

FOR 28 YEARS, THE LEADING PUBLICATION COVERING CONSUMER PAYMENT SYSTEMS WORLDWIDE

GOVERNMENT CARD CONTRACTORS

Contracts to offer purchasing cards, travel & entertainment cards, and/or fleet cards to employees of federal government ... (turn to page 8)

AMEX OUTSIDE THE U.S. A total of 13.1 million American Express cards were in force at the end of last year in 68 countries outside the United States, up 6.4% over ... (turn to page 8) **Amex**

7-ELEVEN FINANCIAL CENTERS The largest chain of convenience stores in the U.S. is testing self-service financial centers in 37 Austin, Texas locations. Terminals let ... (turn to page 5)

KEYCORP CHIP TERMINAL Six banks in the U.K. have ordered 60 unattended K80 self-service terminals made by Keycorp to be used in their Visa Cash chip card ... (turn to page 4)

TEC POS TERMINAL The first point-of-sale terminal manufactured by a Japanese company in compliance with Europay, MasterCard, and Visa specifications for ... (turn to page 5)

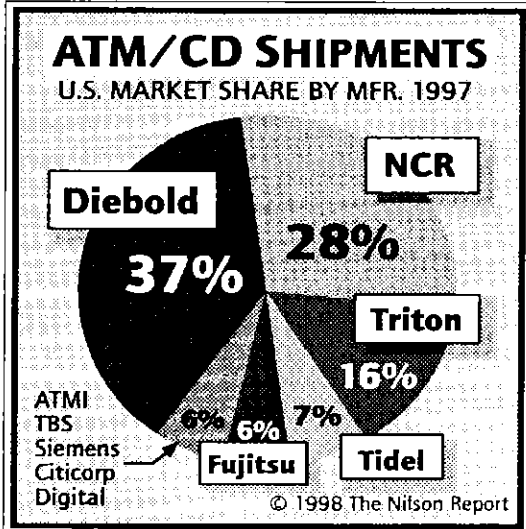
EXPERIAN ACQUIRES SG2 France's largest publicly traded bank, Société Générale, has sold its SG2 Services subsidiary to Experian for \$112 million. SG2 provides: ... (turn to page 10)

CSC CARD SOFTWARE Financial institutions in 13 countries support their bank card issuing and acquiring businesses with card and merchant system software ... (turn to page 4)

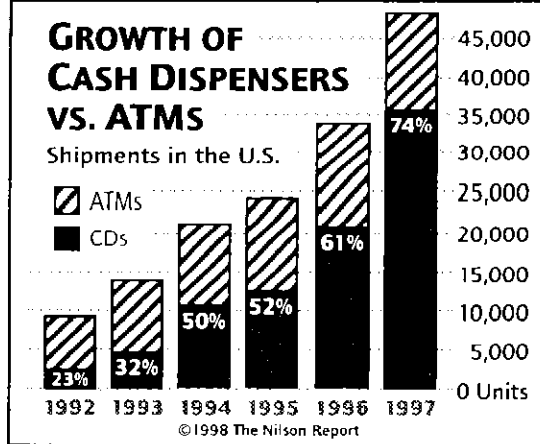
THIRD 50 BANK CARDS Visa and MasterCard credit card issuers that ranked 101 through 150 largest based on year-end 1997 outstandings are listed on page 9. (turn to page 9) □

ATM/CD SHIPMENTS — U.S.

The United States received 30% of newly manufactured automated teller machines and cash dispensers shipped last year to ... (turn to page 6)



ATM/CD UPGRADES During the past five years, over 100,000 ATMs worldwide have been upgraded to deliver new features and provide more functionality. (turn to page 7)



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NATIONAL DATA CORP. has signed a definitive agreement to acquire substantially all the assets of Salt Lake City-based CheckRite, a check-verification company and collection agency serving 35,000 merchants. Last year, CheckRite verified more than 200 million checks. Mike Egan is EVP at CheckRite, (801) 562-2252, fax (801) 255-3762. Tom Dunn is General Mgr. at NDC, (410) 712-6777, fax (410) 712-6742.

KEYCORP will buy 850 NCR-manufactured cash dispensers for installation at Arco gas stations in five Western states. Andy Orent is VPO at NCR, (937) 445-0610, fax (937) 445-1601. Dan Neistadt is EVP at KeyCorp, (216) 689-1687, fax (216) 689-1729. Robert Schick is VP at Arco, (213) 486-3872, fax (213) 486-3840.

NOVA CORP., owner of one of the largest U.S. portfolios of merchant card-processing contracts, will sell 71 million shares of common stock through underwriters Salomon Smith Barney, BT Alex. Brown, and Robinson-Humphrey. Kathy Harris heads Investor Relations at Nova, (770) 396-1456, fax (770) 698-1046.

FEDERATED DEPARTMENT STORES has agreed to pay \$14.6 million as part of a settlement with the attorneys general of 20 states for improperly collecting payments for 13,500 bankrupt credit card customers over the last five years. Previously, Federated agreed to pay \$4.3 million to settle a related class-action lawsuit.

MERIDIAN ENTERPRISES has received settlements from GE Capital and Exxon resulting from a claim that those companies, partners in a co-brand MasterCard program, violated a patented system (US #5,025,372) for administering an incentive award. Meridian will receive fees for licensing and management consulting. Mike Fraser is EVP at Meridian, (314) 592-3144, fax (314) 592-4144.

JCPENNEY will use the TeleCheck subsidiary of First Data Corp. to provide secondary check-verification services at its 1,200 stores. Penney currently uses SCAN for its primary verification service. Larry Chin is Acctg. Projects Mgr. at Penney, (972) 591-6537, fax (972) 591-6532. Steve Shaper is CEO at TeleCheck, (713) 599-7603, fax (713) 599-7114.

CONTIASET RECEIVABLES MANAGEMENT has acquired Pacific Advisory Services (formerly Alderney Capital Management), a buyer of charged-off credit card and other consumer debt. Jerome Perelson is SVP at ContiAsset, (212) 207-5402, fax (212) 207-2868.

DATAWAVE SYSTEMS, merchandisers of prepaid calling cards activated at the POS, will distribute AT&T prepaid cards in all U.S. states. Mark Evans is Director at AT&T Prepaid Cards, (973) 644-8170, fax (973) 644-8326. Clive Barwin is Pres. at DataWave, (604) 874-1302, fax (604) 874-1503.

FUELMAN/GASCARD, a fleet-management information services company, has raised \$17 million in equity primarily through institutional venture investors GCC Investments and Advantage Capital Partners. Kingsley McCallum is Chairman at Fuelman, (504) 835-7171, fax (504) 841-5387.

CYBERCASH, provider of services to secure financial transactions on the Internet, has raised \$15 million in equity capital through a private placement of convertible preferred stock. James Condon is Chief Financial Officer, (703) 620-4200, fax (703) 620-4215.

S&H CITADEL, incentive card marketer, is offering a prepaid Visa program through issuer Best Bank. Bonnie Balfanz is Mktg. Coord. at S&H, (708) 449-4945, fax (708) 409-4195.

TURKIYE GARANTI BANKASI has issued \$175 million in securities backed by receivables created when tourists and business travelers from outside Turkey purchase goods and services within Turkey. Garanti pays the merchant in local currency and receives reimbursement through the Visa and MasterCard systems in U.S. dollars. Yesim Saliba is Asst. VP, 90 (212) 286-1292, fax 90 (212) 286-2327.

UNION BANK of Colombo, Sri Lanka has licensed integrated transaction management software from Arksys to drive its ATMs and to link to the MasterCard and Cirrus networks. Mary Rose is VP Bus. Dev. at Arksys, (501) 218-7141, fax (501) 218-7302. Janaka De Silva is Manager at UB, 941 (346) 360-1466, fax 941 (346) 362-1466.

BANK GOSPODARKI ZYWNOSCOWEJ has licensed Applied Communication Inc.'s BASE24 software for ATMs, POS, ACH, and remote banking. Toni Boje is Mng. Dir. at ACI Europe, 44 (1923) 816-393, fax 44 (1923) 211-037. Adam Kapica is Mng. Dir. at BGZ, 48 (22) 632-6076, fax 48 (22) 632-8689.

UNNISA, third-party processor in Brazil, has installed PaySys VisionPLUS card software to serve its 20 card-issuing clients including Fininvest, Banco Real, BankBoston, and Brascan. Ruth Merides is Prod. Mgr. at Unnisa, 55 (11) 741-7751, fax 55 (11) 741-7373. Juan Yalinas is Acct. Exec. Latin America at PaySys, (407) 660-0343, fax (407) 660-0483.

ASSOCIATES FIRST CAPITAL has signed an agreement to acquire the Canadian consumer finance subsidiary of Beneficial Corp. including a \$158 million portfolio of private label credit card receivables.

DC CARD, a subsidiary of Bank of Tokyo Mitsubishi, has licensed Falcon fraud-detection predictive software from HNC Software. Hiroshi Uematsu is GM at HNC, 81 (3) 532-22800, fax 81 (3) 532-22850. Shozo Komon is GM at DC Card, 81 (3) 548-96038, fax 81 (3) 346-48307.

MONERED of Argentina will purchase \$1.5 million in payment terminals from the IVI Ingenico joint venture. Jorge Fernandez is EVP at IVI Ingenico, (305) 443-4233, fax (305) 443-0544. Nestor Yoan is VP at Monered, 54 (1) 393-5560, fax 54 (1) 393-9641.

TSYS CANADA, a wholly owned subsidiary of the Georgia-based card processor, has opened an office in Welland, Ontario. Anthony de Laat is AVP, (905) 735-8448, fax (905) 735-2490.

MANAGEMENT CHANGES

Robert Rousseau, President of Deluxe Electronic Payment Systems, will be leaving at the end of March. **Debra Janssen** will serve as interim Pres., (414) 341-5474, fax (414) 341-5075. **Steven Grant** has been appointed EVP Consumer Card Svcs. at American Express, (212) 640-1394, fax (212) 619-6639. **Michael Whealy** has been named EVP and Gen. Counsel at First Data, (770) 690-4201 fax (770) 690-4200. **Thomas Malin**, formerly at Electronic Data, has been appointed SVP Global Dev. at Equifax, (813) 556-9000, fax (813) 556-9051. **Stephen Schapp** has been promoted to EVP Emerging Elec. Pymts at Visa International, (650) 432-1983, fax (650) 432-8936. **Michael Perry** has been promoted to Mng. Dir. at U.S. West Card Services, (602) 351-5643, fax (602) 954-4373. **John Clark**, formerly at Salomon Smith Barney, has been appointed SVP Corp. Devel. at Provident, (415) 543-0404, fax (415) 278-6028. **Ruth Ann Marshall**, formerly President of Bypass, has been appointed VP and Group Executive at its parent company, Electronic Payment Services, (770) 953-2644, fax (770) 916-3331. **Jack Kinick**, formerly at Signet Bank, has been appointed SVP heading the credit card program at Mellon Bank, (412) 236-2860, fax (412) 236-1967. **Joanne De Laurentiis**, formerly at Interac Assoc., has been appointed President at Mondex Canada, (416) 348-6975, fax (416) 348-5639. **Michael Malahy**, formerly at De La Rue, has been appointed VP Mktg. and Sales at Smart Card Solutions, (414) 369-3400, fax (414) 369-3401. **Joseph Schuler**, formerly at Schlumberger, has been appointed SVP Bus. Development at The Pathways Group, (707) 546-3015, fax (707) 546-4041. **John Fullmer** has been appointed EVP and Chief Mktg. Officer at Cendant, (203) 965-5184, fax (203) 977-8501.

CONFERENCES & SEMINARS

IQPC PROCESSING & ACQUIRING IN LATIN AMERICA: Mar. 30-April 1, 1998, Hotel Inter-Continental, Miami, Florida. \$1,995. Subscribers to The Nilson Report who identify themselves will receive a 20% discount on registration fees. Contact Michael Siliiano, (212) 885-2768, fax (212) 885-2775. **ICM PROACTIVE COLLECTION STRATEGIES**: May 14-17, Grand Hyatt, New York City, New York. \$290. Contact Marti Revor at NARCA, (314) 428-6190, fax (314) 428-0810.

JOB MART - POSITIONS AVAILABLE Subscribers pay \$300 per 100 words (nonsubscribers \$500).

CHECK GUARANTEE COMPANY Nationwide provider seeks a proven sales professional with a successful record for the position of **Midwest Regional Sales Manager**. Opportunity to represent a unique service with top market share in the West. We prefer a candidate who is currently and successfully employed. Full-time position includes: competitive compensation package with base salary, commissions and incentives, and offers self-management opportunity. Chicago area preferred with residential office. If you have great people skills and want a realistic high income, please send your resume and salary history required to: National Sales Manager, P.O. Box 232220, San Diego, CA 92193-2220.

EMBOSSING SERVICE BUREAU seeks **Experienced Plastic Card Salesperson** for Bank Credit/Debit Cards, Telephone Calling Cards, Supermarket and Promotional Cards. Please send resume to: Pethu Velu, Global Card Service, P.O. Box 621, Downers Grove, Illinois 60515.

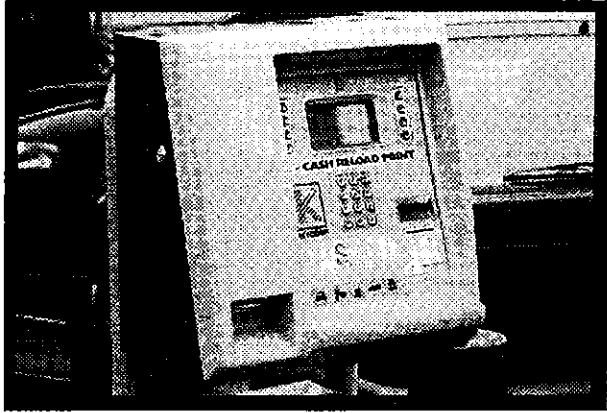
HARLEY-DAVIDSON CREDIT & INSURANCE a national finance/ insurance company, seeks a **Compliance Officer**. Responsible for the overall regulatory compliance including CRA of a national CEBA Bank. Design and implement compliance review for all bank card functions. Ability to quickly evaluate policies and procedures for proper compliance and invoke programs to reflect same. Strong presence and presentation skills. A performance-oriented, resourceful, and decisive individual who works well independently or as a team player. High level of experience in lending and consumer finance programs with a CEBA or national bank required. Forward resumes to Personnel Administrator, Harley-Davidson Credit & Insurance, 4150 Technology Way, Carson City, NV 89706, fax (702) 886-3692.

DELUXE FINANCIAL SERVICES seeks **Field Sales Specialist** to sell fast-growing payment protection and direct response/database marketing products and services to financial institutions. Deluxe is a leader in paper and electronic payment services and has been moving swiftly into the high-growth payment protection and direct response markets. Territories available: Minnesota, Chicago, Boston, North Carolina, Ohio and other major U.S. markets. Requirements: Team player with 5+ years experience in any combination of financial services, technical sales, software sales, system integration, payment protection or direct response. Strong presentation, communication and negotiation skills. Analytical skills to perform cost-benefit analysis, manage quotas, and prepare budgets. Network builder who can leverage relationships into a team-selling environment. Bachelor's degree or equivalent business experience. Resume to Deluxe Corporation, Debbie Maxwell (NR), 3680 Victoria St. N, Shoreview, MN 55126. Fax (612) 481-4357. Visit our web site: www.deluxe.com.

DE LA RUE CARD SYSTEMS seeks an experienced **National Sales Manager** for its U.S. card personalization business. We are in search of an individual who possesses strong organizational, training, and management skills and the ability to aggressively expand our national service bureau business. Previous experience managing major account sales required. Knowledge of telephone and banking industries a plus. If you possess the experience and the ability to manage and train a world class sales organization, submit your resume (with salary history) in complete confidence to: De La Rue Card Systems, Attn: HR Department - NR, 4250 Pleasant Valley Road, Chantilly, Virginia 20151, or fax to (703) 502-6840.

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Keycorp (from page 1) ... programs. In the city of Leeds, terminals have been installed by Abbey National, Barclays, Cooperative Bank, Halifax, Lloyds TSB, and Royal Bank of Scotland. The banks will collectively issue 70,000 reloadable Visa Cash cards functioning as prepaid cards at the point of sale using monetary value stored in the microprocessor chip. Keycorp has also sold 23 model K80 terminals to NatWest for use in its Mondex stored-value chip card program in Swindon.



K80 terminals do not dispense cash — they load new cash value in chip cards by reading credit or debit account data encoded in a magnetic stripe added to chip cards or in the stripe on a separate card. Data is transmitted via a dial-up telecommunications link to Visa or NatWest (Mondex) for approval. K80 provides cardholders with a transaction history that can be viewed on the screen or printed on a mini statement. The K80 can be mounted on a wall, through a window, or on a free-standing pedestal. Cost in the \$3,300 to \$6,600 range depends on quantity and configuration. Ted Satchell is Managing Director at Keycorp (Europe) Ltd. in Warrington, United Kingdom, 44 (1925) 629-003, fax 44 (1925) 629-029. Prior issues: 630, 629 □

.....

CSC (from page 1) ... from Computer Sciences Corp. Newly available CAMS II software is an on-line real-time system operating on IBM mainframes, and is fully functional on a DB2 relational database that gives users more flexibility in managing information. Inquiries and updates can be made 24 hours a day, 7 days a week. The system posts all transactions in real time to constantly update how much of each cardholder's line of credit remains unused. CAMS II provides individualized pricing to merchants and cardholders and allows issuers to give customers one card to access a line of credit, access funds on deposit, and also perform other banking functions.

CSC CARD SOFTWARE CONTACTS

Andrew Sprey is Managing Director Banking for Europe in Woking, U.K., 44 (1276) 411-803, fax 44 (1276) 411-992.

Bruce Hillis is Consultant Manager Latin America in Dallas, Texas, (972) 341-6326, fax (972) 386-0315.

Lee Volante is Asia/Pacific Regional VP in Singapore, (65) 221-9095, fax (65) 223-5130.

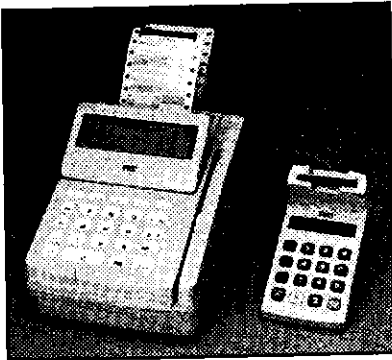
Faith Trapp is VP in Dallas, Texas, (972) 341-6962, fax (972) 341-6321.

Computer Sciences Corporation entered the card payment processing business in 1996 when it acquired Hogan Systems, developer of CAMS software. Users include Garanti Bank in Turkey, Itacard in Italy, Deutsche Bank in Germany, Banco Comercial in Portugal, ANZ and Suncorp/Metway in Australia, First National in South Africa, and First Chicago NBD in the U.S.

HOSTILE TAKEOVER

Computer Associates has launched a hostile takeover bid for Computer Sciences Corp. CA ranks third largest in the world among independent software makers behind Microsoft and Oracle. The combination of CA and CSC would create an \$11-billion information systems company specializing in database and systems management software, systems integration, and consulting services.

CSC is primarily a computer consultancy and systems integration firm. It employs more than 44,000 in over 600 offices worldwide. Revenues of \$6.3 billion last year were up 17%. CSC's Financial Services Group, which includes card processing software, maintains the world's largest inventory of banking and insurance-application software programs used by over one thousand clients in 50 countries. Prior issues: 623, 562, 549, 527, 523, 514, 511, 508, 505, 504, 497, 496, 495, 492, 485 □



TEC Terminal (from page 1) ... chip cards is available from the TEC affiliate of Toshiba. Model IT-10 reads both mag-stripe and chip cards ... the liquid crystal display is 15 characters by four lines ... the built-in sprocket printer alerts clerks to restock the paper supply before receipts run out ... the PIN pad peripheral plugs into the chip card reader/writer. Model IT-10 is currently available only in Japan, but will soon be available in other markets where TEC sells POS systems and where microchip cards are used for payment or loyalty functions. Unit price is \$1,200. Since 1982, TEC has been selling EFT/POS terminals for use with its own brand of

electronic cash registers and PC-based POS systems. Last year it shipped 1,000 units. In Japan, TEC has an installed base of 100,000 point-of-sale units including stand-alone terminals, ECRs, and PCs. Seiji Suzuki is VP and Director Executive Retail Systems Group at TEC Corp. in Shizuoka-ken, Japan, 81 (55) 876-9320, fax 81 (55) 876-9856. □

7-Eleven (from page 1) ... customers cash checks, pay bills, transfer money, buy money orders and phone cards, and withdraw cash either as an advance against their credit card or as a withdrawal against their debit card. Southland Corp., owner of 7-Eleven stores, will build the centers around NCR automated teller machines. For 7-Eleven, NCR will integrate its Personas 75 model, which includes a document-processing module that scans the MICR number on checks and a coin dispenser module that cashes those checks to the penny, with a currency-acceptor terminal manufactured by Mars Electronics and with Western Union's money-order printer manufactured by DH Print. NCR will handle installations and provide project management, level-one and level-two maintenance, and cash-management services for all 7-Elevens. Bill Allen is Marketing Director at NCR Corp. in Dayton, Ohio, (937) 445-2555, fax (937) 445-4550.



Financial Services Centers. To obtain check-cashing services, customers pay a \$2.50 sign-up fee and a per-transaction fee ranging from 1.75% to 6% of the face value of the check depending on the check issuer. Photographs of customers are taken using built-in video cameras when customers sign up. Those photos are subsequently used as part of the check-authorization process for some transactions.

The terminal can accept cash from customers in exchange for money orders, wire transfers, or prepaid phone cards. The currency acceptor will also be used when the financial centers add a bill-payment service. Western Union money orders will cost 49¢ and Western Union money transfers will vary according to how much is being transferred and where it is being sent.

AFFILIATED COMPUTER SERVICES developed the idea of adding financial services centers to convenience stores and presented it to Southland. ACS will provide systems integration and operation of ATMs. All transactions will be routed to the ACS host computer to be handled in-house for check verification, switched to Western Union for money transfers and money orders, switched to AT&T for prepaid telephone cards, or switched to regional or national ATM systems for cash advances and withdrawals. ACS, which has filed four patents that relate to how these payments are processed within the system, operates more than 12,500 ATMs in the U.S. and owns about 1,000 of them. As operator of the MoneyMaker regional EFT network, ACS also provides authorization services for more than 1.2 million ATM cards issued by financial institution members in twelve states. Kip Hyde is VP Electronic Commerce at Affiliated Computer Services in Dallas, Texas, (214) 841-8124, fax (214) 824-7781. □

ATM/CD Shipments (from page 1) ... all world markets. Of twenty-seven manufacturers in the world, eight firms headquartered in the U.S. and two headquartered outside the country shipped a total of 48,901 units to the U.S., an increase of 42% over 1996.

CASH DISPENSERS. Growth continued to be fueled by demand for off-premises installations of limited-function cash dispensers — units that have been designed primarily to dispense cash, but may also have other features that increase profitability for owners such as the ability to dispense coupons, stamps, and other media. Shipments were up 74% and accounted for 74% of total shipments in the U.S. last year, up from 32% five years ago.

AUTOMATED TELLER MACHINES. Six of the ten vendors serving the U.S. market — Diebold, NCR, Fujitsu, Siemens Nixdorf, Digital Equipment, and Citicorp — shipped full-service ATMs, which accept deposits in addition to providing cash-dispensing and other functions. Shipments of 12,556 units last year were down 6% from 1996. Over the past five years, 58,479 new full-service ATMs were shipped, compared to 85,165 limited-function cash dispensers.

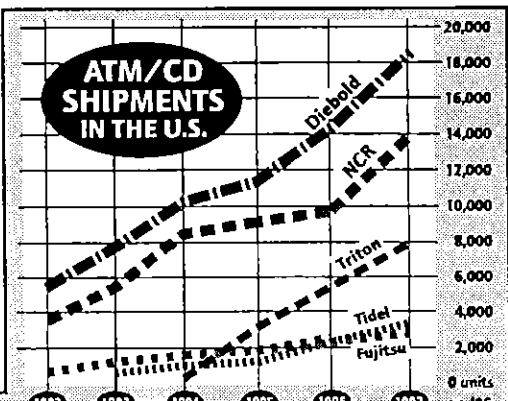
REVENUES. The sale of new ATMs/CDs generated more than \$750 million in revenues last year. Full-service ATMs, with prices in the \$19,000 to \$45,000 range depending on configuration, and which average about \$28,000 per unit, accounted for 47% of revenues or \$351 million. Cash dispensers, with prices in the \$6,000 to \$14,000 range depending on features and functions, accounted for 53% of revenues or \$403 million. Seventy-five percent of revenues from these

CD shipments were for high-end types sold by Diebold, NCR, Fujitsu, and Siemens Nixdorf. The remainder was divided up among manufacturers of v-end dial-up units that cost in the \$1,000 range before distributor mark-ups.

Diebold shipments increased 31%, enough to maintain the top market share of 37.6%. That share, however, represented a decline from 40.8% because of strong competition from NCR and from others that manufacture dial-up cash dispensers only, such as Triton, Tidel, ATM Innovations, and TBS. **NCR** shipments, which were up 45%, increased its U.S. market share to 28.4% from 27.7%. The company did particularly well selling cash dispensers, including some shipped with software acquired from mp for TBS First.

Triton Systems had its market share drop to 15.8% from 16.2% even though its shipments of CDs grew by 39%. Shipments by **Tidel** increased by 55% and its share grew to 6.6% from 6.0%. **Fujitsu** shipments increased by 28% but its market share dropped to 5.7% from 6.3%. **ATM Innovations** shipments increased by 126% and its share reached 3%. **TBS**

First shipments were up 1,733% in its first full year of production. **Siemens** shipped 343 cash dispensers in its first full year in the U.S. **Citicorp** continued to manufacture only for Citibank branch locations. However, it has closed down that business and will use NCR as its vendor this year. **Digital Equipment Corp.** shipments declined 14%. P 39 □



Manufacturer	1992	1993	1994	1995	1996	1997	% vs. '96
Diebold ^(a)	5,346	7,784	10,415	11,361	14,017	18,375	+31%
NCR ^(b)	3,500	5,374	8,294	7,055	9,536	13,864	+45%
Triton	0	0	75	2,921	5,582	7,739	+39%
Tidel	0	210	975	945	2,096	3,240	+55%
Fujitsu	800	1,200	1,450	1,812	2,175	2,781	+28%
ATM Innovations	0	0	0	23	630	1,423	+126%
TBS First	0	0	0	0	60	1,100	+1733%
Siemens	0	0	0	0	0	343	+5617%
Citicorp TM	77	73	122	165	244	18	-93%
Digital	0	12	62	41	21	18	-14%
TOTAL	9,723	14,653	21,400^(c)	24,323	34,367	48,901	+42%

(a) Called InterBold in prior years. (b) NCR's 1997 figure does not include 125 units manufactured by TBS First carrying the NCR brand. (c) Includes five units shipped by Dassault and two shipped by SID. ©1998 The Nilson Report

ATM/CD Upgrades (from page 1) Most upgrades occurred in the U.S. where they equalled the number of shipments of new full-service ATMs. Upgrades are the replacement of one or more modules in the checklist at right. The most common reasons for retrofitting machines are when banks merge and need to standardize all terminals owned by one institution; when ATM owners expand their networks, or when the decision is made to modernize all terminals by increasing their functionality. By upgrading units already installed, banks ensure that their cardholders get the latest service options without having to compromise a strategic marketing/advertising objective best served by uniformity of all terminals in a network.

Upgrading terminals extends their life cycle by two or three years for older units from NCR and Fujitsu, and by eight or nine years for Diebold units up to 12 years old. Owners benefit from upgrading because it protects their investment. Manufacturers benefit by keeping customers whose loyalty over time is as important as revenue that would be realized from selling new machines. Upgrades cost about 25% of what new modules cost, ranging from \$2,000 to \$10,000 per module. Sales of upgrades can account for 10% to 30% of some vendors' revenues, not counting revenue from servicing.

Many owners choose to add hardware upgrades at the same time they add necessary software upgrades, such as those for the year 2000. Modularly designed components of all current ATM models have been engineered to be retrofitted. Older ATMs whose components were not modularly designed can also be upgraded, but first they must be hard-wired to make the new equipment fit — a process that is more expensive, requires more down time, and can't raise terminals to state-of-the-art quality. Upgrading hasn't caught on outside the U.S. yet, but it will — especially in Europe where network operators will be forced to install new software to handle euro currency. □

UPGRADING CHECKLIST

- Check Cashing Module
- Improved Displays including larger CRT, color
- Statement/Passbook/Money Order Printer
- Video
- Thermal Printer
- Touch Screen
- More Powerful Processor
- Dispenser (for travelers cheques, stamps, coupons, etc.)
- Card Reader
- Facelift improving ADA compliance

DIEBOLD

DIEBOLD has led the industry in introduction of modularly designed ATMs. All models shipped since 1986 can be upgraded to look and perform at the same level as new units shipped this year. Diebold has shipped 56,000 upgrade modules during the past five years including 19,931 last year.



NCR has installed over 60,000 third-generation models (5070/5085/5088). All can be hard-wired and upgraded to fourth-generation terminals (models 5600/Personas). Upgrades over the last five years have exceeded 40,000, about 40% in the U.S.

FUJITSU ICL

FUJITSU has been selling ATMs with modular architecture designed for easy upgrades since 1990. This year, Fujitsu estimates upgrades will account for 12% of their hardware revenue.

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Card Contractors (from page 1) ... agencies have been granted to six issuers of general purpose cards: American Express, Citibank, First Chicago, Mellon, NationsBank, and U.S. Bancorp. The five bank card issuers all use Total System Services for processing.

Last year, government employees charged \$9.74 billion on cards issued under existing contracts that expire in November — \$5.93 billion on 250,000 U.S. Bancorp Visa purchasing cards, \$3.68 billion on 1.5 million American Express travel cards, and \$134 million on 380,000 Wright Express automobile/aviation/marine fleet fueling and service cards (most were in use only part of the year).

Prices, terms, and conditions of the five-year contracts negotiated by the General Services Administration on behalf of all federal agencies become effective November 30, 1998, and have five one-year renewal options. Presentations from each contractor to federal agencies began this month. Prior issues: 646, 641 □

CARD PRODUCTS FOR GOV'T EMPLOYEES	
Purchasing Cards	Brands
American Express	Amex
Citibank	MC/V
First Chicago	MC
Mellon Bank	MC
NationsBank	MC/V
U.S. Bancorp	V
T&E Cards	Brands
American Express	Amex
Citibank	MC/V
NationsBank	MC/V
U.S. Bancorp	V
Fleet Cards	Brands
American Express	Wright
Citibank	MC/V
U.S. Bancorp	V

Amex = American Express, Wright Express will act as a subcontractor to American Express for fleet cards. MC = MasterCard, V = Visa, including Voyager for fleet.

GOVERNMENT CARD CONTRACTORS

American Express Dan Goren is Senior VP in Arlington, Virginia, (703) 312-8392, fax (703) 528-2385.

Citibank Cathleen Raffaelli is Executive Director Commercial-Cards in Stamford, Connecticut, (203) 975-6210, fax (203) 975-6712.

First Chicago NBD Anna Rumsey is First VP, Head of Comm. Card Serv. in Chicago, Illinois, (312) 732-3368, fax (312) 732-1485.

Mellon Bank Joseph Schneider is Government Sales Director in Pittsburgh, Pennsylvania, (412) 236-4272, fax (412) 236-0485.

NationsBank Scott Collary is Senior VP in Charlotte, North Carolina, (704) 386-4941, fax (704) 386-9957.

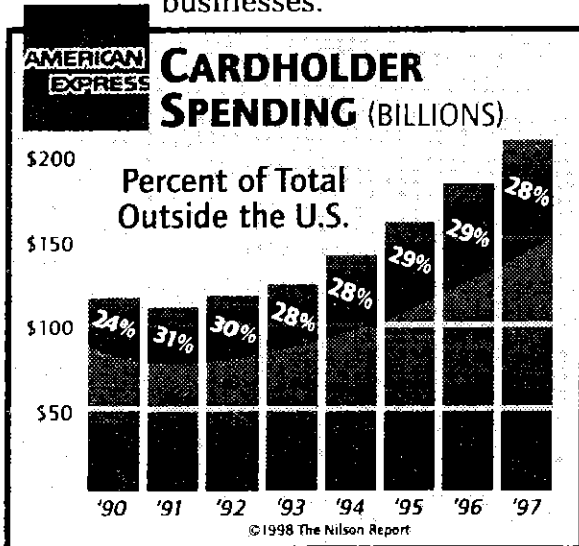
U.S. Bancorp Steven Putney is President Corporate Payment Systems in Minneapolis, Minnesota, (612) 973-7610, fax (612) 973-7651.

(from page 1) ... 1996. These cards generated \$58.70 billion in volume, up 16.1%. Outstandings tied to revolving credit cards issued outside the U.S. reached \$1.20 billion, up 20%. Amex Travel Related Services, the unit that owns card-issuing businesses in 52 countries, has agreements with a growing number of companies to issue cards in some of those markets and in 16 additional countries where TRS doesn't own card businesses.

AMERICAN EXPRESS WORLDWIDE

Billions	1997	Change
Total Volume	\$209.20	+15.2%
U.S.	\$150.50	+14.9%
Non-U.S.	\$58.70	+16.1%
Purchases	\$206.94	+15.4%
U.S.	\$149.00	+15.0%
Non-U.S.	\$57.94	+16.4%
Cash Advances	\$2.26	+4.1%
U.S.	\$1.50	+7.1%
Non-U.S.	\$0.76	-1.9%

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There are four types of TRS partnerships. **Co-brand Agreements** in which Amex issues cards and the partner handles the marketing. The agreements exist in five markets outside the U.S., including France (Credit Lyonnais), Canada (Air Miles), and Mexico (Banco Bital) launched in 1997. **Independent Operator Agreements**, which exist in 16 markets, give TRS partners a nonexclusive license to issue cards using Amex proprietary card designs and to acquire transactions from those cards in their own domestic markets. Partnerships with Komerčni Bank in the Czech Republic and Credomatic covering Costa ... (turn to page 10)

THIRD 50 BANK CREDIT CARD ISSUERS IN THE U.S. – 1997

Issuer, State of Issuance	Type	'97 Rank	'96 Rank	Outstandings	Total Volume	Total Accounts	Active Accounts	Credit Cards	Visa Cards	MasterCard Cards
Amalgamated Bank Ill.	CB	101	108	\$106,181,259	\$276,875,167	110,792	68,884	146,899	0	146,899
Orange County Teachers FCU Calif.	CU	102	111	\$101,000,000	\$165,000,000	72,800	51,300	95,000	78,100	16,900
Standard Federal Bank Mich.	TH	103	115	\$98,600,000	\$202,438,800	90,708	56,233	110,664	110,664	0
Digital Employees FCU Mass.	CU	104	126	\$97,169,040	\$115,786,300	29,838	25,282	35,405	35,405	0
First Nat'l Bank of Ohio Ohio	CB	105	112	\$95,916,031	\$195,779,827	85,272	57,042	103,869	95,632	8,237
Baxter Credit Union Ill.	CU	106	120	\$89,409,084	\$194,320,901	55,560	43,306	82,297	70,339	11,958
Pullman Bank & Trust Ill.	CB	107	118	\$88,208,000	\$61,040,000	104,000	98,025	97,800	97,800	0
Security Service FCU Texas	CU	108	121	\$82,632,806	\$108,007,903	55,097	38,465	75,651	61,708	13,943
Texas Independent Bank Texas	CB	109	117	\$82,507,643	\$227,432,612	136,433	90,241	173,765	109,637	64,128
San Diego County CU Calif.	CU	110	122	\$82,200,000	\$100,700,000	48,300	40,170	59,400	59,400	0
Security National Bank Okla.	CB	111	125	\$81,100,000	\$123,200,000	72,500	48,000	87,800	75,500	12,300
Suncoast Schools CU Fla.	CU	112	127	\$79,458,655	\$139,204,471	66,206	53,776	94,734	65,013	29,721
Franklin Bank Calif.	NB	113	113	\$77,703,319	\$101,733,616	86,084	56,856	81,051	39,564	41,487
State Employees' CU N.C.	CU	114	130	\$77,490,659	\$143,867,623	115,847	90,424	149,832	149,832	0
One Valley Bank W. Va.	CB	115	116	\$77,393,592	\$178,220,500	47,309	42,578	43,902	15,527	28,375
Municipal Credit Union N.Y.	CU	116	123	\$76,900,000	\$70,523,773	50,337	37,927	50,337	50,337	0
Jax Navy FCU Fla.	CU	117	124	\$76,672,000	\$119,610,000	83,490	61,923	83,490	69,648	13,842
Redstone Federal CU Ala.	CU	118	143	\$75,449,176	\$131,608,054	47,809	36,459	67,833	47,164	20,669
Wescom Credit Union Calif.	CU	119	129	\$72,373,936	\$111,680,281	53,081	38,679	71,212	71,212	0
Eastern Financial FCU Fla.	CU	120	141	\$67,662,878	\$77,541,691	44,116	33,608	44,116	16,697	27,419
Citizens Equity FCU Ill.	CU	121	132	\$66,854,142	\$122,306,616	54,434	38,310	54,434	54,434	0
Provident Bank Ohio	CB	122	138	\$66,339,986	\$120,654,907	86,975	58,394	92,345	83,327	9,018
America First Credit Union Utah	CU	123	135	\$66,313,434	\$145,804,768	58,997	37,021	86,847	86,847	0
Belco First FCU Colo.	CU	124	139	\$65,270,000	\$111,000,000	56,910	53,865	62,600	29,422	33,178
Desert Schools Federal CU Ariz.	CU	125	136	\$64,149,996	\$135,035,040	60,696	45,273	80,428	80,428	0
GTE Federal Credit Union Fla.	CU	126	137	\$64,061,778	\$88,558,345	42,515	33,530	42,515	31,725	10,790
Tyndall Credit Union Fla.	CU	127	144	\$63,844,270	\$67,747,553	22,913	19,239	34,369	34,369	0
Wash. State Employees CU Wash.	CU	128	145	\$62,984,861	\$107,230,252	33,080	27,856	44,658	44,658	0
Alaska USA Fed. CU Alaska	CU	129	140	\$62,820,300	\$103,733,500	50,451	29,844	73,453	73,453	0
Wilmington Trust Del.	CB	130	134	\$62,382,990	\$165,653,019	58,220	43,462	87,330	31,889	55,441
Trustmark National Bank Miss.	CB	131	133	\$61,795,357	\$140,599,811	71,050	48,618	96,127	45,708	50,419
Sanwa Bank Calif.	CB	132	152	\$61,272,969	\$118,319,402	27,907	22,427	36,564	19,342	17,222
First Nat'l of S.W. Ohio Ohio	CB	133	161	\$60,801,584	\$60,636,533	23,876	10,764	24,114	6,687	17,427
Virginia Credit Union Va.	CU	134	165	\$58,217,000	\$70,071,300	32,884	25,830	32,880	21,145	11,735
First Premier S. Dak.	CB	135	204	\$58,027,203	\$88,843,623	245,804	210,533	245,804	175,296	70,508
Visions Federal Credit Union N.Y.	CU	136	159	\$54,906,481	\$104,940,930	37,027	28,734	49,504	41,346	8,158
Centura Bank N.C.	CB	137	149	\$54,890,000	\$120,890,000	58,780	36,569	73,400	22,900	50,500
United Airlines Employees CU Ill.	CU	138	148	\$54,837,328	\$98,919,132	45,042	28,633	45,223	45,223	0
Affinity Federal CU N.J.	CU	139	158	\$54,613,491	\$98,978,784	32,809	23,289	31,864	30,250	1,614
Sovereign Bank N.J.	TH	140	131	\$54,571,999	\$100,198,222	43,711	17,508	54,883	892	53,991
Mission Federal CU Calif.	CU	141	157	\$54,090,153	\$103,047,715	34,252	26,654	49,666	49,666	0
FDS National Bank Ohio	NB	142	245	\$54,000,000	\$101,000,000	49,000	35,280	69,580	69,580	0
Iowa League Corp. Central CU Iowa	CU	143	114	\$53,133,951	\$171,155,688	90,716	68,059	123,097	48,395	74,702
Park National Ohio	CB	144	155	\$52,000,000	\$63,000,000	20,000	14,500	30,727	27,286	3,441
State Employees CU Md.	CU	145	154	\$51,690,230	\$82,775,564	44,390	30,537	66,585	66,585	0
Randolph Brooks FCU Texas	CU	146	--	\$50,918,352	\$109,250,481	37,268	30,598	56,685	0	56,685
California Commerce Calif.	CB	147	167	\$50,809,810	\$96,848,452	45,682	27,620	60,220	40,735	19,485
Nat'l Bank of Alaska Alaska	CB	148	153	\$50,154,697	\$108,289,616	37,347	21,786	46,457	46,457	0
Lockheed FCU Calif.	CU	149	160	\$49,680,280	\$82,650,137	35,131	27,165	50,031	50,031	0
Michigan State Univ. FCU Mich.	CU	150	169	\$48,953,884	\$99,831,230	29,029	26,251	38,318	38,318	0

TOTALS THIRD 50 1997

\$3,420,414,604 \$6,032,542,139 3,022,475 2,217,327 3,695,765 2,715,573 980,192

Type – CB = commercial bank, NB = nonbank, TH = thrift, CU = credit union

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Amex (from page 8) ... Rica, Nicaragua, El Salvador, Honduras, and Guatemala were launched in 1997. **Network Partner Agreements** let companies in seven markets issue cards with the Amex blue-box logo in the lower right corner and use the Amex network without acquiring merchant transactions. Partners signed in 1997 include Credit Saison in Japan, Banco Excel Economico and Sony in Brazil, Banco Popular in Puerto Rico, and Natwest in the U.K. **Joint Venture Agreements**, in which Amex handles the acquiring and partners issue cards using proprietary card designs, exist in Spain, Japan, and the Middle East. Prior issues: 660, 654, 646, 644, 641, 639, 638, 637, 636 □

CREDIT BUREAUS

In the **U.K.**, Experian's credit bureau is the largest in Europe, holding more than 300 million records generated from data supplied by lenders and by public sources such as county court judgments, bankruptcies, and the electoral roll. In the **U.S.**, Experian's credit bureau, which maintains files on 190 million consumers, is the former TRW Information Systems & Services database. In **Brazil**, Experian will open a credit bureau. In **Germany**, Experian and its partner Creditreform will open the country's first credit bureau in April containing positive payment records. In **Italy**, Experian shares positive data on approximately 10.5 million people. In **Kuwait**, Experian and partner KNET expect to open a credit bureau in July. In the **Philippines**, Experian is working with The Bankers Association of the Philippines to open a credit bureau. In **South Africa**, Experian sells application information and third party databases that include judgments and collections data and also sells credit scoring and strategy technologies. In **Turkey**, Experian will open the country's first consumer credit bureau, Kredi Kayit Bürosu, in April.

CREDIT DECISION SOFTWARE

Risk management support along with target marketing designed to acquire new customers is available in most countries in Europe, Asia/Pacific, and the U.S.

Experian (from page 1) ... processing for 200 automated teller machines that generated 15 million transactions last year ... preclearing processing and data capture for 80,000 point-of-sale terminals that generated 300 million transactions last year (about 10 million required authorizations) ... back-office processing for merchants signed to card-acceptance contracts by Société Générale, BNP, and over 30 small and medium-sized banks ...

processing for one billion checks annually. SG2 also provides business information and database marketing, facilities management, and call-center services. Credit card processing services will be offered beginning early next year. Revenues for 1997 were \$136 million with operating profits of \$8 million. Prior issue: 539

EXPERIAN provides credit card processing for seven million accounts through third party businesses it owns in the U.K., Germany, the Netherlands, and the Philippines. Clients are located in 40 countries. Revenues were nearly \$1 billion last year. It employs more than 7,000 people in 80 offices in 16 countries. John Peace is Chief Executive at Experian Group in Nottingham, U.K., 44 (115) 941-0888, fax 44 (115) 934-4575. Prior issues: 657, 651, 647, 642, 638, 636, 633, 632, 628 □

CARD CONTACTS

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- Germany** Toni Calabretti in Hamburg, 49 (40) 899-5000, fax 49 (40) 899-50280.
- Netherlands** Martin van Loon in Utrecht, 31 (30) 241-7111, fax 31 (30) 241-7100.
- Philippines** Ernie da Jose in Pasig City, 63 (2) 635-4251, fax 63 (2) 635-4298.
- United Kingdom** Bill Hislop in Nottingham, 44 (115) 934-4000, fax 44 (115) 934-3540.

February 27, 1998

H. Spencer Nilson