co.*, No. C10-1126-RSM, 2011 WL 5299557, at *5 (W.D. Wash. Nov. 4, 2011) (holding that courts will not modify a policy to create ambiguity where none exists and holding that definitions must be applied and undefined terms are to be given plain, ordinary, and popular meaning); *Pestmaster Servs., Inc. v. Travelers Cas. & Sur. Co.*, No. CV 13-5039-JFW, 2014 WL 3844627, at *3 (C.D. Cal. July 17, 2014) (finding that "if the meaning a layperson would ascribe to contract language is not ambiguous, we apply that meaning.").

107. *See* *Am. Tooling Ctr., Inc. v. Travelers Cas. & Sur. Co.*, 895 F.3d 455, 460 (6th Cir. 2018) (holding that plain meaning was to be used for terms, but utilizing an explicitly broader definition of 'direct' to interpret coverage); *see also* *Principle Sols. Grp., LLC, v. Ironshore Indemn., Inc.*, No. 1:15-CV-4130-RWS, 2016 WL 4618761, at *5 (N.D. Ga. Aug.

If a court finds ambiguities are sufficient to overcome the plain-meaning interpretation of a litigated term, it proceeds to make a distinction between the duty to indemnify and the duty to defend, interpreting each duty either narrowly or broadly depending on whether the court emphasizes risk-shifting or party intent.¹⁰⁸ Those courts that emphasize party intent but find ambiguities sufficient to overcome the plain-meaning interpretation do not make a distinction between the duty to indemnify and the duty to defend, appearing to construe each of these duties in a similar vein.¹⁰⁹ However, those courts that emphasize risk-shifting and find ambiguities sufficient to overcome the plain-meaning interpretation consistently indicate that the duty to defend would be construed more broadly than the duty to indemnify.¹¹⁰ In the event of litigation involving the duty to defend, such courts are more likely to determine that the duty was triggered.¹¹¹

A similar dichotomy is utilized by courts when considering whether a term defines the presence of coverage or creates exceptions to it. Courts that find ambiguity will interpret this distinction in different manners depending on the prioritization of party intent or risk-shifting.¹¹² As discussed above, courts that emphasize party intent will make no distinction between coverage and exceptions;¹¹³

30, 2016) (holding that if language in a contract is ambiguous, the policy *must* be construed in the light most favorable to the insured to provide coverage (emphasis added)).

108. *See generally* *Eyeblander, Inc. v. Fed. Ins. Co.*, 613 F.3d 797, 801 (8th Cir. 2010) (utilizing a distinction between the duty to defend and the duty to indemnify to broadly interpret coverage and shift risk); *Travelers Indem. Co. of Am. v. Portal Healthcare Sols., LLC*, 35 F. Supp. 3d 765, 769 (E.D. Va. 2014) (establishing that the duty to defend is broader than the duty to indemnify).

109. Most party-intent cases do not mention the difference between the duty to indemnify and the duty to defend, instead focusing exclusively upon the plain language interpretation of terms. However, *Camp's Grocery* provides evidence of this approach—the court draws a distinction, but then defers to plain language regarding “first-party” or “third-party” risk to determine that neither duty is triggered. *See Camp's Grocery, Inc. v. State Farm Fire & Cas. Co.*, No. 4:16-CV-0204-JEO, 2016 WL 6217161, at *5–7 (N.D. Ala. Oct. 25, 2016).

110. *See supra* note 107, for discussion of cases utilizing this distinction to prioritize risk-shifting principles.

111. *See supra* note 108, for cases stating the duty to defend is to be construed more broadly than the duty to indemnify.

112. *See Eyeblander, Inc.*, 613 F.3d at 802 (construing an exception narrowly under risk-shifting principles); *Netscape Commc'ns Corp v. Fed. Ins. Co.*, 343 F. App'x 271, 271 (9th Cir. 2009) (reversing a decision which interpreted an exclusion too narrowly); *Spec's Family Partners, Ltd. v. Hanover Ins. Co.*, 739 F. App'x 233, 238 (5th Cir. 2018) (interpreting an exception in a policy narrowly to hold that conduct “went beyond” the requirements of the eight corners doctrine).

113. *See First Bank of Del., Inc. v. Fid. & Deposit Co. of Md.*, C.A. No. N11C-08-221 MMJ CCLD, 2013 WL 5858794, at *6 (Del. Super. Ct. Oct. 30, 2013) (citing previous cases which construe conditions for coverage broadly while discussing the burden-shifting mechanism of exceptions); *Pestmaster Servs., Inc. v. Travelers Cas. and Sur. Co. of Am.*, CV 13-5039-JFW, 2014 WL 3844627, at *9 (C.D. Cal. July 17, 2014) (applying a plain meaning analysis to an exclusion and finding it unambiguous); *Am. Online, Inc. v. St. Paul Mercury Ins. Co.*, 207 F. Supp. 2d 459, 465 (E.D. Va. 2002) (stating that exclusionary language is to

courts that emphasize risk-shifting, however, will create a distinction by indicating that terms establishing coverage are to be construed as broadly as possible, and those creating exclusions are to be construed narrowly.¹¹⁴

Finally, if neither the above distinctions nor the plain-language interpretation are deemed sufficient, courts universally turn to additional interpretive canons, emphasizing a particular canon to determine whether coverage is present or not.¹¹⁵ Courts that emphasize risk-shifting regularly utilize the canon of *contra proferentem* to establish that terms are to be construed against the drafter,¹¹⁶ whereas those courts that emphasize party intent utilize either the “four corners” doctrine or the “eight corners” doctrine in the event of third-party complaint.¹¹⁷

VI. POTENTIAL ISSUES & FUTURE SOLUTIONS

A. Problems & Predictability

Throughout this process, courts utilize universally accepted contract interpretation principles but depending on whether the court’s emphasis is on party intent or risk-shifting, certain principles are utilized and emphasized while others are ignored. While common themes and trends may lead to a degree of predictability depending upon previous decisions the court has made in this realm, this methodology grants considerable leeway to a court in interpreting a litigated term in an insurance contract. Courts may be emphasizing particular principles to reach a specific goal. For example, a court emphasizing risk-shifting may apply the

be construed against the drafter, but emphasizing the eight corners doctrine to ascertain whether terms are plain and unambiguous); *P.F. Chang’s China Bistro, Inc. v. Fed. Ins. Co.*, CV-15-01322-PHX-SMM, 2016 WL 3055111, at *3 (D. Ariz. May 31, 2016) (stating that while clauses are to be interpreted broadly and exclusions narrowly, the policy cannot defeat the reasonable expectations of the insured).

114. See *infra* notes 118–19, for discussion of cases distinguishing exclusions and coverage.

115. See *Am. Tooling Ctr., Inc. v. Travelers Cas. & Sur. Co. of Am.*, 895 F.3d 455, 464 (6th Cir. 2018) (discussing a previous case in which a “loosely worded” and “potentially” ambiguous provision was to be construed against the drafter when emphasizing risk-shifting); cf. *Am. Online, Inc.*, 207 F. Supp. 2d at 464 (utilizing the “eight corners” doctrine to emphasize party intent).

116. See *Am. Tooling Ctr., Inc.*, 895 F.3d at 464 (discussing a previous case in which a “loosely worded” and “potentially” ambiguous provision was to be construed against the drafter); *Liberty Corp. Capital Ltd. v. Sec. Safe Outlet*, 577 F. App’x 399, 404 (6th Cir. 2014) (construing ambiguous terms against the drafter in favor of reasonable expectations of the insured); *Principle Sols. Grp, LLC v. Ironshore Indem., Inc.*, 2016 WL 4618761, at *5 (N.D. Ga. 2016) (“In this circumstance, the Court must construe the policy in the light most favorable to Plaintiff and provide coverage.”).

117. See *Am. Online, Inc.*, 207 F. Supp. 2d at 465 (using the “eight corners” doctrine to compare a pleading to an insurance policy to determine party intent); *P.F. Chang’s China Bistro, Inc.*, 2016 WL 3055111, at *3 (discussing the “traditional view” of contracts as utilizing the “four corners” doctrine); *Travelers Prop. Cas. Co. of Am. v. Fed. Recovery Servs., Inc.*, 103 F. Supp. 3d 1297, 1301 (D. Utah 2015) (“If the language found within the collective ‘eight corners’ of these documents clearly and unambiguously indicates that a duty to defend does or does not exist, the analysis is complete.”).

appropriate principles in order to protect third-party tort victims from lack of recompense for harm.

This creates both a degree of predictability and a degree of unpredictability if a term will be litigated. For example, an organization seeking insurance for digital risk may be able to consider how a particular term would be interpreted if it is litigated, predict which approach the court would utilize, and then negotiate the contract and draft terms accordingly. On the other hand, insurers may be able to litigate in those arenas that emphasize party intent, predicting that the court will construe terms narrowly and thus interpret terms to be outside the scope of coverage. Thus, this method creates a risk for both the insurer and the insured. Ultimately, finding a method to more accurately determine the outcomes of litigation would mitigate this risk and ensure that digital risk is being adequately covered in both GCL Policies and Specialized Policies.

B. Going Forward: Suggested Solutions

Because the use of contract interpretation in cyber insurance, both from a perspective attempting to purely ascertain party intent and a perspective maximizing risk-shifting, is inadequate to effectively cover the evolving types and levels of risk inherent to technology in the business environment, what solutions are available? Courts heavily focusing on the plain-language canon of contract construction may not adequately shift risk from an insured to an insurer.¹¹⁸ Such focus may fail to trigger the duty to indemnify or the duty to defend within the context of a cyber insurance contract.¹¹⁹ This Note suggests two potential solutions: a new vernacular specific to cyber insurance terms could shift away from the plain-language canon of contract construction, or, alternatively, the free market could continue to develop and become more robust. Each comes with certain normative advantages, such as providing courts and the insured the safety of potentially broader protection through

118. See *P.F. Chang's China Bistro, Inc.*, 2016 WL 3055111, at *3 (holding that a plain reading of a cyber insurance contract did not include the risks alleged by a data breach victim); *Camp's Grocery, Inc. v. State Farm Fire & Cas. Co.*, No. 4:16-CV-02040JEO, 2016 WL 6217161, at *2 (N.D. Ala. Oct. 25, 2016) (holding that plain language interpretation requires that explicit terminology be included to cover certain data breach damages); *Retail Ventures, Inc. v. Nat'l Union Fire Ins. Co.*, 691 F.3d 821, 831 (6th Cir. 2012) (holding that the plain language interpretation of "directly resulting" within an insurance policy did not include losses that required an attacker to take intermediate steps to utilize stolen data). *But see Principle Sols. Grp., LLC*, 2016 WL 4618761, at *4 (holding that the plain language interpretation of "directly resulting" incorporated the risk of a fraudulent instruction for an employee to take direct action and wire money offshore).

119. This can occur not only regarding general corporate-liability policies, but within specialized cyber insurance policies as well. For example, a specialized "errors and omissions" contract in an insurance policy did not incorporate terminology that sufficiently included a shifting of risk when errors within the software product damaged end-users' workstations. *Eyeblaster, Inc. v. Fed. Ins. Co.*, 613 F.3d 797, 802 (8th Cir. 2010). Courts have additionally found that publication of data breach information to third parties did not sufficiently trigger the duty to defend against third-party lawsuits stemming from a breach. *Travelers Indem Co. of Am. v. Portal Healthcare Sols., LLC*, 35 F. Supp. 3d 765, 770 (E.D. Va. 2014).

various mechanisms. And each presents both positive and practical problems for all parties involved in cyber insurance litigation and contract-term interpretation, in a narrow sense when considering each individual case and in the broader sense of overall efficient administration of contract terms and a need for specialization.

1. Establish a New Vernacular Specific to Cyber Insurance

Courts, working within the industry, may be able to establish new interpretations of terms specific to cyber insurance risks. This seems to directly tackle the largest gap in risk-shifting in Specialized Policies—by better defining and establishing what “risk” means in a digital context, courts can be provided with a larger body of supplemental guidance to follow in understanding these concepts.¹²⁰ This approach, which legal scholars have recently advocated,¹²¹ would establish common use of terminology that mirrors established standards for interpretation of contract terms.¹²² To use one example in this Note, a Specialized Policy dispute regarding whether a risk was triggered by “use of a computer”¹²³ would be easily resolved. Courts could simply turn to the established body of knowledge that defines

120. See Sam Friedman & Adam Thomas, *Demystifying Cyber Insurance Coverage*, DELOITTE INSIGHTS (Feb. 23, 2017), <https://www2.deloitte.com/insights/us/en/industry/financial-services/demystifying-cybersecurity-insurance.html> (discussing the disconnect between certain industry-specific terms in technology with the overall public and financial industry); PRICE WATERHOUSE COOPER, *The Promise and Pitfalls of Cyber Insurance*, PWC (Jan. 2016), <https://www.pwc.com/us/en/insurance/publications/assets/pwc-insurance-top-issues-cyber-insurance.pdf> (categorizing a key issue in cyber insurance being the clarification of risks in cyber insurance policies to better serve customers, i.e. the insured); see also Reetz et al., *supra* note 17 at 729–30 (discussing the lack of common vernacular to “translate” between the cyber world and the “common brick-and-mortar world” of other insurance policies).

121. See Reetz et al., *supra* note 17, at 754–61 (discussing regulatory responses to better define “risk”); Lance Bonner, *Cyber Risk: How the 2011 Sony Data Breach and the Need for Cyber Risk Insurance Policies Should Direct the Federal Response to Rising Data Breaches*, 40 WASH. U. J.L. & POL’Y 257, 276–77 (2012) (suggesting that the lessons learned from data breaches can better inform regulatory agencies via increased exposure of terms, thus leading to better definitions of risk).

122. Reetz et al., *supra* note 17, at 761–62 (asking whether property insurers have sufficiently defined risk to cover “whatever the cyber world will throw at them”).

123. Typically, litigation surrounding the use of phishing e-mails centers around such terminology—analogue to proximate cause in Tort doctrine. See *Apache Corp. v. Great Am. Ins. Co.*, 662 F. App’x 252, 254–55 (5th Cir. 2016) (holding that a cyber insurance policy’s use of the term “resulting directly from the use of a computer” did not apply when a malicious attacker sent a phishing e-mail requiring an employee to then manually transfer funds); *Interactive Commc’ns Int’l, Inc. v. Great Am. Ins. Co.*, 731 F. App’x 929, 934–36 (11th Cir. 2018) (holding similarly when a malicious party utilized a phone tree to extract funds to an offshore account, despite the phone tree being “located” in a server within the premises).

the initial risk;¹²⁴ it would seem to follow that an analysis of triggering of risk-shifting would be simplified with such a foundational term.¹²⁵

Additionally, by establishing a common vernacular to be used regarding digital risk for both policy types, courts effectively level the playing field by avoiding potential moral-hazard problems inherent to insurance contracts.¹²⁶ For example, a common criticism of insurance contracts is the information imbalance between the insurer and insured. The insurer, by the very nature of the business of insuring others, will have access to additional knowledge and skills regarding the potential risks present in taking a particular action, and as such will shape and define an insurance contract to adequately protect those risks.¹²⁷ A successful insurance contract will thus meet the needs of both the insured (in the form of sufficient coverage for the effective risks in making a certain decision) and the insurer (by providing that coverage at a calculated profit via premium payments).¹²⁸ However, access to this information causes a potential externality—the insurer, possessing specialized information relevant to the frequency, average damages claim, and other factors relevant to a particular cyber loss, may use terms that are internally

124. Developing legal research is rapidly creating such a foundational “dictionary” in which to consider risks in the cyber context. See JEFFREY W. STEMPEL & ERIC S. KNUTSEN, *STEMPEL & KNUTSEN ON INSURANCE COVERAGE* § 23.02 (4th ed. 2016) (discussing definitions of “cyber” risk).

125. See *Zurich Am. Ins. Co. v. Sony Corp.*, 2014 N.Y. Misc. LEXIS 5141, at *67–68 (N.Y. Sup. Ct. 2014). Here, the opinion mentions struggling to adequately define the foundational risk in such a manner as to start a risk-shifting analysis; however, the incorporation of broad terms has been presented as a benefit to the insured. Cf. Shauhin A. Talesh, *Data Breach, Privacy, and Cyber Insurance: How Insurance Companies Act as “Compliance Managers” for Businesses*, 43 *LAW & SOC. INQUIRY* 417, 426 (2017) (positing that is due to “broad scope of loss” coverage within cyber insurance leading to a robust source of risk transfer).

126. For discussion of moral-hazard problems, see Mohammed Mahdi Khalili, Parinaz Naghizadeh, Mingyan Liu, *Designing Cyber Insurance Policies: Mitigating Moral Hazard Through Security Pre-Screening*, in *GAME THEORY FOR NETWORKS* 63, 72 (2017), https://doi.org/10.1007/978-3-319-67540-4_6 (indicating that the introduction of insurance may decrease network security overall, as profit maximizing may lead to inefficient expenses on core network security).

127. *Id.* at 64 (utilizing prior studies to differentiate between two models—a competitive market, in which insurers are not optimized to induce better security behavior, and a monopolist or profit-neutral market, in which contracts may be designed to improve overall network security).

128. Ranjan Pal et al., *Will Cyber-Insurance Improve Network Security? A Market Analysis*, IEEE INFOCOM 1 (July 8, 2014), <http://bourbon.usc.edu/leana/papers/PalGPH14.pdf> (finding that those cyber insurance contracts in a “monopolistic” or “well regulated” contract space—required to incorporate the needs of both parties—were, on aggregate, more likely to improve overall network security); Marc Lelarge & Jean Bolot, *Economic Incentives to Increase Security in the Internet: The Case for Insurance*, IEEE INFOCOM 1 (July 2, 2009), https://www.di.ens.fr/~lelarge/papiers/2009/infocom09_cr.pdf (arguing that successful cyber insurance contracts must incorporate both the shifting of risks from individual entities to interdependent entities, such as providers of services).

interpreted in a way that is unknown to the insured.¹²⁹ Thus, an insurer may externalize certain risks (either knowingly or unknowingly) by utilizing and defining certain terms in a specific context not understood by the insured.¹³⁰

By creating a new common vernacular related to digital risk, courts can establish a common foundation that all parties operate upon and remove this externality, even if the potential for such a moral hazard is quite small. For example, if a Specialized Policy insurer understands that a court will interpret a specific risk, such as a malicious penetration of a server and exposing personal information to third parties, to consistently be incorporated within a common “default” group of risks that will always be considered in a Specialized Policy, the insurer will have an impetus *ex ante* to either provide the coverage requested or negotiate with the insured to “carve out” the specific provision within this particular insurance contract.¹³¹ Alternatively, an insured will be provided baseline access to information that is necessary to make a truly informed decision relating to a complex and rapidly evolving topic.¹³² In the hypothetical *ex ante* cyber insurance negotiation, the insured could then refuse to agree to certain “carve-outs” that are counter to the business-risk profile.¹³³

Additionally, in a cyber-risk environment, one significant risk is not physical in nature: loss of data leads to litigation from individuals and others affected by the malicious (or negligent) use or exposure of that data.¹³⁴ Frequently, litigation

129. See Nikhil Shetty et al., *Competitive Cyber-Insurance and Internet Security in ECONOMICS OF INFORMATION SECURITY AND PRIVACY* 229–47 (Tyler Moore, David Pym, Christos Ioannidis, eds., 2010) (finding that because cyber insurance contracts cannot monitor individual user security, information asymmetry must be compensated for via terms in the insurance contract, whereas an insurer that has perfect information about a users’ security may more accurately stipulate the required user security parameters).

130. Minhquang N. Trang, *Compulsory Corporate Cyber-Liability Insurance: Outsourcing Data Privacy Regulation to Prevent and Mitigate Data Breaches*, 18 MINN. J. L. SCI. & TECH. 389, 405–08 (2017) (Part I discussing terms as applied to scope of coverage).

131. See Sasha Romanosky et. al., *Content Analysis of Cyber Insurance Policies: How Do Carriers Write Policies and Price Cyber Risk?*, 5 J. of Cybersecurity 1, 8 (2019), <https://academic.oup.com/cybersecurity/article/5/1/tyz002/5366419> (noting that revisions to losses explicitly covered or excluded will evolve as more connected devices enter the market).

132. This could provide a particular help for small businesses, as these organizations are particularly sensitive to incurring costs, to better inform themselves about cybersecurity in general. Having ready access to clearly-defined terminology external to the insurer would help mitigate these costs. Loren F. Selznick & Carolyn LaMacchia, *Cybersecurity Liability: How Technically Savvy Can We Expect Small Business Owners to Be?*, 13 J. BUS. & TECH. L. 217, 218 (2018) (“Small business face the same risk of data breach as their larger counterparts but lack the resources for cybersecurity measures.”).

133. Romanosky et al., *supra* note 131, at 15.

134. See PONEMON INSTITUTE, *2017 Cost of Data Breach Study*, IBM SECURITY (June 2017), <https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?htmlfid=SEL03130WWEN> (finding that in the United States and the Middle East, data breach response costs, including litigation and defense of third-party claims for data breach, were roughly \$1.5 million per organization and that the data breach in the United States involved an average of 33,167 breached records); Raymond Pompon, *Breach Costs Are Rising with the Prevalence of Lawsuits*, F5 LABS (May 2, 2018), <https://www.f5.com/labs/articles/cisotociso/breach->

is the only remedy available to redress victims' damages. In the event of a dispute over whether a Specialized Policy will be defended or indemnified, the court must enter the insured-insurer relationship and operate as arbiter of potential coverage claims.¹³⁵ Providing a common vernacular that adequately defines and shapes key digital terms, particularly those related to the definitions of risks that trigger risk-shifting, will allow courts to more effectively and consistently decide litigation issues should the *ex ante* negotiation process fail.¹³⁶ This consistent pattern of decision making will reinforce the terms, strengthening the impetus for both insurer and insured to perform the *ex ante* negotiations necessary to avoid potential litigation.

a. A New Common Vernacular May Exist Outside Common Law Plain-Language Interpretation

While establishing a new and common vernacular specific to cyber risk may avoid a potential moral-hazard problem inherent to litigation of any digital-risk coverage, thus resolving a narrow issue, such a solution may cause broader issues in the overall efficiency and administration of courts. This could potentially create an additional externality regarding confusion with terminology in the long term.

By creating a common vernacular specific to cyber risk, a new “wrinkle” of complexity is added to a constantly evolving and developing area of technology. As this Note indicates, another significant problem in the coverage dispute context is the struggle courts have understanding technical or complex terminology in a contract specific to technology.¹³⁷ By adding a separate vernacular for what otherwise would be common terms, such as “risk,” this solution could add confusion and create another litigable issue in contract interpretation.¹³⁸ For example, if a court fails to utilize the new vernacular and instead uses the prior plain-language interpretation before the development of such a vernacular, is this an appealable or

costs-are-rising-with-the-prevalence-of-lawsuits (extrapolating that the future value of a data breach is \$6.56 million due to increased quantity and avenues of available litigation).

135. For a current survey of decisions and litigation involving cyber insurance coverage, see generally David J. Baldwin et al., *Insuring Against Privacy Claims Following a Data Breach*, 122 PENN. ST. L. REV. 683 (2018); see also David L. Silverman, *Developments in Data Security Breach Liability*, 73 BUS. LAW. 215, 222–23 (2017).

136. See generally Reetz et al., *supra* note 17, at 754.

137. A consistent theme within cyber insurance litigation attempts to actively understand the utilization of technical terminology. See P.F. Chang’s China Bistro, Inc. v. Fed. Ins. Co., No. CV-15-01322-PHX-SMM, 2016 WL 3055111, at *3 (D. Ariz. May 31, 2016); Eyeblaster, Inc. v. Fed. Ins. Co., 613 F.3d 797, 802 (8th Cir. 2010); Netscape Commc’ns. Corp. v. Fed. Ins. Co., 343 F. App’x 271, 272 (9th Cir. 2009); Camp’s Grocery, Inc. v. State Farm Fire & Cas. Co., No. 4:16-CV-0204-JEO, 2016 WL 6217161, at *2 (N.D. Ala. Oct. 25, 2016); Zurich Am. Ins. Co. v. Sony Corp, No.8651982/2011, 2014 N.Y. Misc. LEXIS 5141 (N.Y. Sup. Ct. Feb. 21, 2014).

138. Indeed, surveys of existing litigation have frequently found that the heaviest amount of litigation involves the utilization of terminology in different contexts. Gregory D. Podolak, *Insurance for Cyber Risks: A Comprehensive Analysis of the Evolving Exposure, Today’s Litigation, and Tomorrow’s Challenges*, 33 QUINNIPIAC L. REV. 369, 382–95 (2015) (surveying a variety of litigation in light of defining digital risk.).

additionally litigable issue? Would parties litigate over which interpretation is meant to be used from the beginning of a lawsuit?

This could create significant issues in the efficient administration of courts regarding cyber insurance disputes, further complicating an already complex issue. Ultimately, if the goal of cyber insurance is to ensure that individuals are assured they will be made whole in the event of a certain contingency occurring,¹³⁹ adding complexity would seem counter to this social principle. Individuals who otherwise may have been protected by a policy may have to wait longer for their compensation in the event of a data breach or other cyber incident.

2. *Do Nothing: Allow Ex Ante Negotiation for Cyber Insurance Terms*

Another solution may be to simply allow free-market forces to better define and evolve alongside developing cyber risks. For example, denial of coverage that is outside the scope of an *ex ante* bargained-for insurance contract arguably has a deterrent and punitive effect.¹⁴⁰ The insured (or potentially insured) must then bear the burden of understanding and defining the risks inherent to the cyber insurance policy. Then, through a determination of those risks, the insured must make an informed decision as to whether accepting the policy will effectively shift the desired risks in the event of an incident.¹⁴¹ In effect, this forces the party seeking the protection to internalize the very risks meant to be protected against before coming to the bargaining table.¹⁴²

This seems like a common-sense solution to an information issue. After all, because cyber insurance is primarily meant to protect organizations, we should assume that those organizations are sophisticated parties who are capable of taking steps to adequately protect against risks.¹⁴³ While an insurer may better comprehend

139. STEMPEL & KNUTSEN, *supra* note 124; *cf.* Pal et al., *supra* note 128 (arguing that rather than protecting insured, the goal of cyber insurance should instead be to, on aggregate, improve network security and defenses on the part of the insured, thus protecting third parties).

140. Pal et al., *supra* note 128 (finding that those cyber insurance contracts in a “monopolistic” or “well regulated” contract space—required to incorporate the needs of both parties—were, on aggregate, more likely to improve overall network security); Lelarge & Bolot, *supra* note 128 (arguing that successful cyber insurance contracts must incorporate both the shifting of risks from individual entities to interdependent entities, such as providers of services).

141. *See* Lelarge & Bolot, *supra* note 128 (cyber insurance should provide an incentive for organizations to better understand their overall risk profile).

142. *Id.*

143. Sharon D. Nelson & John W. Simek, *A New Dawn for Law Firm Cyberinsurance: “We Don’t Insure Stupid,”* 76-SEP OR. ST. B. BULL. 34, 37 (2016) (discussing the assumption that small organizations are sophisticated and can understand data protection frameworks); *cf.* Selznick & LaMacchia, *supra* note 132, at 225–26 (questioning the assumption that small businesses, in particular, are sophisticated entities regarding cyber risk).

a risk environment as a whole,¹⁴⁴ a sophisticated entity entering into an insurance contract should better understand any specific risks inherent to the organization itself, such as risk categories relating to vulnerabilities in software and network design flaws.¹⁴⁵ Since both categories of risk are directly under the control of the party seeking cyber insurance, that party is in the best position to perform the due diligence in understanding the risks and, thus, should bear the cost of those risks being realized.¹⁴⁶

Additionally, the market for both the cyber insurer and the cyber insured is a relatively recent development.¹⁴⁷ As such, the market is not considered robust.¹⁴⁸ As time goes on and the market develops, the aggregate deterrent effect of failure of coverage may provide the impetus that courts cannot (or do not) provide. For example, a court can only provide a deterrent effect if something is litigated, whereas the cyber insurance market can operate outside these constraints by imposing additional costs.¹⁴⁹ Over time, it may be the case that those cyber insurers who more broadly delineate risk-shifting, and thus are more willing to provide indemnification or defense in the event of a cyber event, will become the norm within the marketplace. If that becomes the new norm, then those cyber insurers who refuse coverage or argue terms under a narrow interpretation may lose clients.¹⁵⁰ Similarly, those clients who are denied coverage may exit the market due to the imposition of costs from lawsuits via third parties,¹⁵¹ leading to a consumer base that is better informed and better understands the due diligence required to negotiate the terms *ex ante*.

a. Difficulty: Are All Parties Truly Sophisticated?

144. However, an understanding of an overall risk profile as it develops industry-wide may not be sufficient to understand individual user proclivities or other potential internal problems an organization may face. Shetty et al., *supra* note 129.

145. *Id.*

146. For example, in a survey of cyber insurance contracts that compared the level of risk protection to the premiums charged, researchers observed an inverse relationship: as the level of network security was more robust, the level of premiums was lower; the insured better understood the need for protection, and thus was more willing to bear the cost of a potential data breach or need to invoke the cyber insurance coverage. Angelica Marotta et al., *Cyber-Insurance Survey*, 24 *COMPUTER SCI. REVIEW* 35–61 (2017).

147. *See supra* note 47.

148. Nelson & Simek, *supra* note 143, at 34; Michael Sean Quinn, *The Cyber-World and Insurance: an Introduction to a New Insurance*, 12 *J. TEX. INS. L.* 20, 20–22 (2013); Meghan E. Ruesch, *Show Me The Bitcoin! The Costs of Cyber Risks and the Cyber-Insurance Coverage Landscape*, 412 *NO. 4 IN-HOUSE DEF. Q.* 66, 70–71 (2017).

149. Marotta et al., *supra* note 146, at 35–61 (describing the relationship between assessed risk profiles and premiums charged, indicating that higher risk profiles would necessitate higher premiums).

150. For example, in a monopoly or other highly regulated sphere with only a limited number of cyber insurance providers, terms are better defined, prices better reflect risk profiles, and coverage can potentially only act as a supplement, forcing organizations to improve a security profile through minimum standards for coverage. Pal et al., *supra* note 128.

151. *Id.*

Because of its constantly evolving nature, the use of technology presents a significant concern in this approach: can we assume that all parties are “truly sophisticated” *ex ante* when considering a cyber insurance contract? A sophisticated party is assumed to have the capability to inform itself prior to entering into the contract.¹⁵² This internalizes the costs of doing business and ensures that, as above, the burden of due diligence is placed upon the party that has the best opportunity to understand both general and specific risks inherent to the use of technology.¹⁵³

However, a distinction can be made regarding risks as they exist today and risks as they exist tomorrow,¹⁵⁴ particularly within the context of the cyber world. For example, while the source of an office fire may change, a fire tomorrow is functionally the same as a fire today, in that the risks can be generalized and predicted—destruction of property and perhaps loss of life.¹⁵⁵ This method of thinking may not be feasible within the cyber context, even for individuals who could be considered the most “sophisticated” of all, such as a network security organization.¹⁵⁶ Today’s risks in the cyber insurance world are not tomorrow’s risks; while we can generalize the hooded hacker as a “malicious third party” that “penetrates a network,” the specific attack vectors and assets utilized to accomplish a goal will change over time.¹⁵⁷ In this sense, it may be argued that understanding today’s risk is something possible but understanding tomorrow’s risk requires a degree of prognostication beyond even those parties that understand today’s risks the best.

b. The Information Problem Puts Both Parties at a Disadvantage

Arguably, allowing free-market forces to potentially stabilize a developing cyber insurance market offsets any potential information imbalance that may exist between the insurer and the insured.¹⁵⁸ If “tomorrow’s risks” are constantly evolving and beyond comprehension under this regime, both the insurer and the insured are not able to effectively understand risks as during the term of an insurance contract.¹⁵⁹ In a true “evolving-risk” situation, in which an attack method or vector completely defies any definition of established risk within the terms of a cyber insurance

152. STEMPEL & KNUTSEN, *supra* note 124.

153. Talesh, *supra* note 125, at 428–30 (indicating that insurance plays a role in regulating the governance of organizations in that it forces boards and managers to be more informed regarding overall cyber-security policies and procedures).

154. STEMPEL & KNUTSEN, *supra* note 124. However, the very act of “predicting tomorrow’s risks” is part and parcel to the insurance provider. *See* PRICE WATERHOUSE COOPER, *supra* note 120.

155. STEMPEL & KNUTSEN, *supra* note 124.

156. *See* PRICE WATERHOUSE COOPER, *supra* note 120. Even those who offer cyber insurance, and thus should be most informed about overall risk profiles, advocate for solutions to the struggles of evolving risk.

157. JOHN MCALANEY ET AL., *PSYCHOLOGICAL AND BEHAVIORAL EXAMINATIONS IN CYBER SECURITY* 266–72 (1st ed. 2018).

158. Shetty et al., *supra* note 129.

159. PRICE WATERHOUSE COOPER, *supra* note 120. Even those who offer cyber insurance, and thus should be most informed about overall risk profiles, advocate for solutions to the struggles of evolving risk.

contract,¹⁶⁰ both parties are at an equal disadvantage, and it seems that neither party can justifiably be held accountable for possessing any information that the other party did not.

CONCLUSION

The distinction in paradigms between traditional thought in insurance interpretation and the evolving nature of digital risk presents a unique difficulty to organizations wishing to either provide coverage for digital risk or obtain coverage for digital risk. By categorizing risk-realizing events utilizing Scheuermann's four axes of risk, the existing body of litigation involving ambiguities in insurance contracts reveals a generally predictable trend in litigation, depending upon whether a court emphasizes party intent or risk-shifting. While this degree of predictability offers an opportunity to better negotiate insurance contracts, this also comes with a risk that either party may harness that predictability in an attempt to ensure a particular outcome in the event of litigation. Courts are currently granted a wide degree of leeway in interpreting these contracts, and as such, new solutions may need to be considered to ensure adequacy and accuracy in interpretation of digital risk coverage. However, both establishing a new vernacular to be utilized and allowing free market forces to independently align insurance contracts come with distinct pitfalls to avoid.

160. See MCALANEY ET AL., *supra* note 157, at 266–72.