

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-4
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

TRANSACTION SYSTEMS ARCHITECTS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

7372
(Primary Standard Industrial Classification Code Number)

47-0772104
(I.R.S. Employer Identification No.)

330 South 108th Avenue
Omaha, Nebraska 68154
(402) 390-7600
(Address, including ZIP Code, and telephone number, including area code, of
registrant's principal executive offices)

William E. Fisher, President
Transaction Systems Architects, Inc.
330 South 108th Avenue
Omaha, Nebraska 68154
(402) 390-7600
(Name, address, including ZIP Code, and telephone number, including area code,
of agent for service)

It is requested that copies of communications be sent to:
Neal A. Klegerman
Baker & McKenzie
One Prudential Plaza
Chicago, Illinois 60601

Approximate date of commencement of proposed sale of the securities to the public: From time to time after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

Calculation of Registration Fee

Title of each class of securities to be registered	Amount to be registered	Proposed maximum offering price per unit (1)	Proposed maximum aggregate offering price (1)	Amount of registration fee
Class A Common Stock, par value \$.005 per share	2,000,000 shares	\$ 26.00	\$ 52,000,000	\$ 15,758

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) promulgated under the Securities Act of 1933, as amended, based upon the average of the high and low prices of the Class A Common Stock on March 24, 1997, as reported on The Nasdaq National Market.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

PURSUANT TO RULE 429 UNDER THE SECURITIES ACT OF 1933, THE PROSPECTUS WHICH CONSTITUTES PART OF THIS REGISTRATION STATEMENT ALSO RELATES TO THE 1,500,000 SHARES OF THE REGISTRANT'S CLASS A COMMON STOCK REGISTERED UNDER THE REGISTRATION STATEMENT ON FORM S-4 (NO. 333-09811) OF WHICH 909,566 SHARES

REMAIN AVAILABLE FOR ISSUANCE AND ARE BEING CARRIED FORWARD. THE FILING FEE ASSOCIATED WITH THE CLASS A COMMON STOCK CARRIED FORWARD AND PREVIOUSLY PAID WITH THE EARLIER REGISTRATION STATEMENT IS \$9,448.

Information contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This prospectus shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any State in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such State.

SUBJECT TO COMPLETION, DATED MARCH 31, 1997

PROSPECTUS

TRANSACTION SYSTEMS ARCHITECTS, INC.

2,000,000 SHARES OF CLASS A COMMON STOCK

This Prospectus relates to 2,000,000 shares of Class A Common Stock, par value \$.005 per share (the "Class A Common Stock"), of Transaction Systems Architects, Inc., a Delaware corporation ("TSA" or the "Company"), which may be offered and issued or reserved for issuance by the Company from time to time in connection with acquisitions by the Company, directly or indirectly, of other businesses or properties, or interests therein. Class A Common Stock may be issued in exchange for shares of capital stock, partnership interests, or other assets representing an interest, direct or indirect, in other companies or entities, or in exchange for assets used in or related to the business of such other companies or entities. See "Securities Covered by This Prospectus."

The Class A Common Stock is subject to quotation on the Nasdaq National Market under the symbol "TSAI."

SEE "RISK FACTORS" BEGINNING ON PAGE 3 FOR CERTAIN CONSIDERATIONS RELEVANT TO AN INVESTMENT IN THE CLASS A COMMON STOCK.

THIS PROSPECTUS INCORPORATES DOCUMENTS BY REFERENCE WHICH ARE NOT PRESENTED HEREIN OR DELIVERED HERewith. THESE DOCUMENTS ARE AVAILABLE UPON REQUEST FROM DAVID P. STOKES, GENERAL COUNSEL AND SECRETARY, TRANSACTION SYSTEMS ARCHITECTS, INC., 330 SOUTH 108TH AVENUE, OMAHA, NEBRASKA 68154, TELEPHONE NUMBER (402) 390-7600. IN ORDER TO ENSURE TIMELY DELIVERY OF THE DOCUMENTS, ANY REQUEST SHOULD BE MADE FIVE BUSINESS DAYS PRIOR TO THE DATE ON WHICH THE FINAL INVESTMENT DECISION MUST BE MADE.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus is _____ 1997.

No person has been authorized to give any information or to make any representations other than those contained or incorporated by reference in this Prospectus or any Prospectus Supplement, and, if given or made, such information or representations must not be relied upon as having been authorized. Neither this Prospectus nor any Prospectus Supplement constitutes an offer to sell or a solicitation of an offer to buy any securities other than the securities to which it relates or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. Neither the delivery of this Prospectus nor any Prospectus Supplement nor any offer or sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Company since the date hereof.

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AVAILABLE INFORMATION

The Company is subject to the informational requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). Such reports, proxy statements and other information filed by the Company can be inspected and copied at the public reference facilities maintained by the Commission at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549 and at the Commission's Regional Offices at 14th Floor, Northwestern Atrium Center, 500 West Madison Street, Chicago, Illinois 60661 and 13th Floor, Seven World Trade Center, New York, New York 10048. Copies of such material can be obtained at prescribed rates from the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549. The Commission maintains a Web site that contains reports, proxy and information statements and other information regarding registrants, including the Company, that file electronically with the Commission, and the address of such site is <http://www.sec.gov>. In addition, reports, proxy statements and other information can be inspected at the offices of The Nasdaq Stock Market, Reports Section, 1735 K Street, N.W., Washington, D.C. 20006.

The Company has filed with the Commission a registration statement on Form S-4, including amendments thereto, if any (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), with respect to the shares of Class A Common Stock. This Prospectus and any accompanying Prospectus Supplement, if any, do not contain all of the information set forth in the Registration Statement, certain parts of which are omitted in accordance with the rules and regulations of the Commission. Statements made in this Prospectus as to the contents of any contract, agreement or other document referred to are not necessarily complete; with respect to each such contract, agreement or other document filed as an exhibit or schedule to the Registration Statement, reference is made to the exhibit or schedule, as applicable, for a more complete description of the matter involved, and each such statement shall be deemed qualified in its entirety by such reference. For further information pertaining to the Company and the shares of Class A Common Stock offered hereby, reference is made to the Registration Statement and the exhibits and schedules thereto, which may be examined or copied at the locations described above.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The Company hereby incorporates the following documents in this Prospectus by reference: (a) the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 1996; (b) the Company's Quarterly Report on Form 10-Q for the period ended December 31, 1996; and (c) the description of the Company's Class A Common Stock included in the Company's Registration Statement on Form 8-A filed with the Commission on January 11, 1995 under the Exchange Act, including any amendment or reports filed for the purpose of updating such description.

All documents filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this Prospectus and prior to the termination of the offering of the shares of Class A Common Stock covered by this Prospectus shall be deemed to be incorporated by reference into this Prospectus and to be a part of this Prospectus from the respective dates of the filing of such documents.

Any statement contained in a document incorporated herein by reference shall be deemed to be modified or superseded for purposes of this Prospectus to the extent that a statement contained in this Prospectus or in any other subsequently filed document which also is or is deemed to be incorporated herein by reference modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Prospectus.

THIS PROSPECTUS INCORPORATES DOCUMENTS BY REFERENCE WHICH ARE NOT PRESENTED HEREIN OR DELIVERED HERewith. THESE DOCUMENTS ARE AVAILABLE UPON REQUEST FROM DAVID P. STOKES, GENERAL COUNSEL AND SECRETARY, TRANSACTION SYSTEMS ARCHITECTS, INC., 330 SOUTH 108TH AVENUE, OMAHA, NEBRASKA 68154, TELEPHONE NUMBER (402) 390-7600. IN ORDER TO ENSURE TIMELY DELIVERY OF THE DOCUMENTS, ANY REQUEST SHOULD BE MADE FIVE BUSINESS DAYS PRIOR TO THE DATE ON WHICH THE FINAL INVESTMENT DECISION MUST BE MADE.

RISK FACTORS

In addition to the other information in this Prospectus and the Prospectus Supplement, if any, and information incorporated herein by reference, the following risk factors should be considered carefully in evaluating the Company and its business before purchasing the Class A Common Stock offered by this Prospectus. Unless the context requires otherwise, as used in this Prospectus, "TSA" or the "Company" means Transaction Systems Architects, Inc. and all of its subsidiaries.

Reliance on BASE24; Lack of Product Diversification

The Company has derived a substantial majority of its total revenues from licensing its BASE24 family of software products and providing services and maintenance related to those products. The BASE24 products and related services and maintenance are expected to provide the substantial majority of the Company's revenues in the foreseeable future. The Company's results will depend upon continued market acceptance of its BASE24 products and related services as well as the Company's ability to continue to adapt and modify them to meet the changing needs of its customers. Any reduction in demand for, or increase in competition with respect to, BASE24 products would have a material adverse

effect on the Company's financial condition and results of operations.

International Operations

The Company has derived a majority of its total revenues from sales to customers outside the United States. International operations generally are subject to certain risks, including difficulties in staffing and management, reliance on independent distributors, fluctuations in foreign currency exchange rates, compliance with foreign regulatory requirements, variability of foreign economic conditions and changing restrictions imposed by U.S. export laws. There can be no assurance that the Company will be able to manage the risks related to selling its products and services in international markets.

Dependence on Banking Industry

The Company's business is concentrated in the banking industry, making the Company susceptible to a downturn in that industry. For example, a decrease in bank spending for software and related services could result in a smaller overall market for electronic payment software. Furthermore, U.S. banks are continuing to consolidate, decreasing the overall potential number of buyers for the Company's products and services. These factors as well as others negatively affecting the banking industry could have a material adverse effect on the Company's financial condition and results of operations.

Relationship with Tandem

Historically, the Company has derived a substantial portion of its total revenues from the licensing of software products that operate on Tandem computers. The BASE24 product line runs exclusively on Tandem computers. These products are expected to provide a substantial portion of the Company's revenues in the foreseeable future. The Company's future results depend on market acceptance of Tandem computers and the financial success of Tandem. Tandem securities are publicly traded and its financial statements are publicly available. Any reduction in demand for these computers or in Tandem's ability to deliver products on a timely basis could have a material adverse effect on the Company's financial condition and results of operations.

Although the Company has several written agreements with Tandem, none of those agreements governs the primary relationship between the Company and Tandem, which is that the Company's major product line, BASE24, runs exclusively on Tandem computers. While the cooperation and past affiliation between the Company and Tandem have facilitated the Company's ability to develop and market Tandem-compatible products, this cooperation is not mandated by contract, and the cessation of such cooperation would adversely affect the Company's business. None of the Company's agreements with Tandem would protect the Company if Tandem's cooperation ceased or if Tandem were unable to deliver products on a timely basis. The written agreements cover such discrete matters as commissions on the sale of certain Tandem products, certain limited resales by the Company of Tandem products and the distribution of the Company's products by Tandem affiliates in a limited number of countries.

Management of Growth

The Company is experiencing a period of growth which is placing demands on its managerial and operations resources. The Company's inability to manage its growth effectively or to maintain its current level of growth could have a material adverse effect on its financial condition and results of operations.

Attraction and Retention of Key Personnel

The Company's success depends on certain of its executive officers, the loss of one or more of whom could have a material adverse effect on the Company's financial condition and results of operations. None of the Company's U.S.-based executive officers is a party to an employment agreement. The Company believes that its future success also depends on its ability to attract and retain highly-skilled technical, managerial and marketing personnel, including, in particular, additional personnel in the areas of research and development and technical support. Competition for personnel is intense. There can be no assurance that the Company will be successful in attracting and retaining the personnel it requires.

Competition

The market for electronic payment software is highly competitive. Many applications software vendors offer products that are directly competitive with BASE24 and other products of the Company. The Company also experiences competition from software developed internally by potential customers and experiences competition for its consulting services from professional services organizations. In addition, processing companies provide services similar to those made possible by the Company's products. Many of the Company's current and potential competitors have significantly greater financial, marketing, technical and other competitive resources than the Company. Current and potential competitors, including providers of transaction-based software, processing, or professional services, may establish cooperative relationships with one another or with third parties to compete more effectively against the Company. It is also possible that new competitors may emerge and acquire market share. In either case, the Company's financial condition and results of operations could be adversely affected.

New Products and Technological Change

The market for software in general is characterized by rapid change in computer hardware and software technology and is highly competitive with respect to the need for timely product innovation and new product introductions. The

Company believes that its future success depends upon its ability to enhance its current applications and develop new products that address the increasingly complex needs of customers. In particular, the Company believes that it must continue to respond quickly to users' needs for additional functionality and multi-platform support. The introduction and marketing of new or enhanced products requires the Company to manage the transition from current products in order to minimize disruption in customer purchasing patterns. There can be no assurance that the Company will continue to be successful in the timely development and marketing of product enhancements or new products that respond to technological advances, that its new products will adequately address the changing needs of the domestic and international markets or that it will successfully manage the transition from current products.

The Company is continually developing new products, product versions and individual features within a large, complex software system. Development projects can be lengthy and are subject to changing requirements, programming difficulties and unforeseen factors which can result in delays in the introduction of new products and features. Delays could have a material adverse effect on the Company's financial condition and results of operations.

In addition, new products, versions or features, when first released by the Company, may contain undetected errors that, despite testing by the Company, are discovered only after a product has been installed and used by customers. To date, undetected errors have not caused significant delays in product introduction and installation or required substantial design modifications. However, there can be no assurance that the Company will avoid problems of this type in the future.

A substantial majority of the Company's license fee revenue is generated by licenses for software products designed to run on fault-tolerant or mainframe computers. Industry sources indicate that sales of mainframe computers are declining on a unit basis, and the Company expects this trend to continue. The Company has developed, and continues to develop, certain products for other platforms, but to date revenues from these products have not been significant. There can be no assurance that the Company will be successful in selling these software products or other products under development. The Company's failure in this regard could have a material adverse effect on its financial condition and results of operations.

Dependence on Proprietary Technology

The Company relies on a combination of trade secret and copyright laws, nondisclosure and other contractual and technical measures to protect its proprietary rights in its products. There can be no assurance that these provisions will be adequate to protect its proprietary rights. In addition, the laws of certain foreign countries do not protect intellectual property rights to the same extent as the laws of the United States. Although the Company believes that its intellectual property rights do not infringe upon the proprietary rights of third parties, there can be no assurance that third parties will not assert infringement claims against the Company.

Variability of Quarterly Operating Results

The Company's quarterly revenues and operating results may fluctuate depending on the timing of executed contracts, license upgrades and the delivery of contracted business during the quarter. In addition, quarterly operating results may fluctuate due to the extent of commissions associated with third party product sales, timing of the Company's hiring of additional staff, new product development and other expenses. No assurance can be given that operating results will not vary due to these factors. Fluctuations in quarterly operating results may result in volatility in the Company's stock price.

Customer Cancellation of Contracts

The Company derives a substantial portion of its total revenues from maintenance fees and monthly software license fees pursuant to contracts which the customer has the right to cancel. A substantial number of cancellations of these maintenance or monthly license fee contracts would have a material adverse effect on the Company's financial condition and results of operations.

Possible Volatility of Stock Price

The stock market has from time to time experienced extreme price and volume fluctuations, particularly in the high technology sector, which have often been unrelated to the operating performance of particular companies. Any announcement with respect to any variance in revenue or earnings from levels generally expected by securities analysts for a given period could have an immediate and significant effect on the trading price of the Class A Common Stock. In addition, factors such as announcements of technological innovations or new products by the Company, its competitors or other third parties, as well as changing market conditions in the computer software or hardware industries, may have a significant impact on the market price of the Class A Common Stock.

Control by Existing Stockholders

The Company's directors and officers and their affiliates in the aggregate beneficially own a substantial percentage of the outstanding Class A Common Stock. As a result, these stockholders, if acting together, would be able to influence most matters requiring approval by the Company's stockholders, including the election of directors. In addition, the Company's Certificate of Incorporation contains provisions that may discourage acquisition bids for the Company. The effect of such provisions may be to limit the price that investors might be willing to pay in the future for shares of the Class A Common Stock.

THE COMPANY

The Company develops, markets and supports a broad line of software products and services primarily focused on facilitating electronic payments. The Company's software products are used to process transactions involving credit cards, debit cards, smart cards, checks, automated teller machines (ATM), point-of-sale (POS) terminals, manned teller devices, remote banking, wire transfers and automated clearing house (ACH) functions. The Company's products and services assist customers in operating large, complex networks performing such functions as transaction authorization, transaction routing, debit and credit card management, transaction settlement and reporting.

The Company was formed for the purpose of acquiring Applied Communications, Inc. and Applied Communications Inc. Limited, which were acquired on December 31, 1993. On January 3, 1994, the Company acquired U.S. Software, Inc. Since that time, the Company has completed several acquisitions complementary to its business. The principal executive offices of the Company are located at 330 South 108th Avenue, Omaha, Nebraska 68154, and its telephone number is (402) 390-7600.

SECURITIES COVERED BY THIS PROSPECTUS

This Prospectus relates to 2,000,000 shares of Class A Common Stock which may be offered and issued or reserved for issuance by the Company from time to time in connection with the acquisition by the Company, directly or indirectly, of other businesses or properties, or interests therein. It is expected that the terms of acquisitions involving the issuance of Class A Common Stock covered by this Prospectus will be determined by direct negotiations with the owners or controlling persons of the businesses or properties, or interest therein, to be acquired by the Company, or, in the case of entities that are more widely held, through exchange offers to stockholders or documents soliciting stockholder approval of mergers, consolidations, plans of share exchange, or sales of assets. It is also expected that the shares of Class A Common Stock issued will be valued at prices reasonably related to quoted market prices either at the time the terms of an acquisition are agreed upon or at or about the time of delivery of such shares.

DESCRIPTION OF CAPITAL STOCK

The Company's Amended and Restated Certificate of Incorporation provides that authorized capital stock of the Company consists of 50,000,000 shares of Class A Common Stock, par value \$0.005 per share, 5,000,000 shares of Class B Common Stock, par value \$0.005 per share, and 5,450,000 shares of redeemable convertible preferred stock, par value of \$0.01 per share. Unless otherwise indicated, references in this Prospectus to "Common Stock" refer to both the Company's Class A Common Stock and Class B Common Stock.

Common Stock

The Class A Common Stock and Class B Common Stock have the same rights except that holders of Class B Common Stock are not entitled to vote except as provided by law. Holders of Class A Common Stock are entitled to one vote per share on all matters to be voted on by the stockholders. Subject to preferences that may be applicable to any preferred stock outstanding at the time, holders of Common Stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the Board of Directors out of funds legally available therefor. In the event of a liquidation, dissolution or winding up of the Company, holders of all Common Stock are entitled to share ratably in all assets remaining after payment of the Company's liabilities and the liquidation preference, if any, of any outstanding preferred stock. Holders of Common Stock have no preemptive rights and no rights to convert their Class A Common Stock into any other securities, and there are no redemption provisions with respect to shares of Common Stock. All of the outstanding shares of Common Stock are fully paid and non-assessable. The rights, preferences and privileges of holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock which the Company may designate and issue in the future.

Preferred Stock

The Board of Directors has the authority, without any further vote or action by the stockholders, to provide for the issuance of up to 5,450,000 shares of redeemable convertible preferred stock from time to time in one or more series with such designations, rights, preferences and limitations as the Board of Directors may determine, including the consideration received therefor, the number of shares comprising each series, dividend rates, redemption provisions, liquidation preferences, sinking fund provisions, conversion rights and voting rights, all without approval by the holders of Common Stock. Although it is not possible to state the effect that any issuance of preferred stock might have on the rights of holders of Common Stock, the issuance of preferred stock may have one or more of the following effects (i) restrict Common Stock dividends if preferred stock dividends have not been paid, (ii) dilute the voting power and equity interest of holders of Common Stock, or (iii) prevent current holders of Common Stock from participating in the Company's assets upon liquidation until any liquidation preferences granted to holders of preferred stock are satisfied. In addition, the issuance of preferred stock may, under certain circumstances, have the effect of discouraging a change in control of the Company by, for example, granting voting rights to holders of preferred stock that require approval by the separate vote of the holders of preferred stock for any amendment to the Company's Amended and Restated Certificate of Incorporation or any reorganization, consolidation, merger (or other similar transaction involving the Company). As a result, the issuance of such preferred stock may discourage bids for the Company's Common Stock at a premium over the market price therefor and could have a material adverse effect on the market value of the Common Stock. No shares of preferred stock are currently outstanding.

Registration Rights

Certain rights with respect to registration of their stock under the Securities Act exist for holders of shares of Common Stock issued upon conversion of the Company's Senior Convertible Preferred Stock ("Senior Conversion Shares"), holders of shares of Common Stock issued upon exercise of certain stock purchase warrants ("Warrant Exercise Shares"), and holders of shares of Common Stock issued upon conversion of the Company's Junior Convertible Preferred Stock, shares of Class A Common Stock issuable upon exercise of stock options issuable to employees of the Company pursuant to the Company's Incentive Stock Option Plan and certain other shares of Class A Common Stock (collectively "Junior Restricted Stock"). The Senior Conversion Shares, Warrant Exercise Shares, and Junior Restricted Stock are hereafter collectively referred to as the "Restricted Stock." The registration rights arise pursuant to an agreement entered into at the time of the sale of underlying shares of Preferred Stock and warrants. Holders of not less than 30% of the outstanding Senior Conversion Shares may demand that the Company register for sale all or a portion of their shares. With certain exceptions, the Company is not generally required to effect more than two such registrations. In the event that the holders making the demand request registration of less than all their Senior Conversion Shares, the Company is required to effect a registration only if the demand covers at least 20% of the total number of Senior Conversion Shares originally issued (or a lesser percentage if the reasonably anticipated aggregate public offering price would exceed \$5,000,000). Subject to certain limitations, at such time as the Company is eligible to register its shares on Form S-3, holders of the Warrant Exercise Shares may demand, on one occasion, that the Company register Warrant Exercise Shares on that form, provided that the reasonably anticipated aggregate offering price would exceed \$4,000,000. Furthermore, if the Company proposes to register any of its securities, either for its own account or that of selling security holders, the Company is required to notify holders of Restricted Stock, and subject to certain limitations, to include in such registration all the shares requested to be included by such holders. The Company is generally obligated to bear the expenses, other than underwriting discounts and sale commissions, of all of these registrations and to indemnify the sellers against certain liabilities, including liabilities under the Securities Act.

Limitation of Liability

The Company's Amended and Restated Certificate of Incorporation limits the liability of directors to the maximum extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for breach of their fiduciary duties as directors, including gross negligence, except liability for (i) breach of the directors' duty of loyalty, (ii) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of the law, (iii) the unlawful payment of a dividend or unlawful stock purchase or redemption and (iv) any transaction from which the director derives an improper personal benefit. Delaware law does not permit a corporation to eliminate a director's duty of care, and this provision of the Company's revised Restated Certificate of Incorporation has no effect on the availability of equitable remedies, such as injunction or rescission, based upon a director's breach of the duty of care.

The Company's Amended and Restated Certificate of Incorporation authorizes the Company to purchase and maintain insurance for the purpose of indemnification.

Delaware Law

Under Section 203 of the Delaware General Corporation Law ("Section 203"), certain "business combinations" between a Delaware corporation whose stock generally is publicly traded or held of record by more than 2,000 stockholders and an "interested stockholder" are prohibited for a three-year period following the date that such stockholder became an interested stockholder, unless (i) the corporation has elected in its original certificate of incorporation not to be governed by Section 203 (the Company did not make such an election), (ii) the business combination was approved by the board of directors of the corporation before the other party to the business combination became an interested stockholder, (iii) upon consummation of the transaction that made it an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the commencement of the transaction (excluding voting stock owned by directors who are also officers or held in employee benefit plans in which the employees do not have a confidential right to tender or vote stock held by the plan) or (iv) the business combination was approved by the board of directors of the corporation and ratified by two-thirds of the voting stock which the interested stockholder did not own. The three-year prohibition also does not apply to certain business combinations proposed by an interested stockholder following the announcement or notification of certain extraordinary transactions involving the corporation and a person who had not been an interested stockholder during the previous three years or who became an interested stockholder with the approval of the majority of the corporation's directors. The term "business combination" is defined generally to include mergers or consolidations between a Delaware corporation and an "interested stockholder," transactions with an "interested stockholder" involving the assets or stock of the corporation or its majority-owned subsidiaries and transactions which increase an interested stockholder's percentage ownership of stock. The term "interested stockholder" is defined generally as a stockholder who, together with affiliates and associates, owns (or, within three years prior, did own) 15% or more of a Delaware corporation's voting stock. Section 203 could prohibit or delay a merger, takeover or other change in control of the Company and therefore could discourage attempts to acquire the Company.

Transfer Agent and Registrar

The transfer agent and registrar of the Class A Common Stock is Norwest Bank Minnesota, N.A.

EXPERTS

The financial statements and schedules incorporated in this Prospectus by reference to the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 1996, have been audited by Arthur Andersen LLP, independent public accountants, as indicated in their reports with respect thereto, and have been so incorporated in reliance upon the authority of said firm as experts in giving said reports.

Future financial statements and schedules of the company and the reports thereon of the Company's independent public accountants also will be incorporated by reference in this Prospectus in reliance upon the authority of those accountants as experts in giving those reports to the extent those accountants have audited those financial statements and consented to the use of their reports thereon.

LEGAL MATTERS

The validity of the Class A Common Stock offered pursuant to this Prospectus will be passed upon for the Company by Baker & McKenzie, Chicago, Illinois.

PART II.

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 20. Indemnification of Directors and Officers

Section 145 of the General Corporation Law of the State of Delaware permits indemnification by a corporation of certain officers, directors, employees and agents. Consistent therewith, Article Tenth of the Company's Amended and Restated Certificate of Incorporation provides that the Company, to the fullest extent authorized by the General Corporation Law of the State of Delaware, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Company to provide broader indemnification rights than such law permitted the Company to provide prior to such amendment), to indemnify a director or officer of the Company or a person who is or was serving at the request of the Company as director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan, who was or is made (or threatened to be made) a party to a civil, criminal, administrative or investigative proceeding (an "indemnified person"). Article Tenth also provides that expenses incurred by an indemnified person will be paid in advance by the Company; provided, however, that, if the General Corporation Law of the State of Delaware requires, an advancement of expenses incurred by an indemnified person incurred in his or her capacity as a director or officer shall be made only if the Company receives an undertaking by or on behalf of the indemnified person to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such indemnified person is not entitled to be indemnified for such expenses.

Under a registration rights agreement between the Company and certain of its stockholders, the Company agreed to indemnify each stockholder selling his or her shares thereunder in connection with any losses, claims, damages or liabilities arising out of certain acts or omissions of the Company. Under an agreement with the purchasers of the Company's Senior Convertible Preferred Stock and warrants, the Company indemnified the purchasers with respect to any misrepresentation or breach of any representation or warranty or noncompliance with any conditions or other agreements given or made in connection with the agreement or the transactions contemplated therein.

Item 21. Exhibits and Financial Statement Schedules

A. Exhibits

Exhibit Number	Description
2.01*	Senior Convertible Preferred Stock and Warrant Purchase Agreement among ACI Holdings, Inc. and the Several Named Purchasers Named therein, dated as of December 31, 1993
2.02*	Stock Purchase Agreement between and among Tandem Computers Incorporated, Tandem Computers Limited, Applied Communications, Inc., Applied Communications Inc. Limited and ACI Holding, Inc., dated November 8, 1993, and amendments thereto
2.03*	Stock Purchase Agreement between and among U S Software Holding, Inc., Michael J. Scheier, Trustee, Michael J. Scheier and ACI Holding, Inc., dated December 13, 1993, and amendments thereto
2.04*	Stock and Warrant Holders Agreement, dated as of December 30, 1993
2.05*	Credit Agreement among ACI Transub, Inc., ACI Holding, Inc., certain lenders and Continental Bank N.A., as Agent, dated December 31, 1993, including Amendment No. 1 to Credit Agreement and Amendment No. 2 to Credit Agreement and Consent
2.06*	Letter Agreement among ACI Holding, Inc., Alex. Brown and Sons, Incorporated and Kirkpatrick Pettis Smith Polian, Inc., and amendment thereto
2.07*	ACI Management Group Investor Subscription Agreement, dated as of December 30, 1993
2.08**	Asset Purchase Agreement Between 1176484 Ontario Inc. and TXN Solution Integrators Dated June 3, 1996
2.09***	Stock Exchange Agreement by and among the Company, Grapevine Systems, Inc. and certain principal shareholders of Grapevine Systems, Inc., dated as of June 15, 1996
4.01*	Form of Common Stock Certificate
5.01	Opinion of Baker & McKenzie
23.01	Consent of Independent Public Accountants

23.02 Consent of Baker & McKenzie (included in opinion filed as Exhibit 5.01)

24.01 Power of Attorney (contained in Signature Page)

* Incorporated by reference to the exhibit of the same number to the Registrant's Registration Statement No. 33-88292 on Form S-1.

** Incorporated by reference to the exhibit of the same number to the Registrant's Current Report on Form 8-K dated June 3, 1996 filed on June 17, 1996, as amended by the Registrant's Current Report on Form 8-K(A) filed on July 15, 1996.

*** Incorporated by reference to the exhibit of the same number to the Registrant's Registration Statement No. 333-09811 on Form S-4.

Item 22. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) The undersigned registrant hereby undertakes as follows: that prior to any public reoffering of the securities registered hereunder through use of a prospectus which is a part of this registration statement, by any person or party who is deemed to be an underwriter within the meaning of Rule 145(c), the issuer undertakes that such reoffering prospectus will contain the information called for by the applicable registration form with respect to reofferings by persons who may be deemed underwriters, in addition to the information called for by the other Items of the applicable form.

(d) The registrant undertakes that every prospectus: (i) that is filed pursuant to paragraph (c) immediately preceding, or (ii) that purports to meet the requirements of Section 10(a)(3) of the

Act and is used in connection with an offering of securities subject to Rule 415, will be filed as a part of an amendment to the registration statement and will not be used until such amendment is effective, and that, for purposes of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(e) The undersigned registrant hereby undertakes to respond to requests for information that is incorporated by reference into the prospectus pursuant to Items 4, 10(b), 11 or 13 of this Form S-4, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the Registration Statement through the date of responding to the request.

(f) The undersigned registrant hereby undertakes to supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the Registration Statement when it became effective.

(g) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Omaha, State of Nebraska, on March 31, 1997.

TRANSACTION SYSTEMS ARCHITECTS, INC.

By: /s/ William E. Fisher

William E. Fisher
President

POWER OF ATTORNEY

We, the undersigned officers and directors of Transaction Systems Architects, Inc., hereby severally and individually constitute and appoint William E. Fisher, Gregory J. Duman, David P. Stokes and Dwight G. Hanson, and each of them, the true and lawful attorneys and agents of each of us to execute in the name, place and stead of each of us (individually and in any capacity stated below) any and all amendments to this Registration Statement on Form S-4, including any post-effective amendments, and any additional Registration Statement filed pursuant to Rule 462(b) under the Securities Act of 1933, and all instruments necessary or advisable in connection therewith and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, each of said attorneys and agents to have power to act with or without the other and to have full power and authority to do and perform in the name and on behalf of each of the undersigned every act whatsoever necessary or advisable to be done in the premises as fully and to all intents and purposes as any of the undersigned might or could do in person, and we hereby ratify and confirm other signatures as they may be signed by our said attorneys and agents and each of them to any and all such amendment and amendments.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Name -----	Title -----	Date ----
/s/ William E. Fisher ----- William E. Fisher	Director and President (Principal Executive Officer)	March 31, 1997
/s/ Gregory J. Duman ----- Gregory J. Duman	Chief Financial Officer (Principal Financial Officer)	March 31, 1997
/s/ Dwight G. Hanson ----- Dwight G. Hanson	Controller (Principal Accounting Officer)	March 31, 1997
/s/ David C. Russell ----- David C. Russell	Director	March 31, 1997
/s/ Jim D. Kever ----- Jim D. Kever	Director	March 31, 1997
/s/ Promod Haque ----- Promod Haque	Director	March 31, 1997
/s/ Frederick L. Bryant ----- Frederick L. Bryant	Director	March 31, 1997
/s/ Charles E. Noell, III ----- Charles E. Noell, III	Director	March 31, 1997
/s/ Larry G. Fendley ----- Larry G. Fendley	Director	March 31, 1997

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BAKER & MCKENZIE
Attorneys at Law

One Prudential Plaza
130 East Randolph Drive
Chicago, Illinois 60601

March 31, 1997

Board of Directors
Transaction Systems Architects, Inc.
330 South 108th Avenue
Omaha, Nebraska 68154

Re: Transaction Systems Architects, Inc. (the "Company")

Gentlemen:

We have acted as your counsel in connection with the registration, on a Registration Statement on Form S-4 (the "Registration Statement") under the Securities Act of 1933, as amended, of 2,000,000 shares of the Company's Class A Common Stock, \$.005 par value per share (the "Stock"), to be issued by the Company from time to time in connection with acquisitions by the Company, directly or indirectly, of other businesses or properties, or interests therein. We have reviewed the Registration Statement, the charter and by-laws of the Company, corporate proceedings of the Board of Directors relating to the issuance of the shares of Stock, and such other documents, corporate records and questions of law as we have deemed necessary to the rendering of the opinions expressed below.

Based upon the foregoing, we are of the opinion that the 2,000,000 shares of Stock to be issued by the Company as described in the Registration Statement are duly authorized and, when issued and paid for in the manner contemplated in the Registration Statement and upon approval by the Board of Directors of the acquisition in which shares of Stock will be issued, will be legally issued, fully paid and non-assessable shares of Class A Common Stock of the Company.

We hereby consent to the reference to our firm under the caption "Legal Matters" in the prospectus included in the Registration Statement and to the filing of this opinion as an exhibit thereto.

Very truly yours,

BAKER & MCKENZIE

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the incorporation by reference in this Form S-4 Registration Statement of our reports dated October 31, 1996, included in Transaction Systems Architects, Inc.'s Annual Report 10-K on Form for the fiscal year ended September 30, 1996, and to all references to our Firm included in this Registration Statement.

ARTHUR ANDERSEN LLP

Omaha, Nebraska
March 27, 1997