



*Market Primer*

# Loyalty & Stored Value Cards

**HOW TO GET A BETTER RETURN ON YOUR INVESTMENT**

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CardLogix Corp. 16 Hughes, Irvine, CA 92618, USA.

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## INTRODUCTION

Since the first airline frequent flyer mile was recorded, the concept of loyalty marketing has been used widely, but not always profitably. Enhancing loyalty programs with new technology won't improve results unless the right business model – and the right technology – is properly applied. This CardLogix White Paper will review loyalty program basics, then discuss cards as the perfect way to wield technology, increase business, protect consumer privacy and boost the bottom line.

Loyalty in retail operations began with the simple concept of retaining customers of all types and discouraging them from taking their business elsewhere. Traditionally, retailers were physically fixed in place, helplessly waiting for a customer visit. Factors such as location, price and brand awareness dialed-in customer targets, but loyalty programs provided an additional edge. Mechanisms for tracking customer rewards were based on the frequency and amount of purchases and ranged from 'Baker's dozen' doughnuts to magnetic-stripe cards swiped through a reader and keeping track of points that generally represented dollars spent.

The next generation of loyalty marketing programs paid close attention to the old '80/20' Rule', helping retailers to mostly focus on a small percentage of the best customers. This added a level of complexity to program execution, but without correspondingly better technology to manage it. Today, loyalty encompasses consumer modeling that strives to attract, manage, and optimize consumer spending over time and across many different purchases. This endeavor requires tremendous integration of consumer, POS and larger sets of enterprise data. These programs must also respect the consumer's ever-growing concern for privacy and security.

According to Jupiter Research, more than 75 percent of consumers now have at least one loyalty card. Research firm Gartner states that U.S. companies spent more than \$1.2 billion on customer loyalty programs in 2003. As loyalty marketing matures, consumers expect these programs to deliver real value, plus a high-impact 'wow' factor that continues to earn their allegiance. At the same time, marketers joining the fray must solidly analyze if a loyalty program is right for their business, as well as how to execute one with profitable results that can be quantified. Within this rising tide of loyalty marketing, there are distinct issues that must be considered before any planning takes place:

**The competition is using their loyalty marketing to win your customers and business.** Consumer expectation is that some form of loyalty awards should be offered just to keep their interest. The absence of any program decreases your competitive parity.

**Customer satisfaction and loyalty is not the same thing.** While customers might report satisfaction with your products and services, many surveys find this does not automatically translate to loyalty, as defined by the customers themselves.

**A loyalty program is not a cure-all.** Loyalty only enhances, and does not replace, the timely delivery of quality products, good service, convenience and other key factors of customer satisfaction.

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## TYPES OF LOYALTY CARD PROGRAMS

Any card that can store value and yield data can be used as either loyalty-only, (accumulates points only) stored value, (accumulates points and monetary value) or both. Types of programs include:

- **Membership programs:** i.e. Costco/Sam's Club/Vons club typically the customer expects a consistent discount on all products purchased by being a member.
- **Simple repeat programs:** i.e. Supercuts punch paper card is a simple reward for a transactional behavior.
- **Rewards and points programs:** i.e. the many frequent flyer and casino player tracking programs that are available. These can be single or multi-tiered compensation for a customer's behavior.
- **Stored Value / Prepaid / Gift programs:** many merchants and food service companies have ongoing successful gift card programs that generate additional revenue streams.
- **Multi-applications programs:** These programs combine a few elements of each of the above to reach their goals; a good example is a gift card that morphs into a rewards card if all the value is spent and can incentivize the holder to share additional demographic data for future promos and repeat visits.

## THE DECISION PROCESS

Deciding to start a loyalty program must initially rely on a clear business justification. Even though every business knows it would probably benefit from some sort of loyalty card program, the challenge is to pose and answer the critical questions right up front. Talking directly to your customers about what they expect from a program is invaluable. Focus groups can also help. Other issues to settle include deciding on your primary business goals. Programs can be tailored to different objectives, such as:

**Incentivize All, or Just Top-tier Customers:** While some businesses seek to increase sales with all customers, analysis might show that just a percentage of higher-spending customers would be incentivized even further with a truly valuable loyalty proposition. Conversely, you might examine some form of motivation with lower-spending patrons.

**Forge/Strengthen Marketing Partner Relationships:** Loyalty becomes a link between your business and companies whose products and services are complimentary to yours. Connections can be by business location (for example, restaurants and movie theaters) or by type i.e. an oil company working with a tire store.

**Increase Market Share Versus Competitors:** A program can key into competitive factors of price, convenience, even prestige to persuade customers away from competitors.

**Smooth-out Revenue Flow:** Boost sales in slow periods of time, (seasonal) at select locations, (in a highly competitive neighborhood) or with high inventory items.

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## SETTING PROGRAM METRICS

These benchmarks help you establish and track ROI goals. The understanding of these metrics will help in the creation of a *financial model* that identifies revenue streams, business opportunities/pitfalls and justifies program expenses.

**Expected Card Issuance:** How many cards do you expect to issue?

**Identified Transactions:** Can you identify all different types of transactions? (Including quantity, method of payment, place, and time).

**Average Customer Value:** What is the average worth of your current customers and each transaction, including gross sales and profit, over time?

**Average Program Member Value (proposed):** What is their expected average worth in sales and in profit after customer acquisition and retention costs?

**Margin:** What is your current overall profit margin? How will changes in margin affect your loyalty program's ROI?

**Current Churn Rate:** A model of current customer attrition.

**Projected Customer Retention Rate:** What percentage reduction in attrition would make your loyalty program profitable? These assumptions are very important for pre-paid stored value programs.

**Funding Rate:** What can your program afford to offer? What increase in customer spending are you expecting? How will rewards be distributed across various customer segments?

**Redemption:** What is the maximum amount of redemption the program can handle and remain profitable? Consider that a high level of program success means a high volume of transactions. This could figure prominently into transaction costs and fees discussed in more detail below.

**Float:** Consider the interest earned on the outstanding stored value remaining on the cards that is nominally maintained as members accumulate points/value toward rewards. This is particularly important with gift card program calculations.

**Breakage:** This is the money that is never redeemed from stored value cards. As an issuer, you can use this, as well as convert card value that is never redeemed.

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### ***Points Of Purchase (Present and future)***

Since the cornerstone of a successful loyalty program is to fine-tune your customer knowledge base to increase sales, you must consider the places where your customers might buy from you today and in the future. Especially problematic are 'mystery customers' who are poorly profiled.

For example, many retailers misjudged the initial importance of customers shifting their purchases to the web. Bear in mind that each point of purchase comes with an associated customer acquisition, retention and transaction cost.

Typical delivery channels will include:

- Retail stores
- Other channels, such as distributors
- Internet
- Catalogs
- Related businesses

How customers pay for products is also important. Typical payment methods include:

- Cash
- Debit/ATM
- Check
- Credit
- Gift card/Stored Value Card or certificates
- Coupons & paper punch cards

And, a customer's preferred payment method is also significant. It is suggested that you:

- Identify restrictions, such as the possibility of children paying with checks or a credit card
- Identify opportunities and trends, such as migrating sales to a different payment method

## **THE VALUE PROPOSITION**

As loyalty marketing matures, consumers need ever-more compelling reasons to give your program a try, much less stay with it. Loyalty marketing has become so prevalent that customer expectation is very high. Apart from rewards, customers have been turned-off by the lack of real value in many loyalty programs, as well as a merchant's poor execution of them.

A clear definition of what your company is offering to your customers in exchange for a change in their behavior is your value proposition.

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In addition to getting feedback from customers first-hand, your assessment of what to offer should also cover promotion of your program.

This includes getting all the staff on board to fully understand the concepts, so they fully execute. The weak program link is often the unhelpful or poorly trained employee.

The redemption process is critical. Think through how to sustain value and a relationship with the customer through the nuts and bolts of converting points to rewards.

## **THE PROGRAM MECHANISMS**

As important as program planning is, the actual mechanism, or card, that customers use to participate in a loyalty program has undergone tremendous change. The discussion below excludes non-machine readable cards, such as paper punch and 'show only' plastic cards.

### **Consumers require:**

- A knowledge of what your value proposition is.
- A clear understanding of how the program works.
- Accurate tracking of accumulated points or value.
- A convenient way to carry, store, and query for points and value.
- Quick and easy redemption.

### **On the merchant side, requirements for loyalty mechanisms are:**

- Accurate reporting on usage and outstanding balances.
- Data integration with their computing system.
- Manageable cost for issuance, upgrades and redemption.
- Creation of real value for sustained customer retention, in addition to simple redemption (not just 'another card').

### **When considering your system, questions to answer include:**

- What customer information should we track?
- How do we get the customer to give us this data?
- How will I distribute the cards?
- How will cards be activated and loaded with value?
- What type of card traceability should I implement?
- What is the minimum and maximum value each card can store?
- Is the card for loyalty rewards only or for other functions, such as stored value?

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- Should card access depend on access to a separate database? Or be standalone within the card?
  - How many different card artworks will be included in the issuance?
  - Who will do the artwork?
  - Will there be a refund policy?
  - How many cards will be needed?
  - Required fraud protection, especially for web transactions.
  - How often will the cards need updating, i.e., adding new stores, partners, program features etc?

How the program should work is the basis of your requirements document. Every detail from enrollment through redemption to end of card life should be described.

## THE TECHNOLOGY INFRASTRUCTURE

The integration of a card loyalty component into an existing computing infrastructure involves how card data moves from the point of use, interacts with larger system data and how securely it must be maintained. The main components of all loyalty systems are system architecture, card acceptance devices, cards and related software.

Make sure that your system has adequate processing power, bandwidth, data storage and network compatibility. Knowing your overall system is a key in your evaluation.

### System Architecture

This is the framework for the loyalty program and card. Card technologies vary in the amount and level of data processing they can handle, but ultimately all types integrate into a larger system where other, related processes take place, such as accounting, POS, etc. The three types of system architecture are:

- **Client-Server:** In this architecture, a transaction causes the client (a terminal or PC-based POS) to query value or reward information from the host computer. Because the card merely 'points' to the centrally located data, there is no transaction done on the card and no value is stored there. With each card use, a query must occur to determine and update point status. If your program involves a single point of purchase and you keep your data locally, this is the most cost-effective system. Typical card types are bar-code or magnetic-stripe. If your system has to dial out on a line for a query, this architecture represents the longest transaction time, thus being inappropriate for certain venues.
- **Distributed:** The terminal and card transact value at the point of transaction, with no reference back to a central host. Data and value are processed real-time at the time of the transaction. Smart contact and contactless cards are the norm in this type of system. Typical applications are stored value telephone or transit systems.



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- **Hybrid:** The terminal and card transact value at the point of transaction. Data is collected from the card transaction on the terminal or PC and is batch uploaded regularly to a host computer to reconcile card and central database information and re-synchronize the data. Typical applications are multi-location retailers, casinos and restaurants. Typical card types are contact smart cards. A well-deployed hybrid system can give a card issuer complete interoperability among POS suppliers and can enable *card-present* web transactions.

### **Card Acceptance Devices**

These devices are the link between the card user and the computing system that executes the loyalty software.

*For the sake of clearly defining all of the different hardware devices that cards can be used with, the card industry has adopted the following definitions:* The term "**Reader**" is used to describe a unit that interfaces with a PC or other terminals for the majority of its processing requirements. In contrast a "**Terminal**" is a self-contained processing device.

Typically, terminals and readers can read magnetic-stripe cards and many can read and write to smart cards. Readers come in many form factors and in a wide variety of capabilities. Physically, they can be as small as a matchbook and configured as part of an attended POS station or in a non-attended kiosk. The easiest way to describe a reader is by the method of its interface to a PC. Smart card readers are available that interface to RS232 serial ports, USB ports, PCMCIA slots, floppy disk slots, parallel ports, infrared IRDA ports, keyboards and keyboard wedge readers. Another difference in reader types is their amount of on-board intelligence and capabilities. Large price and performance differences exist between an industrial strength intelligent reader/writer that supports a wide variety of card protocols and a home style card reader that only works with microprocessor cards and performs all processing of the data in the PC. The options in terminals are just as varied. Most units have their own operating systems and development tools. They typically support other functions such as magnetic-stripe reading, modem functions and transaction printing.

**Balance Checkers:** These are small key-chain style readers that can read a contact smart card value or points. Some of these devices can also read back the last 4 transactions from a file stored on the card.

### **Card Acceptance Device Considerations**

- **Versatility:** How many different types of cards can the device handle? i.e. smart, magnetic, R.F.I.D. (contactless) and bar-code. Keep in mind each card technology uses its own communication protocol to interface with the rest of the system.
- **Storage:** How much capacity do you need to store data between batch host sessions?
- **Physical:** What footprint space do you have to work with? Will display data and keypad be used only by the merchant or also the customer? Is it readable in low or bright light?

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- **Security:** Secure Access Modules (SAMs) are often provided in the back of the device. These securely store and isolate programs that work together in the device. Depending on what programs you incorporate, you may need SAMs.
  - **Function Extensions:** Purchase now or plan for function upgrades for additional card types. Upgrades can be costly.
  - **Network Compatibility:** When used additionally as a credit/debit acceptance device, the terminal system must be compatible with different approval networks i.e. Visa, MasterCard Amex & Discover.

**Related software** governs how the card and acceptance device work in the larger system and other sub-systems within your business. Application software is the engine that runs your program. This software will be a mix of Point of Sale (POS) /Point of Purchase (POP) related applications and back-end reporting and settlement software. There are many choices, often tied to hardware infrastructure that you have or are putting in place (Terminals, PCs). The choice to make, or buy/license, or do both is a difficult decision for most organizations. But if you have already done your research and you have mapped out the infrastructure, your task is much easier.

**Cards** are the essential contact between customer and business. The look, feel, and quality of a card can radically affect a customer's perception of your value proposition. This billboard in your customer's wallet is the primary reminder of your brand. It can be enhanced with foils, holograms, signature panels and variable printing. Main types are:

- **Bar code:** The simplest kind of machine-readable technology, with limited data storage.
- **Magnetic-stripe:** Encoded with read-only data; very ubiquitous and cost effective for single location businesses.
- **Smart Card-Contact:** The computer chip is visible on the face of the card. Reading and writing is done by insertion into a reader or a terminal. There are two types of contact cards; Memory and microprocessor (CPU). Smart cards enable off-line authentication, and on-line identification. They do not need to dial out on a network to securely complete a transaction.
- **Smart Card-Contactless (RFID):** With a computer chip embedded within the card. Works when passed close to a device that reads and or writes data. Does not require insertion into a reader.

### Matrix of Card Technologies

Card Technology	Data Storage	Drawbacks	Advantages	Relative Cost of finished cards*	Relative Security
Bar-Code	104 bits average	Read-only, Durability, clone-able	Cost	\$ 0.36	No Security
Magnetic-Stripe	372 bits 2 tracks	Read-only, 7% Infant Mortality, Reader Life, Clone-able	Cost	\$ 0.38	No Security
Smart Contact-Memory	up to 2,000 bits	Data storage is limited	Read-Write Capability, Durability	\$ 0.80	Medium Security
Smart Contact-CPU	up to 512,000 bits	Cost	Read-Write & Computing Capability, Durability, Security, Storage	\$ 1.25	High Security
R.F.I.D. - Prox	36 bits	Read-only, High Cost of cards, readers and terminals, clone-able	Durability	\$ 2.60	No Security
R.F.I.D. - ISO1443	up to 64,000 bits	High Cost of cards, readers and terminals	Read-Write Capability, Durability	\$ 3.50	Low Security

\*These prices are for typical size memor, full color printed and encoded cards @ 50K units.

**Card Printing** is the lowest-tech aspect of the program, but essential, since much of your value proposition is carried on that space. All cards needs basic printing to identify what they are. This is done with conventional printing techniques like those used for collateral. When viewed as a marketing tool, the card is actually more impactful and lasting than most other forms of branding for your business. More elaborate printing, such as additional colors and features, are highly effective. Any printing needs design, layout and proofing prior to card production.

### TOTAL SYSTEM COSTS

Perhaps because plastic cards have been around for so long and are so ubiquitous, cost analysis of a card-based loyalty program often starts and ends with examination of card cost only. Evaluating card technologies for a system requires viewing the loyalty component strategically as a permanent, long-term investment. Total system cost ultimately governs ROI and should be calculated with the following points in mind:

**Transaction Costs:** In a client-server system, the connection between card and database depends on either a dedicated data line or dial-up access per transaction. Costs include line access and per-use charges. When loyalty transactions are performed in a distributed or hybrid system, transaction processing is not required for each use of the card. This is especially valuable for any business that does not currently maintain a dedicated data line. It is also a factor for a high volume of transactions on an existing line.

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**POS Interoperability/Independence:** In any business that is or plans to grow into a multi-site operation, POS coordination with a loyalty program can be problematic. POS systems consist of terminals and software that must work with the loyalty card, software, reader or terminal. For some companies, it makes sense to pay per-use and license fees to a single turnkey vendor to integrate between systems and locations. For others, in-house or out-sourced software development makes more sense. The degree to which your company can control the integration road map will dictate cost control and system flexibility. Software is now commercially available for loyalty programs that integrates with POS independence and is licensed via the customer to POS vendors.

**Web Commerce Fraud:** Smart cards excel at securely verifying a cardholders identity for Internet transactions. This guarantees 'card-present' transactions, eliminating fraud and resulting charge-backs. Additionally, lost or stolen cards cannot be accessed, since the smart card's data is encrypted.

**Field Upgradability:** Smart cards are reprogrammable not only for program updates, but also for additional applications, such as stored value, ID, etc.

**Third Party Fees:** Although turnkey solutions are quicker and easier initially, over time, per-use and license fees accumulate and can represent a significant hit to the bottom line.

### **Marketing Considerations**

Once your card loyalty system is mapped out, you can progress to the launch and promote the program so that the card gets used. You should include:

- A formal launch with explanation of program, membership rules, (minimum age, black-outs, etc) awards, redemption guidelines and customer service. This is the initial member sign-up and should be regarded as an event.
- Cross-marketing (Internal) with your store, web identity: Signage, employee buttons, etc. reminding customers to sign-up. Consider a sweepstakes for joining by a deadline. Include information on receipts, invoices, web pages, bags.
- Cross-marketing (External): Tie-ins with retail partners, co-brand, coupon the cards, web offers, in-store offers.

## **CONCLUSION**

Just twenty years ago, a merchant could commit to memory the identities and preferences of their customers and create loyalty with the personal touch. The quest for customer loyalty became complicated when choices multiplied and *Points of Purchase* expanded and technology advanced. Careful planning can simplify the concept of value for your business and help you deliver it to your customers. An integrated approach that includes loyalty and relationships as key assets in your marketing will give your program a good start and the power to sustain years of increased business. All you need to begin is an understanding of your customers, an analytic approach to the value proposition and careful crafting of a financial model that makes sense.

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## Resources

Smart Cards and the Retail Payment Infrastructure: Status, Drivers, and Directions

- The Smart Card Alliance, 10/02 [www.smartcardalliance.org](http://www.smartcardalliance.org)

Trends: Loyalty Programs

- Margaret L. Young and Marcia Stepanek, CIO Insight, 12/03

Smart Cards And Loyalty – Is The Emperor Wearing any Clothes?

- Jim Kuschill, Colloquy, 3/02

Loyalty Gets Physical

- Don Davis, Card Technology, [www.cardtechnology.com](http://www.cardtechnology.com)

Smart Card Basics

- CardLogix, [www.smartcardbasics.org](http://www.smartcardbasics.org)

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## Glossary of Terms

**Bar Code**

Machine readable printing consisting of a series of bars and spaces standardized by ISO.

**CRM**

Customer Relationship Management, the functions and programs a company uses to connect with its customers; typically divided into logical groups such as call centers, sales force automation, and supply chain management.

**Data mining**

The application of a collection of mathematical procedures to a company's data warehouse in an effort to find "nuggets" in the form of statistical relationships.

**Loyalty**

A measure of the future expectations a company has for one of its customers; intent to repurchase.

**Interoperability**

The ability of your data and systems to work with multiple vendors and types of equipment; typically terminals and PCs.

**Network Topology**

The map or plan of the network. The physical topology describes how the wires or cables are laid out, and the logical or electrical topology describes how the information flows.

**Non-contractual commerce**

A form of business in which the customer has no obligation to make regular purchases. Non-contractual commerce leaves the customer free to move from one vendor to another in search of better price, product availability, product quality, service or some intangible factors. Non-contractual commerce is more amenable to loyalty analysis because a customer's loyalty is tested with each transaction. In contractual forms of business, the customer has a contract with a company and is billed regularly. Examples include telephone services, most other utility bills, magazine subscriptions, software maintenance agreements and health club memberships.

**Off-line Authentication**

A method of authorizing and verifying that a transaction, this can occur without the use of a network. These methods are typically associated with smart cards.

**Portal**

A web browser-based interface to applications, typically customized for individual users.

**POS**

Point of Sale - A system used to transact with a customer that exchanges value.

**POP**

Point of Purchase

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**Retention**

Length of time between a customer's first purchase and the latest analysis.

**RFID**

Radio Frequency Identification, a semiconductor based technology that is now used in tags labels and cards. Sometimes referred to as contactless.

**Secure Access Modules (SAMs)**

An additional smart card in a smaller package that is used inside a POS terminal to store specific encryption keys and program information.

**Satisfaction**

A measure of a customer's past experiences, most likely related to their most recent transaction.

**Security**

The ability to prevent unauthorized access to crucial information; typically enforced by Smart cards, PINs and passwords and by encrypted transmissions.

**Segmentation**

The process of dividing a potential customer population into groups based on their market type or location.

**Transaction Fees**

Monies associated with the use of a processing or loyalty network, typically a per use charge.

*CardLogix is a leading U.S.-based provider of smart card platforms for the secure transaction of data and value. The CardLogix smart card technology platforms are the basis for innovative applications throughout the world in loyalty, wireless, healthcare, security, finance and entertainment. For more information, please visit CardLogix on the web at [www.cardlogix.com](http://www.cardlogix.com) or call (949) 380-1312*