Applying the "Continuous Treatment" Doctrine to Data Processing

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Computers and data processing have become commonplace in today's business world. With the continuing decline of prices in the data processing field,² more and more businesses are purchasing computer systems³ to handle accounting, inventory control and word processing functions.4 Computers offer the businessperson a number of advantages over manual systems⁵ including increased speed, accuracy and data storage capabilities. Owing to their complexity, however, computer systems are quite susceptible to malfunction, with resulting harm to the purchaser or third persons.⁷ Ferreting out the cause of these malfunctions is a difficult task⁸ which sometimes is not completed until long after the system has been installed and in operation.9

As computer use in the businessworld becomes more widespread the

See Vogel, supra note 1, at 757.

4. See Tunic, supra note 1, at 316. An estimated 350,000 small business computer systems

were installed in 1978 alone. Id.

5. "Manual systems" are business systems designed around a pattern of manual operations performed by people. M. Gore & J. Stubbe, Elements of Systems Analysis 26 (2d ed. 1975). 6. For example, modern computers are capable of executing instructions in as little as a billionth of a second. Vogel, *supra* note 1, at 758.

- 7. Rumbelow, Liability for Programming Errors, 9 INT'L Bus. LAW. 303, 303 (1981). The author notes "[t]he capacity of machines for error is vastly greater than ours. A computer can (one is almost glad to say this) make more mistakes in the fraction of a second than a human in a lifetime." Id.
- 8. Id. Sources of computer errors include faulty programming, hardware fault, operator
- 8. Id. Sources of computer errors include faulty programming, hardware fault, operator misuse and inaccurate data entry. Id. See also Nycum, Liability for Malfunction of a Computer Program, 7 Rut. J. Computers, Tech. & L., 8 (1979). The process of locating and correcting software and hardware defects ("bugs") is called "debugging." See Note, Computer Programs as Goods Under the U.C.C., 77 Mich. L. Rev. 1149, 1160 (1979).

 9. See Note, supra note 8, at 1154 n.29 ("The buyer does not usually expect a specially manufactured program to be perfect when delivered. Instead, it is tested in use and then perfected."); Carl Beasley Ford, Inc. v. Burroughs Corp., 361 F. Supp. 325, 330 (E.D. Pa. 1973), aff'd, 493 F.2d 1400 (3d Cir. 1974) (eight month "programming adjustment" period not considered by the court to be unwarranted in view of complexity of system); Nycum, supra note 8, at 10 (noting

^{1.} See generally Vogel, Law and Computers: Current Issues, 43 Tex. B.J. 757 (1980); Tunic, Computer Law: An Overview, 13 Loy. L.A.L. Rev. 315 (1980); Note, Negligence: Liability for Defective Software, 33 OKLA. L. REV. 848 (1980).

^{3.} For a brief description of the various components comprising a computer system (hardware, data and software), see Tunic, supra note 1, at 317 n.12, 317-18 n.15.

number of computer-related problems will correspondingly increase. 10 Many of these problems will stem from the fact that most businesspersons have a limited knowledge of data processing.11 This fact, along with the data processing professional's unfamiliarity with the customer's business. contributes to what has been termed the "information gap." 12

The "information gap" which exists between computer system suppliers and users at the time of negotiations for the purchase of a system adds to the need for post-installation adjustment by the supplier. 13 Thus, the relationship between the supplier and customer rarely terminates with delivery of the system.¹⁴ Throughout this ongoing relationship the customer must rely almost exclusively on the advice and superior knowledge of the supplier for effective implementation and operation of the computer system. 15 This relationship of trust and confidence creates a duty in the data processing professional similar to that which a doctor owes his patient.¹⁶

When a data processing user suffers serious economic harm as a result of a computer malfunction, ¹⁷ he must determine 1) who is potentially lia-

that a computer "program may run for an extended period before a particular combination of circumstances arises which reveals [a bug]").

10. See Note, supra note 1, at 848.

11. See infra notes 12-15 and accompanying text.

12. Rumbelow, supra note 7, at 304. The term "information gap" is used by the author to describe the situation which typically exists between the supplier of a computer system and the customer (user): the customer knows his business, but his lack of computer expertise hampers his customer (user): the customer knows his business, but his lack of computer expertise nampers his ability to specify his needs. The supplier knows about computers, but lacks insight into particular requirements of the customer's business. *Id. See also* Tunic, *supra* note 1, at 316-17 (describing customer's failure to specify the computer output he desires as a major problem in negotiating for computer services); Vogel, *supra* note 1, at 760 (major problem is that neither party really understands what the other party wants). As a result of this "information gap" portions of the software initially delivered by the supplier may not accomplish what the customer wants and must be redesigned. *See* Rumbelow, *supra* note 7, at 304.

13. See Rumbelow, supra note 7, at 304; Tunic, supra note 1, at 317.

14. See Note, supra note 8, at 1158-64 (describing the various support or maintenance services which suppliers of computer systems may agree to provide in the post-installation period). See also Tunic, supra note î, at 318-19.

15. See Judge Rules DPers Open To Malpractice Claims, Computerworld, Nov. 28, 1977, at 1,

col. 1 [hereinafter cited as Computerworld].

16. Similarly, the relationship is akin to that which exists between an architect and his client, see County of Broome v. Vincent J. Smith, Inc., 78 Misc.2d 889, 358 N.Y.S.2d 998 (N.Y. Sup. Ct. 1974), or an accountant and his client, see Wilkin v. Dana R. Pickup & Co., 74 Misc.2d 1025, 347 N.Y.S.2d 122 (N.Y. Sup. Ct. 1973). See Computerworld, supra note 15, at 1, col. 3. Throughout the development and implementation of the computer system, the supplier may have access to confidential data relating to the customer's business or clients. See Tunic, supra note 1, at 320. Furthermore, the purchaser of a computer system must have enough faith in the supplier's hardware and software to permit his data (accounting records, customer lists, etc.) to be fed into and manipulated by the computer system. The trust and confidence elements in a data processing relationship are common denominators in other professions. See, e.g., County of Broome v. Vincent J. Smith, Inc., 78 Misc.2d at 892, 358 N.Y.S.2d at 1002 (client places full trust and confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Pickup & Co., 74 Misc.2d at 1027, 347 N.Y.S.2d at 125 (confidence in architect); Wilkin v. Dana R. Wilkin Wilkin Wilkin Wilkin Wilkin Wilkin Wi tial complex relationship exists between accountant and client); Siegel v. Kranis, 29 A.D.2d 477, 480, 288 N.Y.S.2d 831, 834 (1968) (noting that relationship between attorney and client is marked by trust and confidence). See infra note 86 and accompanying text.

17. Examples of economic harm which may result from computer malfunction are: cost of reconstructing data files following a system crash which causes a major loss of business records, see M. GEMIGNANI, Law and the Computer 12 (1st ed. 1980); lost earnings due to faulty collection, storage, analysis and reporting of data, see M. GEMIGNANI, supra, at 13; substantial errors in data output, resulting in billing errors, see M. GEMIGNANI, supra, at 54.

Computer errors may also lead to serious physical injury. See Rumbelow, supra note 7, at 303 (noting the grave consequences of a military defense computer generating a false alert); Note,

ble for the loss;¹⁸ and 2) on what theory or theories of liability he should proceed.¹⁹ Often the user contends that it was negligence on the part of the data processing supplier which occasioned the loss.²⁰ The difficulty involved in locating another data processing professional who is competent to remedy the situation,²¹ and the considerable time it takes to procure a new system,²² may leave the user with no choice but to give the negligent party an opportunity to correct the malfunction. This ongoing relationship between the user and data processing professional presents difficult statute of limitations questions. For instance, if the curative efforts of the data processing professional extend beyond the statutory period, is the user's claim barred? In such a case it is important to consider when a cause of action for negligence accrues in order to determine whether the action was brought within the statutorily prescribed period.²³

This Note will consider when a cause of action for data processing malpractice accrues. Specifically, this Note will examine the potential applicability of the "continuous treatment" doctrine²⁴ to the data processing

supra note 1, at 848-49 (discussing the possibility of imposing strict liability against a supplier of defective software); M. Gemignani, supra, at 49 (noting serious harm which could result from the malfunction of a computer used to monitor vital signs of patients in an intensive care unit).

18. To answer this question, the user must determine the cause of the computer error. See supra note 8 and accompanying text. Such a determination is often a formidable task. See Nycum, supra note 8, at 8 (error may be attributable to program defect, erroneous input, hardware failure, power failure, or operator error); Rumbelow, supra note 7, at 304 ("The cause of a computer error could be very elusive. The error might occur only in an unusual combination of circumstances, and might be difficult or even impossible to replicate under test conditions.").

Where the user is responsible for the malfunction (due to improper operation of the computer), the user may have to bear the loss himself. Even where the malfunction can be traced to operator error, however, the user may still have a cause of action based on negligence if the supplier has provided inadequate instruction in the use of the computer system. Where the malfunction is a result of power failure, the user may look to the utility company (if the power loss was due to negligence on its part), but it is more likely that the user will succeed in a negligence action against the supplier of the computer system for failure to provide adequate safeguards against such computer malfunction due to power fluctuations. See Nycum, supra note 8, at 13.

A user's decision whether to sue at all may be influenced by the financial standing of the defendant. See Rumbelow, supra note 7, at 304 (noting that many software suppliers lack financial resources to pay large claims and remarking "[t]wo programmers and a dog could start a new software house"). For this reason, the user may consider the alternative of purchasing its own insurance against such computer-related losses. Id.

- 19. Theories on which data processing suppliers may be held liable are: 1) breach of contract, see M. GEMIGNANI, supra note 17, at 19-23; 2) breach of warranty, see Comment, Imposing Liability on Data Processing Services—Should California Choose Fraud or Warranty, 13 Santa Clara Law. 140, 156-65 (1972); 3) strict liability in tort, see Note, supra note 1, at 848; 4) misrepresentation, see Comment, supra, at 143-56; and 5) negligence or malpractice, see M. GEMIGNANI, supra note 17, at 46-56.
- 20. The various difficulties associated with proceeding on a theory of negligence are discussed in M. GEMIGNANI, supra note 17, at 46-56.

21. See infra note 86.

22. See Note, The Effect of the Statute of Limitations on a Computer Vendor's Liability in a Failed Computer Installation, 26 St. Louis U.L.J. 181, 188 (1981).

23. See Note, supra note 22, at 196. The statute of limitations is longer for some causes of action than for others. This may influence the user's choice of theories. See Triangle Underwriters, Inc. v. Honeywell, Inc., 604 F.2d 737, 741-48 (2d Cir. 1979) (holding plaintiff's claims based on breach of contract, breach of warranty, and negligence barred by the four, four and three year statutes of limitations respectively, but allowing a claim based on misrepresentation on which the six year statute of limitations had not yet run).

24. Basically, the "continuous treatment" doctrine provides that a cause of action for professional malpractice does not accrue until the professional relationship has ended. See infra notes 27-30 and accompanying text.

profession. First, the origin and rationale of the "continuous treatment" doctrine will be reviewed. Second, a line of New York cases extending the doctrine beyond the field of medical malpractice to other professions will be examined. Third, this Note will consider the desirability of applying the "continuous treatment" doctrine to the area of data processing malpractice and argue that it should be applied. Finally, this Note will examine one case that has denied application of the doctrine to the data processing field and conclude that the case was wrongly decided.

Development of the "Continuous Treatment" Doctrine

Generally, a cause of action for negligence accrues when the negligent act is committed or when injury resulting therefrom is sustained or discovered.²⁵ The accrual of a cause of action marks the point at which the statute of limitations begins to run. Originating in the area of medical malpractice, the "continuous treatment" doctrine redefines the point at which a cause of action accrues. The "continuous treatment" doctrine provides that the victim of professional malpractice²⁶ need not bring suit against the defendant until after the professional relationship which caused the injury has terminated.²⁷ The "continuous treatment" doctrine is not dependent upon a finding of fraudulent concealment of the initial tort by the defendant. It is thus distinguished from the so-called "discovery rule" which provides that a cause of action for professional malpractice does not accrue until the plaintiff knows, or by the exercise of reasonable diligence should have known of the defendant's negligence.²⁸ Nor is it necessary that subsequent independent acts of negligence be committed in the course of the continuous treatment. In such a case, the statute runs from the date of the last independent act of negligence.29 Instead, the "continuous treatment" doctrine is applicable whenever the continued course of treatment is related to the same original condition or complaint

^{25.} See Holdridge v. Heyer-Schulte Corp., 440 F. Supp. 1088, 1095 (N.D.N.Y. 1977), for a statement of this general rule.

^{26.} Professional "malpractice" is a

[[]f]ailure of one rendering professional services to exercise that degree of skill and learning commonly applied under all the circumstances in the community by the average prudent reputable member of the profession with the result of injury, loss or damage to the recipient of those services or to those entitled to rely upon them.

BLACK'S Law Dictionary 864 (5th ed. 1979). See also Grago v. Robertson, 49 A.D.2d 645, 646, 370 N.Y.S.2d 255, 258 (1975).

While the argument has been advanced that there is no established standard minimum of related knowledge and competence in the data processing profession (due to the novelty of the field), see Scaletta, The Legal Ramifications of the Computer Age, 8 DATA MGMT. 1, 12 (1970); Note, supra note 22, at 200, such an argument is no longer convincing given the current prevalence of data processing, particularly in traditional applications. See supra note 4 and accompanying text; Nycum, supra note 8, at 12.

^{27.} See Triangle Underwriters, Inc. v. Honeywell, Inc., 604 F.2d 737, 744 (1979); Grago v. Robertson, 49 A.D.2d 645, 646, 370 N.Y.S.2d 255, 259 (1975); County of Broome v. Vincent J. Smith, Inc., 78 Misc.2d 889, 890, 358 N.Y.S.2d 998, 1001 (N.Y. Sup. Ct. 1974).

28. See Mayer v. Good Samaritan Hosp., 14 Ariz. App. 248, 252, 482 P.2d 497, 501 (1971). Application of this rule leads to the conclusion that defendant's fraudulent concealment of the

^{28.} See Mayer v. Good Samaritan Hosp., 14 Ariz. App. 248, 252, 482 P.2d 497, 501 (1971). Application of this rule leads to the conclusion that defendant's fraudulent concealment of the initial act of malpractice prevents the cause of action from accruing until the injury is discovered. See Acton v. Morrison, 62 Ariz. 139, 144, 155 P.2d 782, 783 (1945), aff'd, 68 Ariz. 27, 198 P.2d 590 (1948).

^{29.} See Note, supra note 22, at 197.

for which professional services were initially sought.30

The "continuous treatment" doctrine was first developed in Borgia v. City of New York.31 In Borgia, the New York Court of Appeals applied the doctrine to a case involving medical malpractice, thereby allowing a claim which would otherwise have been barred by the statute of limitations,³² In that case, the plaintiff brought an action against the city alleging that he had sustained personal injuries due to the malpractice and negligence of city-employed doctors and nurses.³³ New York City law³⁴ required that notice of a claim against the city be given within ninety days after the claim accrued.35 Plaintiff did not file the notice of claim until more than ninety days after the last act of alleged malpractice had occurred.³⁶ The claim was filed, however, sixty-three days after plaintiff was discharged from the city hospital, 37 which was well within the statutory period.

The intermediate appellate court concluded that since the cause of action accrued no later than when the last act of malpractice was committed, the claim was time barred under New York law. 38 The New York Court of Appeals reversed holding, "[t]hat at least when the course of treatment which includes the wrongful acts or omissions has run continuously and is related to the same original condition or complaint, the 'accrual' comes only at the end of the treatment."39 The court reasoned that the "continuous treatment" theory provided for a more equitable result under the circumstances, noting the absurdity of requiring the plaintiff to interrupt corrective medical treatment by bringing action against the doctor or hospital.⁴⁰

Implicit in the Borgia court's holding was the notion that the relationship between a doctor and patient is one of trust and confidence—the patient having no expertise in the field of medicine.⁴¹ Hence, the patient is justified in relying absolutely on the doctor's judgment and need not interrupt corrective treatment by filing suit.⁴² The *Borgia* court's reasoning was

^{30.} See Borgia v. City of New York, 12 N.Y.2d 151, 157, 237 N.Y.S.2d 319, 322, 187 N.E.2d 777, 778 (1962).

^{31. 12} N.Y.2d 151, 237 N.Y.S.2d 319, 187 N.E.2d 777 (1962).

^{32.} Id. at 155, 237 N.Y.S.2d at 321, 187 N.E.2d at 778. In so doing, the court broke tradition with prior New York medical malpractice cases which had held that the statute of limitations ran from the incidence of the wrongful conduct. Eg. Conklin v. Draper, 254 N.Y. 620, 173 N.E. 892 (1930); Gross v. Wise, 16 A.D.2d 682, 227 N.Y.S.2d 523 (1962).

33. 12 N.Y.2d at 154-55, 237 N.Y.S.2d at 320, 187 N.E.2d at 778.

^{34.} New York, N.Y., General Municipal Law, Consol. Laws, ch. 24, § 50-e; Adminis-TRATIVE CODE OF CITY OF NEW YORK, § 394a-1.0(c).

^{35. 12} N.Y.2d at 155, 237 N.Y.S.2d at 320, 187 N.E.2d at 778. 36. *Id.* 37. *Id.* 38. *Id.*

^{40. 12} N.Y.2d at 156, 237 N.Y.S.2d at 321-22, 187 N.E.2d at 779.

^{41.} See County of Broome v. Vincent J. Smith, Inc., 78 Misc.2d 889, 891, 358 N.Y.S.2d 998, 1001 (N.Y. Sup. Ct. 1974).

^{42.} See id. The Broome court considered the practical considerations of refusing to apply the "continuous treatment" doctrine in such a situation, stating, "[u]nder the contrary rule a physician, aware of his malpractice, might be encouraged to pursue useless corrective treatment until the statute of limitations on his original wrongful act or omission had expired." Id. at 891, 358 N.Y.S.2d at 1001-02.

later extended to the attorney-client relationship in Seigel v. Kranis.⁴³ The Seigel court found the same factors which justified application of the "continuous treatment" doctrine to medical malpractice to be present in the attorney-client relationship.⁴⁴ The argument for application of the doctrine presented by the court was extremely compelling, especially because very often the client is not sure he has suffered any injury as a result of the lawyer's malpractice until final disposition of the litigation.⁴⁵ The court expressed a concern that a contrary rule would encourage "procrastination by the attorney to postpone the inevitable event of defeat."⁴⁶

Later, the "continuous treatment" doctrine was extended to the accountant-client relationship. In Wilkin v. Dana R. Pickup & Co. ⁴⁷ plaintiffs claimed that defendant-accountants had been negligent in the preparation of plaintiffs' 1966 and 1967 federal and state income tax returns. ⁴⁸ The accountant-client relationship between plaintiffs and defendants continued until 1970, during which time plaintiffs "continually complained of the 1966 tax problem but received no satisfaction from defendants." Plaintiffs did not commence a lawsuit against defendants for professional malpractice until 1973, more than six years after the alleged acts of negligence. The court held, however, that the three year statute of limitations presented no bar to plaintiffs' claim since the cause of action did not accrue until the professional relationship ended in 1970. The court concluded that the "continuous treatment" doctrine was broad enough to cover the confidential and complex relationship existing between an accountant and his client. ⁵²

Finally, the doctrine was extended to nonprofessionals in Colpan Realty Corp. v. Great American Insurance Co. 53 In that case the court held that where an insurance company wrongfully refused to defend a suit brought against its insured, the cause of action accrued at the culmination

^{43. 29} A.D.2d 477, 288 N.Y.S.2d 831 (1968).

^{44.} Id. at 480, 288 N.Y.S.2d at 834. In comparing the doctor-patient and lawyer-client relationships the court noted:

In both instances the relationship between the parties is marked by trust and confidence; in both there is presented an aspect of the relationship not sporadic but developing; and in both the recipient of the services is necessarily at a disadvantage to question the reason for the tactics employed or the manner in which the tactics are executed.

Id.

^{45.} See id. at 480, 288 N.Y.S.2d at 835. In the Seigel case, it was not clear that the attorney's late service of the notice of claim would prejudice his client until the court had entered a permanent stay of arbitration. Id. But see Galloway v. Hood, 69 Ohio App. 278, 281-82, 24 Ohio Op. 66, 67-68, 43 N.E.2d 631, 632-33 (1941) (declining to apply the "continuous treatment" doctrine to a legal malpractice case on the ground that the attorney did not have the same opportunity which a doctor has "to correct the ordinary and usual mistakes incident" to the provision of his professional services). Id.

^{46. 29} A.D.2d at 480, 288 N.Y.S.2d at 835. This would enable the attorney to avoid liability through dilatory tactics, a result considered by the court to be unjust. *Id.*

^{47. 74} Misc.2d 1025, 347 N.Y.S.2d 122 (N.Y. Sup. Ct. 1973).

^{48.} Id. at 1025, 347 N.Y.S.2d at 123-24.

^{49.} Id. at 1025-26, 347 N.Y.S.2d at 123-24.

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^{51.} Id. at 1026-27, 347 N.Y.S.2d at 124-25.

^{52.} Id. at 1026-27, 347 N.Y.S.2d at 125.

^{53. 83} Misc.2d 730, 373 N.Y.S.2d 802 (N.Y. Sup. Ct. 1975).

of the conduct constituting the breach.⁵⁴ The court analogized the duty an insurance company owes its insured to that which an attorney owes his client.55

In sum, the "continuous treatment" doctrine has not been confined to the medical profession where it originated. It has been extended to other areas where the relationship between the parties is based on trust and confidence. The data processing field is such an area.

Extending the Doctrine to the Data Processing Field

The application of the "continuous treatment" doctrine turns on considerations of fairness.⁵⁶ A professional relationship is necessarily marked by trust and confidence.⁵⁷ The recipient of professional services is unfamiliar with the professional's business and therefore must depend exclusively on the professional's superior knowledge and place absolute trust in his judgment.⁵⁸ Hence, it would be unfair and unreasonable to require such recipient to "question the tactics of the [professional] or to interrupt corrective efforts by the service of a summons and complaint."59

Several factors present in a data processing relationship dictate that the "continuous treatment" doctrine should be applied to the data processing profession.⁶⁰ The disparity of knowledge between a data processing professional and user is vast. First, data processing experts utilize a special language in designing and developing computer systems, making it difficult, if not impossible, for customers to give informed consent to their work.61 Second, the user's knowledge of state of the art data processing techniques is often quite limited due to the rapid development taking place in the computer industry. Users must, therefore, depend totally on the data processing professional to design and deliver a satisfactory system.⁶² As long as the professional relationship continues, the user is in no position to question the tactics or judgment of the data processor. 63 Furthermore, given the complexity of computer systems, some form of postinstallation adjustment will undoubtedly have to be made.⁶⁴ Therefore, requiring the user to bring suit without first giving the data processing pro-

^{54.} Id. at 732, 373 N.Y.S.2d at 805. The court found "no logical basis for distinction between wrongful conduct on the part of professionals and the wrongful breach of a contract by an insurance company." Id.

^{55.} *Id*.

^{56.} See County of Broome v. Vincent J. Smith, Inc., 78 Misc.2d 889, 892, 358 N.Y.S.2d 998, 1003 (N.Y. Sup. Ct. 1974) ("Fairness and justice dictate that a cause of action of this nature accrue only after the professional relationship has been terminated.").

^{57.} Furthermore, Colpan Realty Corp. v. Great Am. Ins. Co., 83 Misc.2d 730, 373 N.Y.S.2d 802 (N.Y. Sup. Ct. 1975), makes it clear that the elements of trust and confidence which justify application of the "continuous treatment" doctrine may be present even in the absence of a professional relationship. Id. at 732, 373 N.Y.S.2d at 805.

See Siegel v. Kranis, 29 A.D.2d 477, 480, 288 N.Y.S.2d 831, 834 (1968).
 See County of Broome v. Vincent J. Smith, Inc., 78 Misc.2d 889, 892, 358 N.Y.S.2d 998, 1003 (N.Y. Sup. Ct. 1974).

^{60.} See infra notes 61-67 and accompanying text.

^{61.} See Computerworld, supra note 15, at 1, col.1.

^{62.} See id.63. Cf. County of Broome v. Vincent J. Smith, Inc., 78 Misc.2d at 892, 358 N.Y.S.2d at 1003.

^{64.} See authorities cited supra note 9.

fessional an opportunity to debug the system could result in a tremendous waste of judicial time and energy.⁶⁵

Other considerations also militate in favor of applying the doctrine to the data processing area. The user may be dissuaded from bringing suit due to the considerable time it would take to procure a replacement system. Similarly, it may be difficult to locate another data processor who possesses the expertise required to effectively implement the particular computer system. Therefore, the user may jeopardize the success of the entire installation if he is required to bring suit against the data processing professional prematurely. Such a result is both unfair and unreasonable. In sum, the "continuous treatment" doctrine should be applied to the data processing field.

Triangle Decision

The Second Circuit had an opportunity to extend the "continuous treatment" doctrine to data processing in *Triangle Underwriters, Inc. v. Honeywell, Inc.* ⁶⁸ The *Triangle* court refused, however, to apply the doctrine to a situation involving alleged negligence on the part of a data processing supplier. ⁶⁹ In *Triangle*, defendant Honeywell solicited plaintiff Triangle to purchase or lease its Honeywell 110 (H-110) computer system to replace Triangle's old data processing system. ⁷¹ After several meetings with Honeywell representatives, Triangle entered into a hardware lease agreement with Honeywell. ⁷² Upon delivery and installation of the system in January 1971, Triangle immediately discontinued its old data processing system. ⁷³ The initial "run" of the new system was unsatisfactory. ⁷⁴ Honeywell personnel unsuccessfully attempted to rectify the various

^{65.} In addition, such a process loses sight of the real purpose behind the courts, to wit, providing an avenue of relief where the parties cannot work out their differences.

^{66.} See Tunic, supra note 1, at 320 (noting that it may take many months to obtain another system).

^{67.} See infra note 86.

^{68. 604} F.2d 737 (2d Cir. 1979).

^{69.} Id. at 746.

^{70.} The H-110 system is "a package consisting of 'hardware' . . . and programming 'software' created for use in connection with the hardware." See 604 F.2d at 739. Honeywell provided both a standard software package (i.e. programs which perform standard functions such as accounting and do not vary from one customer installation to the next) and "Custom Application Software" (specially designed programs to fit the customer's individual needs). Id.

^{71.} *Id*.

^{72.} Id. at 740. The agreement obligated Honeywell to install the system and train Triangle employees in its operation. Id. Following execution of the lease agreement Honeywell developed the "Custom Application Software" and in December 1970 notified Triangle that the system was fully operational. Id. Triangle subsequently decided to purchase rather than lease the hardware. Id.

^{73.} Id. Such action by Triangle constituted a serious tactical blunder. A safer method of implementing the new H-110 system would have been to operate the H-110 "in parallel" with the old system for a period of time until Triangle was sure the new system was functioning properly. See M. Gore & J. Stubbe, supra note 5, at 352. Such a plan of implementation would have enabled Triangle to revert to the old system when it discovered serious flaws in the H-110 system. Id.

^{74.} See 604 F.2d at 740. Triangle's president, Robert Weinstein, testified that after the invoice printing program was run (yielding obviously defective results), "[t]here was literally a scream and I panicked." Id. Each time the invoice program was run, billing inaccuracies resulted. In addition, several of the statistical reporting programs failed to function properly. Id.

software "bugs" until 1972, "when they departed, never to return," Triangle did not file suit against Honeywell until August 1975, more than four years after installation of the computer system. ⁷⁶ Triangle alleged, among other theories, that Honeywell was guilty of various acts and omissions amounting to negligence.⁷⁷ Honeywell asserted that the three-year statute of limitations applicable to negligence actions barred Triangle's claim.⁷⁸ The Second Circuit enunciated the general rule that a cause of action accrues when acts or omissions constituting negligence cause an injury, 79 but then proceeded to consider Triangle's contention that the "continuous treatment" doctrine should be applied to allow its claim.80 The court concluded that a professional relationship, upon which application of the doctrine is dependent, was lacking in the present case.81

The court's reasoning against application of the "continuous treatment" doctrine is faulty in several respects.82 First, the court analogized this case to a situation involving repair efforts by the manufacturer of a defective product when, in fact, it was not the Honeywell machinery which was defective, but rather the computer software.83 The customized software was the product of professional data processing services rendered by Honeywell much the same as the income tax return prepared in Wilkin⁸⁴ was the product of accounting services performed by the defendantaccountants. Similarly, the court disposed of Triangle's argument that it was justified in relying on Honeywell's superior knowledge of the system by noting "[t]he manufacturer of a large, complicated piece of machinery may be presumed to know more about its workings than the purchaser, at least in most cases."85 It was the software, however, not the hardware, which malfunctioned and about which Honeywell had superior knowledge.86 Triangle was totally dependent upon Honeywell to develop

^{75.} Id.

^{77.} Id. at 740-41. The second amended complaint contained nine counts alleging: 1) fraud; 2) breach of contract; 3) breach of warranty; 4) negligence; and 5) malpractice. Id. The district court dismissed all counts on the ground that the applicable statutes of limitation had run. Triangle Underwriters, Inc. v. Honeywell, Inc., 457 F. Supp. 765, 768-71 (E.D.N.Y. 1978), modified, 604 F.2d 737 (2d Cir. 1979).

^{78. 604} F.2d at 744.

^{79.} Id.; see supra note 25 and accompanying text. The court noted that under that general rule the negligence cause of action would be time barred by the three-year statute of limitations. 604 F.2d at 744.

^{80. 604} F.2d at 744.

^{81.} Id. at 745. But see Colpan Realty Corp. v. Great Am. Ins. Co., 83 Misc.2d. 730, 732, 373 N.Y.S.2d 802, 805 (N.Y. Sup. Ct. 1975) (applying "continuous treatment" doctrine to "non-professional" insurance company). See also supra notes 53-55 and accompanying text.

^{83.} See 604 F.2d at 740.
84. 74 Misc.2d 1025, 1025, 347 N.Y.S.2d 122, 123 (N.Y. Sup. Ct. 1973). For a discussion of Wilkin, see supra notes 47-52 and accompanying text.
85. 604 F.2d at 746 (emphasis added). The court continued:

However, to lift the continuous treatment concept from its narrow origin of personal services rendered by a professional defendant to a lay patient or client, and apply it generally to the law of commercial sales, would open Pandora's box, and create uncertainty where well-defined statutes of limitation now offer repose.

Id. 86. The developer of specially designed software has superior knowledge not only vis-a-vis the customer, but also vis-a-vis all other data processing professionals. The specially designed

the customized programs necessary to make the H-110 system work. Triangle's reliance on Honeywell's data processing expertise gave rise to a relationship of trust and confidence contemplated by the "continuous treatment" doctrine. Such a relationship is wholly lacking between a consumer and manufacturer of machinery, and therefore, the court's analogy is inapposite.

Finally, the court noted that no continuous relationship was contemplated by the parties to the litigation. Application of the "continuous treatment" doctrine, however, is not dependent on whether a continuing relationship was initially contemplated by the parties, but rather on whether a continued course of treatment is necessitated by an act of negligence. It is likely to undergo a routine appendent on the doctor and patient to undergo a routine appendent on. Barring unforeseen complications, the relationship which exists between the doctor and patient is expected to last a relatively short time. If, however, the doctor negligently fails to remove one of his surgical instruments before closing the incision, it is possible that corrective efforts by the doctor will extend the relationship considerably. The "continuous treatment" doctrine applies even though a continuing relationship was not originally contemplated by the parties.

The *Triangle* court failed to recognize that professional services play an important role in the design and implementation of any computer system. To develop the customized programs which the user requires, the data processor must thoroughly understand the user's business operations. Such an understanding is dependent upon a close working relationship between the user and data processing professional. The relationship rarely ends with the delivery of the system. Instead, there is often a period of post-installation adjustment, during which the data processor corrects hardward and software "bugs" as well as design defects. Hence, it is unrealistic to expect, as the court in *Triangle* did, that the data processing relationship will cease to exist the moment that the installation is completed.

The same elements which justify application of the "continuous treatment" doctrine to other professions are present in a data processing relationship.⁹³ Therefore, the court should have applied the doctrine to allow

nature of the software provided in the present case distinguishes the *Triangle* situation from the manufacturer-customer example used by the court. A relationship of trust and confidence is present where a data processing supplier specially designs a computer system for a customer. See supra notes 12-15 and accompanying text.

^{87.} See 604 F.2d at 745.

^{88.} See Borgia v. City of New York, 12 N.Y.2d. 151, 157, 237 N.Y.S.2d 319, 322, 187 N.E.2d 777, 778 (1962) (continued medical treatment was necessary only as a result of prior acts of negligence by physician). However, since it is virtually inevitable that "bugs" will turn up in any computer system, it is likely that the parties in a data processing relationship do contemplate some type of continuing relationship.

^{89.} See id.

^{90.} See 604 F.2d at 743 (characterizing the services Honeywell performed as merely incidental to a sale of goods).

^{91.} See supra notes 12-13 and accompanying text.

^{92.} See authorities cited supra note 9.

^{93.} See supra note 16 and accompanying text.

Triangle's claim based on negligence.

Conclusion

The "continuous treatment" doctrine provides relief from the general rule that a cause of action for negligence accrues when the negligent act is committed or when injury resulting therefrom is sustained or discovered. The doctrine provides that a negligence cause of action does not accrue until the relationship in which the harm was sustained has terminated and corrective efforts by the tortfeasor have ceased. Its application is warranted in situations where it would be unjust or unreasonable to require the victim to interrupt corrective efforts by the tortfeasor by bringing suit. This occurs most often in a professional relationship where the recipient of services must rely on the superior knowledge and expertise of the professional.

The Triangle court refused to apply the "continuous treatment" doctrine because it misunderstood the nature of the relationship between data processing suppliers and users. The development of a customized computer system necessarily involves the rendition of professional data processing services by the supplier. When the negligent performance of these services necessitates post-installation adjustment, the user is in no position to question the tactics employed by the supplier to eliminate the problem. He must, instead, place his full trust and confidence in the supplier's professional skill and judgment. Requiring the user to bring suit without first giving the supplier an opportunity to cure the system defects is both unreasonable and unjust. It makes more sense to provide that the cause of action does not accrue until after the curative efforts by the supplier have ended and the professional relationship has terminated. Application of the "continuous treatment" doctrine to the data processing profession would achieve precisely this result.

