UIC John Marshall Journal of Information Technology & Privacy Law

Volume 10
Issue 4 *Computer/Law Journal - Winter 1990*

Article 7

Winter 1990

Small Business Reliance on Computer Software: There Should Be Protection, 10 Computer L.J. 635 (1990)

Julie Delluomo

SMALL BUSINESS RELIANCE ON COMPUTER SOFTWARE: THERE SHOULD BE PROTECTION

I. INTRODUCTION

The use of computers in our society is well recognized and accepted. While the computer market has greatly expanded because of the significant decrease in the cost of processing power,[1] the potential for user dissatisfaction is great in a business setting because software is often custom-designed to perform functions specifically for that business. Because investment in computers is expensive and creates tremendous reliance upon computer functions, businesses can incur heavy losses when computer software fails to perform properly. Thus, if a business buys its computer through a vendor, contract law should provide a remedy for the business user against the computer vendor. While a remedy can be available when equal bargaining power is present, smaller businesses often face harsh results from contractual provisions found in the computer vendor's standardized contract.

Imagine the following hypothetical. The owner of a small car dealership contracts to purchase a computer system that will perform accounting, payroll, inventory and customer billing functions after the computer sales representative convinces the owner of the necessity of computer implementation as the only means to remain competitive and profitable. Although the owner is repeatedly assured of the simplicity in operating the system, the computer fails to perform as expected. Customers begin complaining of inaccurate billings. While employees continue to work on the computer, they also must then manually perform the same functions to prevent additional errors, resulting in substantial overtime.

The owner first believes that the errors are the result of his employee's lack of experience with the system, but after numerous visits to the car dealership, the computer vendor's personnel admit that the problems are caused by the custom-designed software. Although the company promises to remedy the problems by modifying the software, after repeated overhaul, it never performs properly. Two years after

1. Zammit, *Computers, Software and the Law*, 68 A.B.A. J. 970 (1982).

purchasing the computer system, the owner is overcome by lost profits, lost customers and substantial expenses, all of which force him to close his doors and declare bankruptcy. Despite the computer software being the cause of his problems, the owner finds that he has no contractual remedy against the computer vendor. The vendor has successfully avoided all responsibility by drafting a standardized contract with disclaimer and limitation of liability provisions.

The possibility of the above scenario occurring becomes more likely as computer use continues to expand.[2] Smaller businesses are especially vulnerable because they can now afford computers but may become so totally dependent upon them that if the software fails to operate, the business itself may also be unable to operate or recover from the investment costs. Most smaller businesses sign standardized contracts drafted by the computer vendors that eliminate virtually all recovery.

To circumvent contractual limitations on possible recovery, dissatisfied computer users may assert tort causes of action. However, the current contract and tort remedies provide little hope for a recovery of economic losses in such a situation. Several articles have proposed a theory of computer professional malpractice to protect such plaintiffs from detrimental reliance on the knowledge and skill of the computer vendor.[3] However, no court to date has recognized such a theory.

This Note will suggest an alternative solution to the current problems facing the small business community. Although much has been written in this area, the courts have refused to address the issue. This Note will first review the current remedies, addressing why each is an inadequate means of recovery for the small business computer user, then discuss the likelihood that a computer professional malpractice theory will be recognized by the courts, and conclude that the best solution to the small business community's problem would be for the state legislatures to impose statutory responsibilities enforceable in tort upon the computer industry.

II. PROBLEMS WITH THE CURRENT REMEDIES

The law of contracts enforces the expectations created by bar-

2. *See, e.g.*, Triangle Underwriters, Inc. v. Honeywell, Inc., 604 F.2d 737 (2d Cir. 1979), *aff'g in part, rev'g in part*, 457 F. Supp. 765 (E.D.N.Y. 1978) (a company that had been in business for more than forty years went out of business less than three years after installing one of the defendant's computer systems).

3. MacKinnon, *Computer Malpractice: Are Computer Manufacturers, Service Bureaus and Programmers Really the Professionals They Claim to Be?*, 23 SANTA CLARA L. REV. 1065 (1983); Mylott, *Computer Professional Malpractice*, 2 SANTA CLARA COMPUTER & HIGH TECH. L.J. 240 (1986).

gained-for promises that are voluntarily made.[4] Although big businesses have the ability to negotiate computer contracts at arm's length with computer vendors, smaller businesses are usually presented with a standardized "take it or leave it" contract.[5] This is often the result of unequal bargaining power between the parties. If the buyer attempts to go outside the contract to show reliance on the computer vendor's representations, he is often met with the parol evidence rule and the merger clause.

The parol evidence rule usually excludes evidence of a bargain that was omitted in the written contract.[6] For example, in *Investors Premium Corp. v. Burroughs Corp.*[7] the defendant was able to exclude evidence of representations and warranties claimed to have been made by defendant's representative prior to the contract. In addition, typical computer contracts contain merger or integration clauses which evidence that the parties intended the written contract to be the final expression of their agreement.[8] Parties dealing at arm's length may shape and restrict the remedies for breach of a contract. However, when one party lacks bargaining power, clauses that limit all recovery become harsh and oppressive.

A dissatisfied user will likely claim breach of express and/or implied warranties. An implied warranty claim may be based on Section 2-316 of the Uniform Commercial Code ("U.C.C."). This in itself is problematic because of the current controversy concerning whether software is a good or service. If software is a good, the U.C.C. applies and the plaintiff has a cause of action; however, if software is a service, the contract qualifies as one for performance of services and the contract law of the individual state applies.[9]

Recent cases show that the courts are inconsistent in how the good/

---

4. *See* Fossett, *The Development of Negligence in Computer Law*, 14 N. KENT. L. REV. 289, 291 (1987).

5. Contracts in which the party in the superior bargaining position offers a preprinted contract on a take it or leave it basis are generally categorized as adhesion contracts which may be found unenforceable. Courts generally apply the adhesion contract theory to consumer contracts, such as insurance policies and automobile purchase agreements. Courts have been unwilling to apply the theory in a commercial setting because there is a presumption that parties to a business agreement are of relatively equal bargaining position. *See*, M. SCOTT, COMPUTER LAW, § 6.7 at 6-10.

6. U.C.C. § 2-202 (1977).

7. 389 F. Supp. 39, 44 (D.S.C. 1974). *See also*, Jaskey Finance and Leasing v. Display Data Corp., 564 F. Supp. 160, 164 (E.D. Pa. 1983) (breach of express warranty claim based on advertising not present in contract held non-actionable); Kalil Bottling Co. v. Burroughs Corp., 127 Ariz. 278, 281, 619 P.2d 1055, 1058 (Ariz. App. 1980) (statements made by seller prior to signing of contract held non-actionable).

8. Mylott, *supra* note 3, at 247.

9. Nycum, *Liability for Malfunction of a Computer Program*, 7 RUTGERS J. COMPUTERS, TECH. & LAW 1, 3 (1979).

service issue is decided. In *RRX Industries, Inc. v. Lab-Con, Inc.*,[10] the court held that software licensed for use in a medical laboratory were "goods" within the meaning of the California Commercial Code.[11] This transaction included accompanying hardware that had previously been determined to be a good. In *Data Processing Services Inc. v. L. H. Smith Oil Corp.*,[12] the court held that a contract to develop customized software is a contract for services when no hardware accompanies the software. However, in *Analysts International Corp. v. Recycled Paper Products, Inc.*,[13] the court found that a contract to write customer programs is a transaction in goods, even without the accompanying hardware. Finally, in *West Outer Drive Medical Center v. Compucare, Inc.*,[14] the court sent the issue to the jury as a question of fact, and the jury found that a contract for software development is a contract for the sale of goods.

Although courts look at the extent to which the software was custom-designed for the plaintiff's use and the extent to which the software came as part of a package with other computer items, these recent developments indicate that the U.C.C. will apply in most cases involving software.[15] This theory fails to consider that the plaintiff has bargained for the skill and knowledge of the computer vendor's expertise in designing a program. In addition, plaintiffs in an unequal bargaining position will not be protected by the U.C.C. if the computer vendor disclaims all warranties in the contract.

The U.C.C. allows disclaimers if they "mention merchantability" and are "conspicuous in the writing."[16] These broad disclaimers have been consistently upheld in the computer industry.[17] For example, in *Electro-Matic Products, Inc. v. Creata-Data, Inc.*,[18] the court held that all consequential damages must be excluded and limited Electro-Matic's recovery to direct damages, absent a finding that the provision was un-

10. 772 F.2d 543 (9th Cir. 1985).

11. *Id.* at 546 (applying the definition under CAL. COMM. CODE § 2105).

12. 492 N.E.2d 314, 318 (Ind. Ct. App. 1986).

13. No. 85-C-8637 (N.D. Ill. Oct. 7, 1987) (1987 Westlaw 18360).

14. No. 80-73315 (E.D. Mich. Feb. 9, 1989).

15. *See generally* Rodau, *Computer Software: Does Article 2 of the Uniform Commercial Code Apply?* 35 EMORY L.J. 853 (1986); Note, *Computer Programs as Goods Under the U.C.C.*, 77 MICH. L. REV. 1149 (1979); Note, *Computer Software as A Good Under the Uniform Commercial Code: Taking a Byte Out of the Intangibility Myth*, 65 B.U.L. REV. 129 (1985).

16. U.C.C. § 2-316 (1977).

17. *See, e.g.*, American Equipment & Leasing Co. v. Jose A. Muniz, No. 88-3573 (E.D. Pa. Jan. 9, 1989) (1989 Westlaw 827) (contract upheld); Third Century, Inc. v. Morgan, et al., 187 Ga. App. 718, 719, 371 S.E. 2d. 262, 263 (Ga. Ct. App. 1988) (supplier entitled to summary judgment when parties executed contract containing warranty disclaimer and claim is brought alleging disclaimer ineffective).

18. No. 86-73895-DT, slip op. at 3, (E.D. Mich., Feb. 22, 1988).

conscionable. The court determined that because Electro-Matic was a sophisticated business entity, instead of an unsuspecting consumer, unconscionability would not apply.[19]

Other contract causes of action that may apply to the dissatisfied user of a computer system are rejection of the goods[20] and revocation of acceptance.[21] In *Triad Systems Corp. v. Alsip*,[22] the 10th Circuit upheld a jury verdict allowing a user to revoke his acceptance of a computer system two years after its purchase. The evidence overwhelmingly showed that the computer never operated as expected and that the purchaser was repeatedly assured by the vendor that once the purchaser replaced his hardware system the newly developed software would meet his requirements. The purchaser revoked his acceptance only after he concluded that the new system would not generate the reports that he required even after repeated attempts by the vendor to correct the problem.

Some purchasers, however, are often unable to invoke the remedies of rejection of the goods and revocation of acceptance. Purchasers often possess the software for too long and therefore are unable to reject it or fail to follow the necessary procedural requirements of U.C.C. section 2-608 in order to revoke acceptance.[23] The above cases demonstrate that the courts will continue to allow software vendors to disclaim all warranties and to substantially limit any significant remedies or liabilities in connection with software. The cases also show that the courts will continue to treat all business users as sophisticated entities and refuse to recognize unconscionability in a commercial setting.

Many small businesses, however, are not sophisticated and suffer substantial hardship when classified as a commercial party. Small business users should be allowed an opportunity to show that grossly unequal bargaining power and oppressive contract terms exempt them from the usual commercial setting. When the computer vendor has limited its responsibility by using such a contract, fairness demands that the injured party be statutorily protected.

The purpose of tort law is to adjust losses and afford compensation for injuries sustained by one person as the result of the conduct of another.[24] Plaintiffs have successfully overcome contractual disclaimers and limitations of remedy by asserting tort causes of action based on

19. *Id.* at 4

20. U.C.C. § 2-601 (1977).

21. *Id.* § 2-608 (1977).

22. 880 F.2d 247, 248-49 (10th Cir. 1989).

23. Mylott, *supra* note 3, at 251.

24. W. PROSSER AND W. KEETON, PROSSER AND KEETON ON THE LAW OF TORTS § 1, at 6 (5th ed. 1984).

negligent design or negligent manufacture.[25] However, fraud has been the only effective theory applied in computer cases.[26] A successful fraud cause of action voids the contract, or makes the contract voidable at the aggrieved party's election.[27]

Tortious misrepresentation may be based upon fraud, negligence, or innocent misrepresentation.[28] Although all three varieties are not available in every jurisdiction, all three require the misrepresentation to pertain to an existing fact.[29] In addition, fraud requires proof of scienter where the state of the defendant's mind is examined in order to maintain the cause of action.[30]

For example, in *Accusystems, Inc. v. Honeywell Information Systems*,[31] the court found that the facts were sufficient to state a fraud cause of action by determining that the vendor fraudulently misrepresented to the purchaser the capabilities of the software and the amount of testing the system had undergone.[32] New York law required a showing that the defendant "made a representation of fact which was known by it to be untrue or recklessly made, offered to deceive plaintiffs and to induce them to act upon the representation, causing injury."[33] The court concluded that the purchaser had relied on the vendor's misrepresentations when entering into the contract agreement.[34]

However, in *Fruit Industries Research Foundation v. National Cash Register*,[35] the purchaser alleged that the vendor, through its sales agent, fraudulently misrepresented that the relatively slow print-out rate of the computer was not important and had no practical significance. Washington law required the plaintiff to prove that the defendant "knew the falsity of its representations and thereby intended to deceive the plaintiff."[36] The court found that the defendant's promises constituted nothing beyond present statements of intent which would

25. *See e.g.*, Air Products & Chemicals, Inc. v. Fairbanks Morse, Inc., 58 Wis. 2d 193, 206 N.W.2d 414 (1973); Cova v. Harley Davidson Motor Co., 26 Mich. App. 602, 182 N.W.2d. 800 (1970).

26. Ottawa Strong & Strong v. McLeod Bishop Systems, Inc., 676 F. Supp. 159 (N.D. Ill. 1987); Accusystems, Inc. v. Honeywell Information Systems, 580 F. Supp. 474 (S.D.N.Y. 1984).

27. RESTATEMENT (SECOND) OF CONTRACTS §§ 163, 164, ch. 7, Introductory Note (1979).

28. W. PROSSER & W. KEETON, *supra* note 24, § 107, at 740.

29. Mylott, *supra* note 3, at 240.

30. W. PROSSER & W. KEETON, *supra* note 24, § 107, at 741.

31. 580 F. Supp. at 474 (S.D.N.Y. 1984).

32. *Id.* at 482.

33. *Id.*

34. *Id.*

35. 406 F.2d 546 (9th Cir. 1969).

36. *Id.* at 548.

not satisfy misrepresentation of an existing fact.[37]

Such proof is virtually impossible for a plaintiff in a computer case to show because there is usually no intent to deceive. A sales representative often makes statements which he believes are true when actually they are false.[38] In addition, there is usually no *intent* by the computer programmer and other employees to injure the buyer; someone's *negligence* usually causes the injury.

Negligent misrepresentation may be a representation made with an honest belief in its truth when the defendant has failed to exercise reasonable care in ascertaining the facts.[39] It may be found "in the manner of expression, absence of the skill and competence required by a particular business or profession."[40] In *Accusystems*, the court dismissed the plaintiff's negligent misrepresentation theory by finding an absence of the required special relationship of trust or confidence between the parties.[41] Despite plaintiff's total reliance on defendant's advice and assistance, the court decided that the buyer-seller relationship was not such a special relationship.[42]

Courts that do recognize negligent misrepresentation normally restrict the use of it where the plaintiff seeks purely economic damages.[43] In *Black, Jackson and Simmons Insurance Brokerage, Inc. v. IBM*,[44] the court only applied negligent misrepresentation to information supplied for the guidance of others and their business transactions. The court found that IBM and a software provider that it recommended were mere sellers of merchandise and thus not in the business of supplying information.[45] Further, the court found that the information allegedly supplied was not supplied for the guidance of Black, Jackson in its dealings with others.[46]

Many courts have difficulty drawing a line between negligent misrepresentation and breach of warranty. Some courts hold that misrepresentation voids contractual disclaimers.[47] Other courts find that the

37. *Id.* at 549.

38. Mylott, *supra* note 3, at 253.

39. W. PROSSER & W. KEETON, *supra* note 24, § 107, at 745.

40. *Id.*

41. 580 F. Supp. at 480.

42. *Id.* at 481.

43. The rationale for the traditional rule is found in Ultramares Corp. v. Touche, 174 N.E. 441 (N.Y. Ct. App. 1931), which held that an accounting firm that had negligently prepared financial statement for general use by a business was not liable to a lender who made a series of loans on the basis of the financial statements.

44. 109 Ill. App. 3d 132, 440 N.E.2d 282 (1982).

45. 109 Ill. App. 3d at 135, 440 N.E.2d at 284.

46. *Id.*

47. Clements Auto Co. v. Service Bureau Corporation, 444 F.2d 169 (8th Cir. 1971).

use of the theory is a means to circumvent contract disclaimers.[48] Whether misrepresentation may be asserted in a computer case appears to depend on how the particular court views the relationship between tort law and contract law.

Regardless of the type of misrepresentation asserted, each requires that the misrepresentation pertain to an existing fact.[49] Normally in computer cases, plaintiffs have greater difficulty with this aspect of proof because the misrepresentation is found instead to be a promise of future performance. Sometimes the line between a promise of future performance and a statement of existing fact is difficult to draw. Plaintiffs also have the responsibility of proving that they relied on the misrepresentation. Although the theory of misrepresentation presents legal and factual difficulties for a plaintiff, it is one theory that a dissatisfied user may turn to if the facts of his case are appropriate.

Whenever negligence is asserted as a cause of action, four elements must be met: (1) A duty, recognized by law, requiring the defendant to conform to a certain standard of conduct to protect others against unreasonable risk; (2) A breach of this duty; (3) A reasonably close causal connection between the conduct and the resulting injury; and (4) Damages resulting to the interests of another.[50]

The plaintiff in computer disputes will find that the common law negligence cause of action is plagued with difficulties involving all four elements. The most difficult obstacle to prevailing on a negligence claim is proving that the computer company had a duty independent of the obligations set out in the parties' contract. There is no general duty to exercise reasonable care to avoid intangible economic loss or losses to others that do not arise from tangible physical harm to persons and tangible things.[51] Most courts refuse to recognize negligence claims when the plaintiff is merely asserting economic damages, such as lost profits and business interruption.[52] In *Word Management Corp. v. AT&T Information Systems, Inc.*,[53] the court disallowed a negligence claim for failure to make a computer system work on the basis that plaintiff was limited to contractual remedies by the U.C.C.

Although some courts may find that the computer company owes a

48. Call Computer v. Data General Corp., No. 409415 (Cal. Super. Ct. March 11, 1980).

49. Mylott, *supra* note 3, at 254.

50. W. PROSSER & W. KEETON, *supra* note 24, § 30, at 164-65.

51. W. PROSSER & W. KEETON, *supra* note 24, § 92, at 657.

52. *See* Office Supply, Inc. v. Basic/Four Corp., 538 F. Supp. 776 (E.D. Wis. 1982) (economic losses not recoverable in tort); Eaton Corp. v. Magnavox Co., 581 F. Supp. 1514, 1537 (E.D. Mich. 1984) (plaintiff cannot make negligence claim when contract exists and there is no personal injury or property damage).

53. 135 A.D.2d 317, 525 N.Y.S.2d 433 (1988).

duty to the business user, there is no established standard of care.[54] A computer defendant need only meet the prudent man standard of ordinary or reasonable care.[55] This ordinary negligence standard does not consider the relative disparities of knowledge and skill between the plaintiff and defendant.

Proving that the computer company breached its duty of care is difficult because the computer industry has few standards by which to measure performance. The trier of fact determines the standard of care but usually lacks sufficient knowledge of the computer issues involved.[56] Consequently, the standard of care applied in the case may not accurately reflect the knowledge and skill of the vendor.

An essential element of the plaintiff's cause of action for negligence is that there be some reasonable connection between the act or omission of the defendant and the damage which the plaintiff has suffered.[57] This connection is usually referred to as "proximate cause." The nature of software renders direct proof of negligence nearly impossible. Software errors are expected and software is often put into operation with knowledge that it contains errors that may remain hidden for years. Operator error can also cause faulty results. Although error controls are often built into the software to detect data entry errors, some still may enter the system. Therefore, the plaintiff has a heavy burden in establishing that it is more likely than not that the conduct of the defendant was a cause in fact of the result.

Most articles that have discussed the plaintiff's burden of proof have concluded that res ipsa loquitur is inapplicable in software cases.[58] Res ipsa loquitur is a type of circumstantial evidence applied by the courts when a specific negligent act cannot be proven.[59] This doctrine creates a presumption that the defendant's negligence caused the plaintiff's injury when the plaintiff proves that the event would not ordinarily occur unless someone was negligent, the instrumentality of negligence was within the defendant's control, and the plaintiff was in no way responsible for the accident.[60]

Several commentators have argued that courts strictly interpreting these conditions will not apply res ipsa loquitur in computer cases.[61]

---

54. Nycum, *supra* note 9, at 9.

55. Fossett, *supra* note 4, at 303.

56. Mylott, *supra* note 3, at 257-58.

57. W. PROSSER & W. KEETON, *supra* note 24, § 30, at 165.

58. Nycum, *supra* note 9, at 11; Fossett, *supra* note 4, at 296; Conley, *Tort Theories of Recovery Against Venders of Defective Software*, 13 RUTGERS J. COMPUTERS, TECH & LAW 1, 23 (1987).

59. W. PROSSER & W. KEETON, *supra* note 24, § 39, at 244.

60. *Id.*

61. *Cf.* Nycum, *supra* note 9, at 11-12; Conley, *supra* note 58.

They argue that the jury lacks the necessary experience to infer that a computer malfunction resulted from someone's negligence and that it may be impossible to attribute negligence to a particular defendant.[62]

However, juries continuously hear medical malpractice cases in which they lack experience in the complexities of the issues. Expert testimony can provide a sufficient foundation when the basis of past experience is lacking.[63] In addition, if the computer vendor who designs the software also sells accompanying hardware, the argument that it is impossible to attribute negligence to a specific party then should not apply. If there are multiple defendants, some courts may still be willing to apply res ipsa loquitur because each defendant has contributed a component part to an integrated whole.[64] Therefore, if circumstantial evidence indicates that the computer vendor's negligence is the most plausible explanation for the failure of the user's software, res ipsa loquitur should be applied to raise a presumption of negligence.

Aside from the difficulties that the negligence elements present, the statute of limitations offers another problem. In negligence actions, the statute of limitations generally begins to run when damage has occurred.[65] This rule hinders a computer litigation plaintiff in two ways. First, a plaintiff might not discover the damage until several years have elapsed.[66] Second, several years may pass from the occurrence of the negligent act before the plaintiff complains to the defendant in an attempt to rectify the problem.[67]

Consequently, many state courts and legislatures have abandoned the traditional approach in certain areas of the law due to its injustice or illogic.[68] For example, the statute has been tolled in medical malpractice cases,[69] legal malpractice cases,[70] products liability cases,[71] and asbestos cases,[72] as well as in many other tort actions until the plaintiff

62. *Cf.* Nycum, *supra* note 9, at 11-12.

63. W. PROSSER & W. KEETON, *supra* note 24, § 39, at 247.

64. *Id.*

65. *Id.* § 30, at 165.

66. MacKinnon, *supra* note 3, at 1073.

67. *Id.*

68. W. PROSSER & W. KEETON, *supra* note 24, § 30, at 166.

69. Taddeucci v. Weitzner, 130 Misc. 2d 853, 497 N.Y.S.2d 997 (1986) (statutory foreign object discovery rule; negligent failure to remove IUD).

70. Freel v. Fleming, 489 So. 2d 1209 (Fla. Dist. Ct. App. 1986) (statutory discovery rule; failure to file timely answer).

71. Raymond v. Eli Lilly & Co., 117 N.H. 164, 371 A.2d 170 (N.H. 1977) (oral contraceptive).

72. Larson v. Johns-Manville Sales Corp., 427 Mich. 3d 301; 399 N.W.2d 1 (1986) (asbestos; statute begins to run on claim for future cancer from discovery of cancer, not asbestosis).

discovers that he has suffered, or should have discovered the elements of his cause of action.

Despite these difficulties, at least two courts have held that negligence is a viable cause of action in a computer case. In *Thompson v. San Antonio Retail Merchants Association*,[73] the court found that a computerized credit reporting service negligently failed to exercise reasonable care in programming its computer and also failed to employ reasonable procedures to learn of the error.

In *Thompson*, the plaintiff was denied credit by two merchants after they received erroneous information from the defendant. The defendant had failed to check the accuracy of a social security number obtained by an automatic capturing feature which updated its files. The plaintiff brought the action under the Fair Credit Reporting Act which imposed a duty of reasonable care upon the consumer reporting agency in preparing a credit report.

Although Thompson was not injured as a result of custom designed software failing to operate properly in his business, the case is significant because the negligence action was upheld on a basis of software error. In *Thompson*, the court was not required to determine the standard of care because it was statutorily imposed by the Fair Credit Reporting Act. Most negligence claims in computer litigation have lacked statutory guidelines relating to the appropriate criteria for determining reasonable care.[74] *Thompson* demonstrates the advantage of a statutorily imposed duty of reasonable care, allowing a small business to assert a successful negligence cause of action in a computer dispute.

Invacare Corp. v. Sperry Corp.[75] is the only case to date which has recognized negligence as a valid cause of action in computer disputes between the business purchaser and the computer seller. Invacare Corp. alleged breach of contract, fraud and negligence after its computer system entirely failed to perform. Sperry Corp. filed a motion for summary judgment asserting, inter alia, that Invacare's negligence and breach of contract claims actually alleged non-actionable computer malpractice.

In dismissing the motion for summary judgment, the court found that Invacare's allegations stated a valid claim of negligence in a business setting which did not give rise to a new tort of computer malpractice.[76] However, the court did not discuss whether the economic damages were recoverable under the negligence claim. As discussed

73. 682 F.2d 509, 513 (5th Cir. 1982).

74. Mylott, *supra* note 3, at 257.

75. 612 F. Supp. 448, 453 (N.D. Ohio 1984).

76. *Id.*

above,[77] prevailing on a negligence claim where there is a contractual relationship is difficult because the plaintiff most prove an independent duty.

III. COMPUTER PROFESSIONAL MALPRACTICE

Some authors have proposed that common law malpractice be extended to computer professionals.[78] Although the four elements of negligence must still be met, malpractice is distinguishable from negligence by its elevated standard of care. Malpractice requires a professional to exercise the same level of care as other professionals.

The essential attributes relating to conduct that identifies a professional activity are: (1) the requirement of extensive learning and training; (2) the prerequisite of obtaining a license prior to admission to practice; (3) a primary emphasis on social responsibility over strictly individual gain, and the corresponding duty of its members to behave as members of a disciplined and honored profession; (4) a code of ethics imposing standards above those normally tolerated in the marketplace; and (5) a disciplinary system for members who breach this code.[79]

There are several distinguishing factors between computer professionals and members of the traditional professions. Extensive learning and training is not mandatory in the computer field. Although most computer professionals may be extremely knowledgeable and skilled in their area, there are no state mandated educational requirements. Lawyers typically attend law school for three years prior to practicing. Doctors must attend medical school for four years and also serve an internship prior to practicing. Accountants, architects, and engineers are also required to complete difficult schooling. In addition, all these professionals must pass rigorous exams prior to being admitted to their professions.

Some computer professionals have not completed college. Many members of the industry were employed in other areas and began to work on computers as a hobby. The demand for programmers has been so great due to the growth of the industry that many have found opportunities in the industry. Of course, lack of a formal education does not necessarily equal a lack of expertise in the area of computers. However, there remains a significant distinction between these individuals and those members of the traditional professions.

The computer industry lacks accepted professional standards. Doctors, lawyers, accountants, architects, and engineers are all subject to professional licensing. The states restrict performance of certain speci-

77. *See supra* notes 50-54 and accompanying text.

78. MacKinnon, *supra* note 3; Mylott, *supra* note 3.

79. MacKinnon, *supra* note 3, at 1078.

fied services to those licensed professionals. No state has yet begun to regulate the computer industry.

Much of the opposition to licensing the computer industry comes from the computer professionals who view licensing as an unnecessary intrusion into the development of their profession.[80] The computer industry has many voluntary codes of ethics which stress adherence to uniform, professional standards.[81] Such codes, however, only apply to those who establish and follow them.[82] No code applies to the industry as a whole and the industry does not discipline its members when they fail to meet these voluntary minimum standards.[83] The computer industry cannot be expected to self-regulate unless there is some incentive to do so.[84]

A profession is a "vocation or occupation requiring special, usually advanced, education and skill. . . ."[85] A professional association is a "group of professional people organized to practice their profession together. . . ."[86] Computer experts call themselves professionals and organize themselves in various professional associations. As professional persons, computer experts possess special skills and abilities. Therefore, because computer experts hold themselves out as professionals, they should be subject to similar state mandated professional licensing procedures as are other professionals. In the past, the newness of the computer industry and the demands for computer programmers were so great that the need to restrict the field's membership was not present. Current computer litigation strongly indicates that now is the time to begin to "weed out" incompetence in the industry. As more and more small businesses are injured by the computer industry's members, the public will gradually become aware of the growing problem.

A small business owner may rely on a computer expert more than he relies on his lawyer or accountant. Today, a computer is an essential

---

80. *Id.*

81. *E.g.*, "Code of Professional Conduct" of the Association for Computing Machinery ("ACM"); "Code of Ethics and Good Practices" of the Institute for Certification of Computer Professionals; the ADAPSO "Recommended Code of Ethics for Professional Services Firms." The Data Processing Management Association ("DPMA") and the Institute of Electrical and Electronic Engineering ("IEEE") also have general codes.

82. MacKinnon, *supra* note 3, at 1078.

83. "The ACM has a mechanism for bringing complaints against a member for violating its code, but the most severe penalty that the ACM can impose is expulsion from the organization." M. GEMIGNANI, COMPUTER LAW § 25:9A (Supp. 1990)

84. The Institute for Certification of Computer Professionals provides the closest analog of licensure in the computer industry. A person is entitled to designate himself as "certified" and place appropriate initials after his name after meeting the Institute's rigorous standards of experience and testing. M. GEMIGNANI, *supra* note 83.

85. BLACK'S LAW DICTIONARY 1089 (5th ed. 1979).

86. *Id.* at 1090.

need for businesses that want to remain profitable and competitive. Because the businessman's knowledge lags behind advances made in the computer industry, however, the businessman often becomes totally dependent on his computer expert. The relationship can be seen as similar to that of attorney-client or doctor-patient because the relationship creates demanding special trust and loyalty. Because of this relationship, a computer expert should be held to a professional standard of conduct.

Only a few plaintiffs have advanced a computer malpractice theory. In *Triangle Underwriters, Inc. v. Honeywell, Inc.*,[87] the court determined that the professional relationship of trust and reliance, upon which the application of the malpractice theory was asserted, was totally absent. Although the court recognized that the plaintiff had relied on the defendant's expertise, the court found that their relationship resembled an ordinary business relationship.[88] In *Chatlos Systems v. National Cash Register*,[89] the court found that the technical complexity and relative importance of selling and servicing computers to the business community was an insufficient justification for imposing greater potential liability.[90]

However, in the recent case of *Diversified Graphics, Ltd. v. Groves*,[91] the Eighth Circuit held that a computer consultant did not exercise its requisite level of professional care in purchasing and implementing a computer system for its client.[92] Diversified Graphics was a screen printer and apparel manufacturer who hired the accounting firm of Ernst & Whinney to assist it in obtaining a computer system. Although the parties disputed the extent to which Ernst & Whinney was involved in the transaction, Diversified Graphics brought an action alleging negligence, breach of fiduciary duty and breach of contract after receiving a computer that failed to meet its needs.

Ernst & Whinney appealed after a jury awarded damages for negligence and breach of fiduciary duty, maintaining that the district court should have applied an ordinary standard of care, rather than a professional standard. The Eighth Circuit disagreed and held that Ernst & Whinney was acting as a computer consultant who failed to act reasonably considering its superior knowledge and expertise in the area of computers.[93]

Although Ernst & Whinney was an accounting firm, the court fo-

87. 604 F.2d 737 (2d Cir. 1979).
88. *Id.* at 746.
89. 479 F. Supp. 738 (D.N.J. 1979).
90. *Id.* at 740-41 n.1.
91. 868 F.2d 293 (8th Cir. 1989).
92. *Id.* at 296.
93. *Id.*

cused on the firm's expertise as a computer system consultant.[94] The court also relied heavily on the American Institute of Certified Public Accountants, Inc. standards in determining the requisite level of care.[95] Thus the court borrowed the industry wide standards of accountants to measure the firm's standard of care as a computer consultant.

Hopefully, this decision will have a profound effect on the liability standards applicable to computer consultants, including vendors who sell the customized software. Because this case broadens the potential liability exposure of computer consultants for unsatisfactory services, it provides a foundation for possibly expanding the liability of this multi-billion dollar industry.

IV. A PRACTICAL SOLUTION

General deterrence, optimal deterrence and loss-spreading policy considerations suggest that the computer industry should bear some of the loss caused by defective software. The deterrence principle will discourage the industry from negligently programming software because its members will know that they can be held liable for negligent errors. Imposing liability on the computer industry will also be more cost effective because the industry can prevent errors at a much smaller cost than can the user. Finally, the industry is in a better position to insure against losses. The industry can spread the loss by passing it on to its consumers, whereas in contrast, many computer users are unable to procure computer insurance covering losses due to software error.[96]

Despite such policy considerations, courts may be unwilling to shift the burden of loss if they conclude that the computer industry is still a new industry which will be unduly hampered in its development.[97] Although the industry is still relatively young and competitive, its growth is beginning to slow. Because there are no current incentives for the computer industry to self-regulate, legal reform should be introduced in the area of computer software. State legislation is the logical instrument to use in order to protect computer users from an unrestrained computer industry.

In the past, state legislatures have changed many areas of substantive law by passing statutes designed to overrule judge-made law. For example, state legislatures responded to the medical malpractice crisis of the early 1970s by passing legislation affecting malpractice litigation. Because of the inadequacy of current contract and tort theories of re-

94. *Id.*

95. *Id.*

96. *See* Note, *Easing Plaintiff's Burden of Proving Negligence for Computer Malfunction*, 69 IOWA L. REV. 241, 257 (1983).

97. W. PROSSER & W. KEETON, *supra* note 24, § 39, at 244.

covery, legislative involvement is necessary in the computer industry to protect small business users. Statutes should be implemented imposing a duty upon the computer vendor that is independent of any contractual obligations.

A statute directed at the computer industry could impose licensing regulations similar to those imposed upon other professions. Such a licensing scheme would make the computer expert a true professional in the legal sense. The various codes of ethics followed in the industry could be used as evidence of minimally accepted standards within the industry. In addition, the statute of limitations could be tolled by statute until the computer user discovers, or should have discovered, the injury, as followed in other areas of malpractice. Finally, a statute could modify damages to include economic loss.

Although such legislation would enable a plaintiff to proceed on the merits of his case, plaintiffs will still have a difficult burden of proof. Such demanding burden is necessary to balance the computer user's expectations against the computer vendor's assailable risk of errors. Software users must realize that software cannot always be error-free. Users must educate themselves and determine what their needs are prior to purchasing software. Most importantly, the user must communicate to the vendor what he expects the software to do.

Software vendors claim that imposition of excessive responsibility upon the industry will hinder the industry's growth and development. However, vendors can take steps to limit their liability. If a vendor sells an evolutionary product, this must be communicated to the purchaser. Finally, increased testing by the vendor prior to delivery to the user should be instituted to safeguard against software errors.

V. CONCLUSION

The number of small businesses that use computers continues to grow, and computer vendors continue to take advantage of unequal bargaining power by contractual disclaimers and limitations of liability. Policy reasons demand that the growing class of small businesses that use computers be protected against negligence by the computer industry.

The courts are not the only branch of government that change law for public policy reasons; state legislatures also determine public policy. The remedies available to a business which has been economically injured by defective software have proved inadequate. The courts have shown their unwillingness to help. By instituting legislation recognizing the members of the computer industry as professionals, state legisla-

tures can redress this inequitable treatment of the small business community.

*Julie Delluomo**

* This Note was awarded Fifth Place in the Seventh Annual Computer Law Center Writing Competition (1990). Ms. Delluomo received her B.S. from Oklahoma State University and is currently a third year law student at the University of Oklahoma College of Law.

The
COMPUTER/LAW
JOURNAL

VOLUME 10
(1990-91)

INDEXES

CENTER FOR COMPUTER/LAW
Rolling Hills Estates, California