

uniPAY™

A Unified Payment & Card Management System

Innoviti Embedded Solutions

Innoviti is a Titan Industries investee company

Agenda

- ◆ What is uniPAY?
- ◆ uniPAY Architecture
- ◆ uniPAY Benefits
- ◆ Salient Features
- ◆ Summary

What Is uniPAY?

- ◆ uniPAY is a unified payment and card management system for modern retailers, that helps
 - Improve operational efficiency through central management of all forms of payment
 - Provide business intelligence through customer purchase pattern analysis for database marketing campaigns
 - Allows for easy introduction of innovative payment products for higher wallet share

What Is uniPAY...

- ◆ Single platform for multiple programs
 - Credit/debit cards
 - Pre-paid cards
 - Gift cards/coupons
 - Loyalty cards



Issues In Existing Systems

- ◆ Credit/Debit card payment operation managed at store level
 - Challenges in reconciliation, dispute management and resulting delayed payment settlement with bank
- ◆ Gift coupons
 - Limited real-time validation against issuance – leading to fraud
 - Difficult to track location of usage

Issues In Existing Systems...

◆ Loyalty

- Typically limited to only points earn/burn, limited usage for database marketing
- Not linked to business intelligence on customer's payment preference

◆ Pre-paid

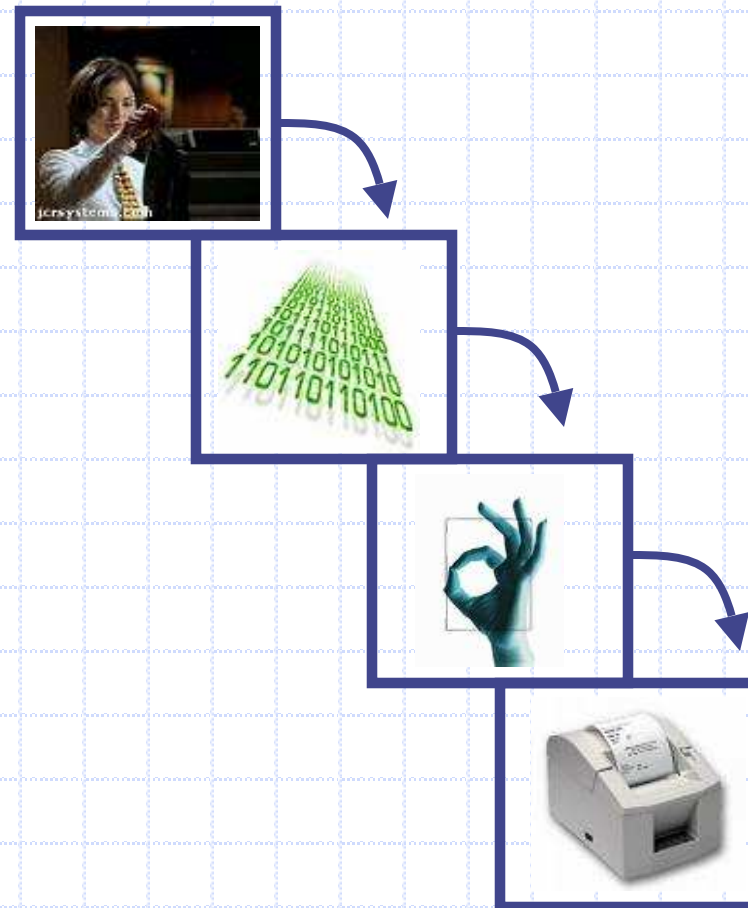
- Limited use in retail due to lack of systems

Who Can Benefit From uniPAY?

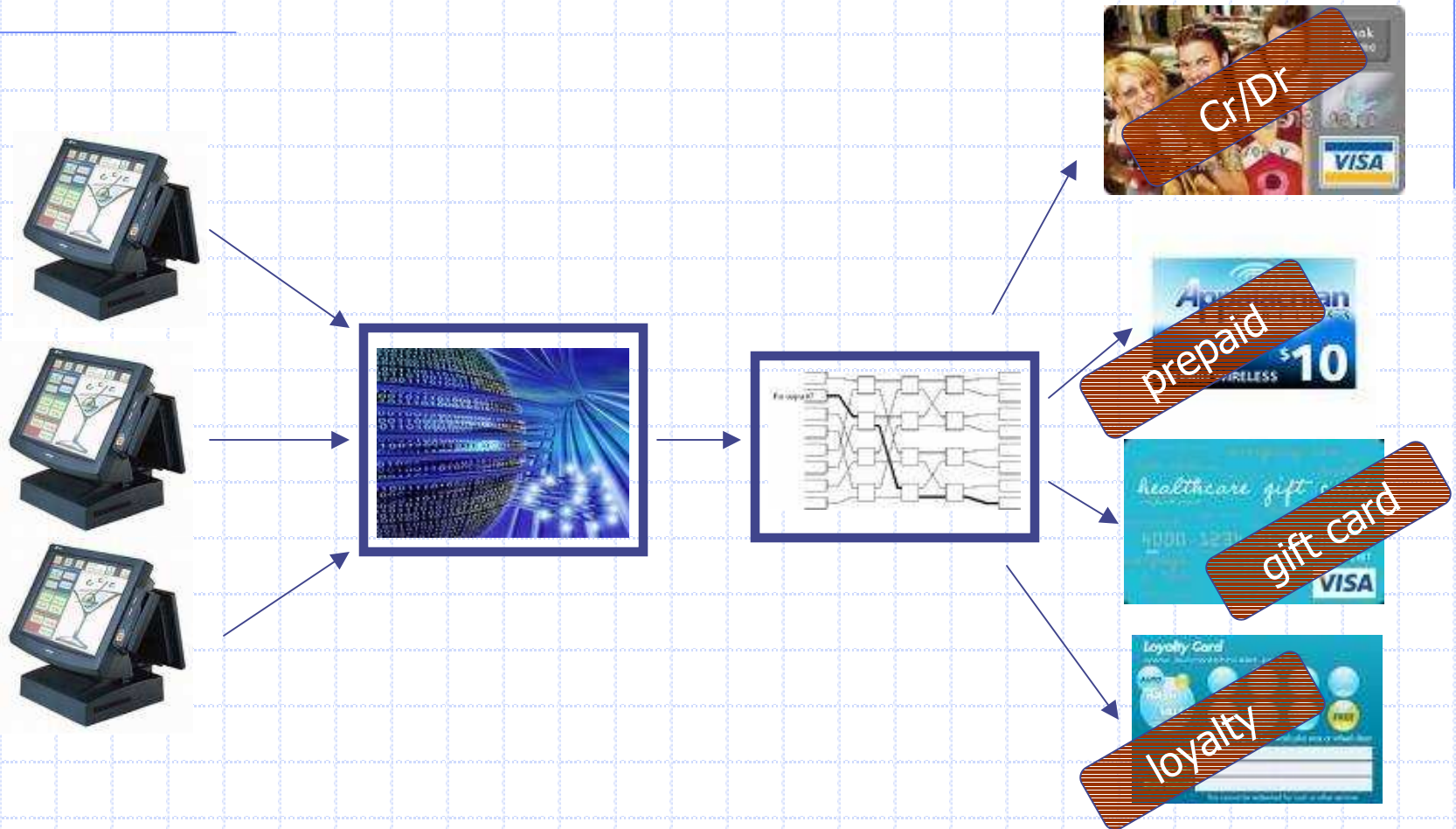
- ◆ Modern retailers and brands,
 - with large number of stores/operations in multiple geographies
 - accepting and promoting multiple payment methods
 - operating in hyper-competitive environments, requiring sophisticated business intelligence for database marketing
 - requiring reduction in speed of transactions

How It Works?

- ◆ Cashier selects payment mode, swipes card
- ◆ uniPAY client connects to uniPAY soft-switch and application server
- ◆ Transaction approval from bank or local database
- ◆ Authorization received at client, charge-slip printed



uniPAY Architecture



uniPAY client

Network

uniPAY
soft-switch

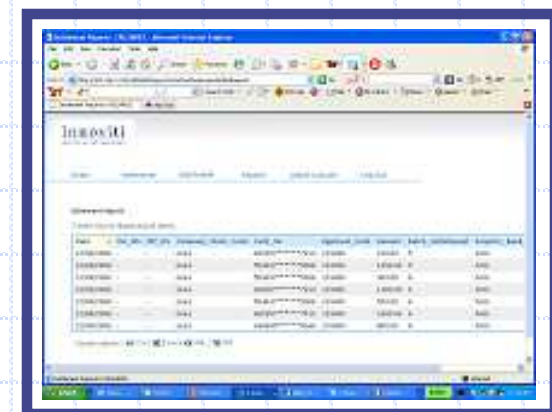
uniPAY
App. server

uniPAY Architecture...

- ◆ Three components:
 - uniPAY client: Installed on a retailer POS system
 - uniPAY soft-switch: Installed in a retailer network/data center
 - uniPAY application server: Installed in network/data center, application components:
 - ◆ Credit/debit card payment
 - ◆ Pre-paid
 - ◆ Gift card/coupons
 - ◆ Loyalty (using Innoviti LIME application)

uniPAY Benefits: Summary

- ◆ Multiple payment options for customers
- ◆ Central management & reconciliation
- ◆ Reports and analysis for finance and marketing



uniPAY Benefits: Payment

- ◆ Consolidate settlement across stores and geographies
 - Reduced human errors, reconciliation, disputes, fraud attempt
- ◆ Seamless recon between billing, payment and bank receipts
- ◆ Transaction time <4s



uniPAY Benefits: Pre-paid Cash/Credit Card

- ◆ Customer SMS and web view for top-ups, spends
- ◆ Retailers can manage corporate accounts with limits, sub-limits, MIS reporting
- ◆ Sophisticated rule engines for value, time based discounts, breakage



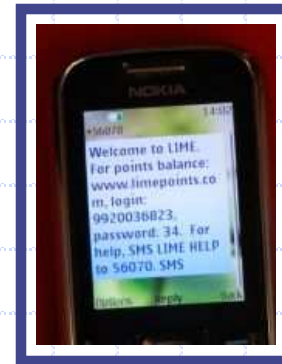
uniPAY Benefits: Gift Cards/Coupons

- ◆ Central issue and monitoring preventing fraud
- ◆ Store level coupon generation to reduce stationary and distribution costs
- ◆ MIS reporting



uniPAY Benefits: Loyalty

- ◆ Web/mobile interface for points balance, redemption
- ◆ RFM reports for database marketing
- ◆ Response reporting for ROI management



Recency	Freq	Monetary (Avg Ord)	2005				2006			2007			2008
			Custs	Buying	% Retn	Sales (000)	Custs	Retn	Sales (000)	Custs	Retn	Sales (000)	Custs
New Customers			17,692	17,672		4,041	15,176	3,677	11,318		2,751		
1. 0-12 mo	1. 2+x	1. Rs201+	6,880	3,897	57%	4,062	7,337	60%	4,884	7,936	58%	4,915	7,604
		2. Rs51-200	16,831	9,211	55%	4,357	16,295	55%	4,198	15,959	54%	3,992	14,875
		3. Rs0-50	3,299	1,236	37%	209	3,376	37%	235	3,191	34%	224	2,901
1. 2+x Total			27,010	14,344	53%	8,628	27,008	54%	9,317	27,086	53%	9,132	25,380
2. 1x	1. Rs201+	1. Rs201+	3,259	662	20%	356	2,899	25%	343	2,686	22%	250	2,354
		2. Rs51-200	7,701	1,260	16%	331	6,054	19%	332	5,800	17%	219	4,726
		3. Rs0-50	6,718	812	12%	165	5,683	14%	166	5,033	13%	133	3,757
2. 1x Total			17,678	2,734	15%	853	14,636	19%	841	13,519	17%	602	10,837
1. 0-12 mo Total			44,688	17,078	38%	9,481	41,644	41%	10,158	40,605	41%	9,734	36,217
2. 13-24 mo	1. 2+x	1. Rs201+	2,401	678	28%	382	2,978	29%	455	2,960	25%	363	3,356
		2. Rs51-200	6,078	1,714	28%	473	7,609	28%	598	7,387	26%	542	7,286
		3. Rs0-50	1,931	383	20%	78	2,062	18%	76	2,109	20%	73	2,117
1. 2+x Total			10,410	2,775	27%	933	12,649	27%	1,128	12,456	25%	979	12,759
2. 1x	1. Rs201+	1. Rs201+	2,844	387	14%	166	2,596	12%	129	2,174	13%	106	2,087
		2. Rs51-200	7,543	841	11%	203	6,438	10%	162	4,882	11%	136	4,820
		3. Rs0-50	6,562	634	10%	105	5,905	8%	91	4,866	9%	66	4,370
2. 1x Total			16,949	1,862	11%	474	14,940	10%	383	11,922	10%	308	11,277
2. 13-24 mo Total			27,359	4,637	17%	1,407	27,589	18%	1,511	24,378	18%	1,287	24,036



System Features And Functioning

Salient Features

- ◆ Designed as per PCI-DSS guidelines
- ◆ Certified by leading banks
- ◆ SSL secure client-server link
- ◆ Supports incremental addition of applications



End-of-day

- ◆ Credit/Debit card
 - Settlement with bank
- ◆ Pre-paid, Gift, Loyalty
 - Settlement with finance
- ◆ Marketing dashboards
- ◆ Database analysis for campaign design



uniPAY Client Specifications

Parameter	Specification
OS	Windows, Linux, customizable for any proprietary OS
Memory required	8 MB
Application interface	XML (customizable)
Communication interface	TCP/IP (over LAN, VSAT, GPRS etc.)
Security	SSL link with server encrypted using 128-bit 3DES
Diagnostics	Error logs, system status reported at regular intervals to server for central diagnostics

uniPAY Soft-Switch & Application Server

Parameter	Specification
OS	Linux (RedHat)
Packages	Apache, MySQL
Application memory	33MB
User interface	Web
Communication interface	TCP/IP (over LAN, VSAT, GPRS etc.)

uniPAY Soft-Switch & Application Server

Parameter	Specification
Hardware requirement	2.x GHz server class dual core machine
RAM requirement	2GB
Storage	Mirrored SCSI disk, 250GB (assuming 600000 transactions per day, storage for 6 months)
Security	PCPOS to CPSS SSL link encrypted using 128-bit 3DES), DBS (128-bit 3DES)
Diagnostics	Software version, error logs, system status reports

Project Engagement

- ◆ Understand retailer POS and network architecture
- ◆ Determine specifications of system required
- ◆ uniPAY client and POS s/w integration
- ◆ Server and network setup
- ◆ Certifications as required

uniPAY: Summary

- ◆ Comprehensive customer card management system
- ◆ Support multiple payment options
- ◆ Centralized reconciliation for easing financial operations
- ◆ Centralized customer database for data mining and analysis to run database marketing campaigns

Case Studies



- ◆ IHCL (Taj Hotels Resorts and Palaces)
 - Using for Taj Epicure (loyalty) program across all properties (225+ installations)
 - All redemption processed in real-time from central server
 - Acceptance of gift coupons and closed-user-group credit cards underway

Case Studies



- ◆ One of India's largest retailers
 - Over 750 outlets with 8000 POS machines
 - Central credit/debit payment acceptance using uniPAY
 - Central management of gift coupons, pre-paid and loyalty using uniPAY



Thank You