

## Perspective



### Airline Loyalty Programs

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#### Abstract

Airline loyalty programs, or frequent flyer program (FFP), are the harbingers of today's sophisticated CRM programs. FFP membership has grown faster than growth of airline industry itself. However air travel, as well as its loyalty programs has now become a commodity. As a result, airline loyalty programs have drifted away from their original purpose of "promoting loyalty for an airlines' brand", to being run as independent profit centers.

The majority of airline frequent-flier miles are now earned outside an airplane, by frequent buyers than frequent flyers. Airline miles are earned for the use of credit cards, hotel stays, car rentals, retail purchases dining out, and even for mortgage and real estate agents. A result of this broadening of earning opportunities is that three times more airline miles are being generated than are being consumed. This is a testimony to both the programs' success as well as failure, in not giving enough options to members for redeeming miles. Airlines usually allocate limited seats per flight for redemption of award travel, giving preference to revenue space over free tickets.

How can the airlines balance between earning revenue, and retaining the loyalty of their existing customers thru FFP? How can they implement best practices of CRM in spite of the "flight centric" nature of an airline's legacy IT infrastructure? How can an airline strike an optimum balance between revenue management objectives of maximizing flight revenues versus retaining the loyalty of existing customers, and meeting the redemption expectations of their loyalty club members?

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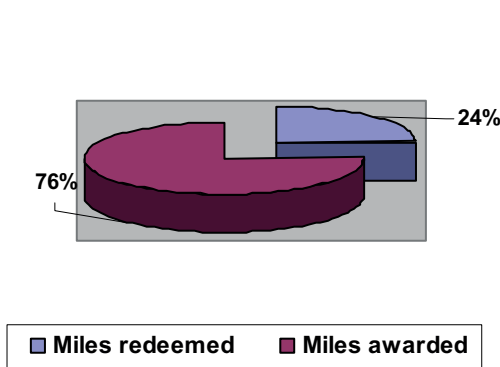
## Airline Loyalty Programs, a great marketing success story, yet...

It is now 25 years since the world's first frequent flyer program was launched. Today almost every airline, even low cost carrier has a Frequent Flyer Program (FFP). The airline industry collectively earns \$10 billion by selling AOMPs (Add on Mileage Points) and airline FFP memberships are growing at 13% per year, much faster than growth of airline industry. However, over the years, air travel in most parts of world has become a commodity, due to increased competition. FFPs have drifted away as main drivers for CRM strategy, their original purpose of "promoting loyalty" to being "independent profit centers". A few airlines have even taken the step of spinning off their loyalty programs, further distancing them from the airline brand, and have in turn benefited from such unlocking of FFP's value on stock exchanges.

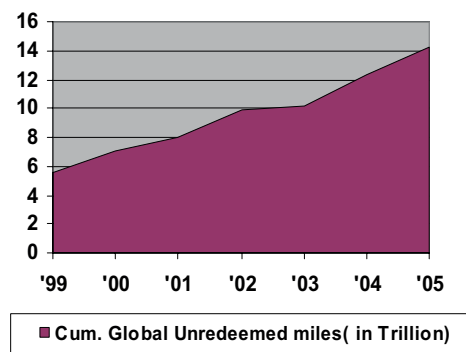
**Transition from "frequent flyers" to "frequent buyers":** In the dynamic market place of 21<sup>st</sup> century air travel, airline FFPs have tied up alliances with partners ranging from credit cards companies, mortgage lenders, finance companies, fuel companies to corner grocery shops! Airlines normally sell their miles for 1-2 cents per mile to such partners, as co branding strategy. As a result, the majority of airline frequent-flyer miles are now earned *outside* an airplane, by frequent buyers than frequent flyers.

Source: [WebFlyer.com](http://WebFlyer.com)

"Burn and Earn" data of US Airlines miles in Trillion(2005)



Unredeemed miles-Scaling up



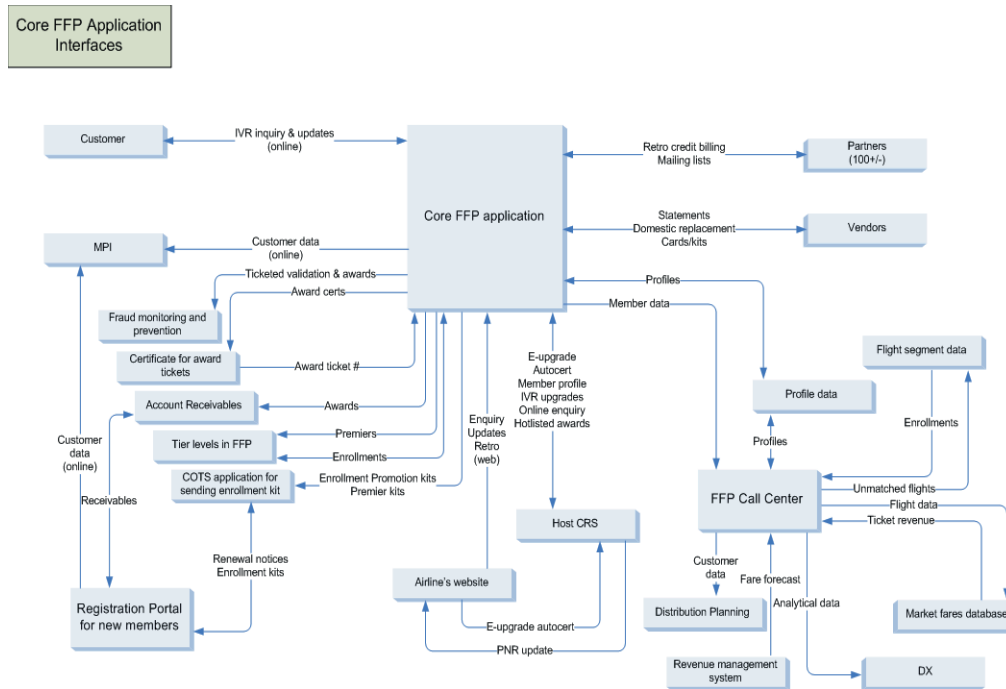
## FFPs lucrative for airlines, yet offering diminishing returns to air travelers

As per industry analysts, out of a worldwide pool of 180 million distinct members of airline FFPs, less than a third are active participants. Airline revenue management is programmed to discourage sale of free seats or upgrades using redemption of miles, instead giving higher priority for revenue sales. Thus, the average success rate of getting an upgrade or free ticket using miles varies from 70% in FFP friendly airlines like US Airways to 37% on stingier airlines like Northwest, as per *The Economist*. As a result, the airline industry's pool of unredeemed miles is growing rapidly, posing a challenge of future contingent liability. Even though the airline industry's average load factor is in range of 74%, (which means 26% of seats go empty), airlines typically allocate not more than 6% of seats for loyalty redemption, down from 9% in earlier times.

In Infosys' view, the reason for such a gap is due legacy airline IT, with its rigid business rules. Airlines cannot effectively balance all the variables such as

- a) Revenue Management objectives of optimizing flight revenue;(Closing low yield classes, and keeping high yield classes open due to desire for revenue sales)
- b) Meeting redemption expectations of their FFP members to keep them loyal and
- c) Garner revenues from FFP as a profit center, from air/non air partners, sell of AOMPS, etc.

## Typical data flows in Airline Loyalty Program are,



- **Daily Operations of FFP**
  - Enrollment of new members, mailing welcome kits
  - Accrual/deposit of points (as per tables) into family, or corporate membership accounts, for flown eligible revenue flights as per MPTs due on sector/class of traveled
  - Accrual of points for eligible flown air partner flights, Accrual of points for non air partner activity
  - Automated accumulation post flight, i.e. retro credit requests for points not credited due various system or process issues
  - Upgrade request processing; complimentary, payment by points or cash
  - Decrementation, i.e. withdrawal of points
    - Expiration or re-crediting of points as per predefined criteria
    - Expire miles or memberships after certain specified time limit, or deceased members
  - Sell AOMPS(Additional Mileage Points) for various air/nor air services
  - Management of membership tier levels
  - Reserve/waitlist/confirm airline inventory CRS with redemption of points.
  - Periodic processing and sending of account activity
- **Track/Report/Inquire data about Member profiles**
  - New enrollments, tracking and billing of airport lounge access services
  - Tiered segmentation of members based on travel patterns
  - Policies for deceased members, donating MPTs for charity
- **Direct marketing, Campaign management, Promotions**
  - Promotions processing for bonus miles/bonus awards/bonus upgrades etc
  - Processing for non flight promotions, sending e-mails, newsletters, and updates on new partnerships, new innovations, etc, to FFP members
  - Giving timely updates on MPTs, suggestions for redemptions, etc
  - Warning on approaching timeline about lapsing of MPTs.

- **Partner Agreements with Air/Non-Air partners**
  - Billing partners for miles accrued on FFP program
  - Reviewing partnership programs prior to their formalization
  - Entering into agreements with partners
  - Building the programmatic logic of partner agreements
  - Announcing partnerships to members
  - Evaluating effectiveness of partnerships
  - Billing partners for miles credited, and/or miles redeemed on airline
- **Portal Management**
  - Password for loyalty portals for members
  - CRM issues such as
    - Web-enable key functions, like enrollment of membership, checking MPTs, redemption of MPTs, etc.
    - Special counters, baggage tags,
    - Online check in facility, rewarding extra points for encouraging use of automated services
- **Redemption processing**
  - correct and timely updating of MPTs
  - Plug loopholes in accruals, fraud prevention
  - Perform audits, ascertaining airline liability, and associated reporting in F&A systems
- **FFP Management from competitive scenario**
  - Ensure seats are protected in RBD for redemption
  - Action on feedback from FFP members
  - Keep track of FFP of other airlines
  - Keep update on accrual/redemption ratios, etc.
  - Keep update on blogs, websites like webflyer.com that give ratings for FFPs

## Brand Positioning of the Airline with product and service differentiation

Product differentiation and brand positioning of the airlines' premium classes, (F/J), have necessarily to be linked to airlines' product vis-a-vis competition on each major route. The Differentiation of product fulfills consumer promise but needs to be at a competitive price. The value benefit of airline product has to be highlighted clearly by targeting promotional campaigns aimed at specific markets segments.

Price versus product/service differentiation of the airline with its competitors is a crucial benchmark for building the brand equity of an airlines' loyalty program over time.

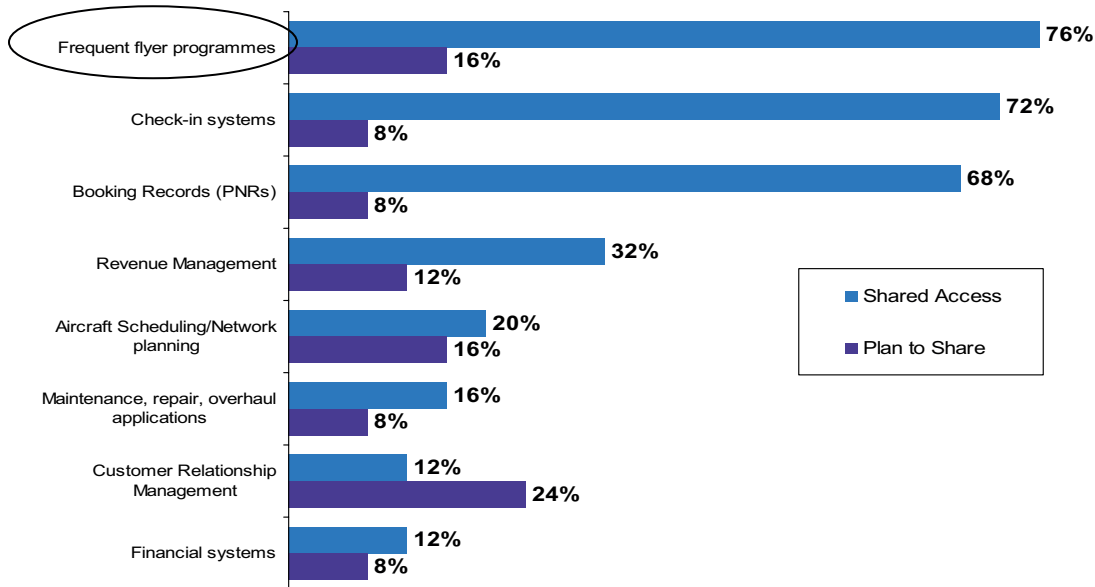
### *Key success criteria of FFP*

#### From customer's point of view

- Success in getting award travel (free seats or free upgrades using MPTs)
- Personalized service by airline in the following functions
  - Accessing airlines' website
  - Recognition by airlines, e.g. a birthday gift like a bottle of wine on board aircraft, if travel date coincides with birthday
  - Special assistance during irregular operations, delayed flights, etc.
- Web enabling key internal business processes (easy online accrual redemption, upgrades)
- Integration with alliance partner airlines' FFPs, giving wider options to customer

## Shared access to FFP is the top priority for members of airline alliances

Access to various tools among alliance partners (Base: airlines already part of global alliance) Ref: SITA-Airline IT Trends survey



### Key objectives of FFP

#### Airline's point of view

- Integrate its FFP with alliance members and other airlines as well as, non air partners' systems facilitating redemption and accrual across members
- Reduce liability of MPTs by expiring them, promoting the sale of expiring MPTs, etc.
- Increase the frequency of and/or influence the customers' purchase
- Improve the service provided to members based on value
- Provide a mechanism to influence the behavior and improve the profitability of the entire membership base.

Direct marketing resources for optimal return on investment Enable FFP platform and processes to be performed at a competitive cost

- Create and enable partnership agreements, joint credit card promotions etc. that earn additional revenue (e.g. ATP cards),
- Provide an additional promotional and payment channel to facilitate sale of in-flight goods

#### IT systems for FFP: the advantages of "in-house systems"

1. The in house systems have served very well for the basic functions of a loyalty program, which are debiting and crediting the miles to a particular account number based on certain activities; tier management, and promotions for certain routes, with bonus miles
2. Airlines' core IT infrastructure, and their CRS system in particular, are essentially flight centric, (i.e. operational in nature) the focus of which is a flight segment rather than a particular customer.
3. Airlines have built lot of additional functionalities around the basic loyalty program, like code share partners, credit card companies, UATP cards, partner agreements, in-flight sales, etc.
4. Airlines can offer bonus points and promote specific flights to spur demand from loyalty members (identify weak flights/sectors where additional points are awarded, etc.) based on guidance from their revenue management system
5. Thus loyalty program have developed over the last 25 years or so, and for many carriers at mainly an incremental cost.

## Disadvantages of in house loyalty systems

The legacy loyalty system makes it slow and expensive to add new functionalities

1. **High maintenance costs:** legacy systems are expensive to maintain as they get older due to redundancies of technology, human resources, etc.
  2. **Limited functionalities:** Inability to provide detailed customer data at touch points (e.g. Check-in, call center, web, PDA, airport lounges, on board the aircraft, etc). Airlines have a hard time integrating CRM functionalities into day-to-day activities of their loyalty program
  3. Inadequate data mining of customer data for specifically targeted campaigns, such as not being able to identify the mishandled passengers on delayed flights, mishandled baggage, etc. or passengers with special events (anniversaries, birthdays, honeymoons etc)
  4. **Poor integration:** Inability to integrate revenue management with objectives of airline loyalty program
  5. **Minimal analytical capabilities:** Difficult to further segment than the standard three tiers
  6. **Lack of flexibility:** Inflexible accrual rules mean airlines are unable to quickly respond to the marketing programs of the competition, delays in effecting changes in tiers.
  7. **Lack of clarity of ROI:** Not able to identify focus areas where ROI will be greater, based on past results
  8. **B2B interfaces:** Inability to integrate B2B marketing activities in loyalty programs, such as for corporate deals
  9. **Lack of relational database :** Limited benefit can be derived despite having voluminous data on customers
  10. **Patterns of changes in consumer buying:** Increase or decrease of patronage by FFP members on competitors is not available. This results in poorly targeted campaigns.
  11. **Actionable customer information** cannot be pushed to point of customer contact at appropriate time to deliver value
- Airlines achieve customer differentiation thru personalized services:** The airline loyalty programs have a great deal of unlocked business value. Can CRM initiatives overcome this? One of the primary **goals of CRM is to differentiate a company's services to the customer through personalization.** This is increasingly difficult in an industry that struggles with commoditization, with many service offerings indistinguishable from airline to airline. Moreover differentiation of basic services is not feasible as airlines have automated many such routine functions, such as bookings, check in, reward processing, etc.

As per Infosys view, enhancing customer experience for airlines cannot be construed to recommend manual ways of handling passengers replacing automated self service processing like check in, bookings, redemption processing, etc That will be indeed a regressive step, as the airline industry has already invested a great deal of capital in automating check in (CUSS), websites, electronic ticketing. Any steps to add expensive human interactions for routine activities like booking, check in, boarding, etc may not also be realistic when airlines are handling more than two billion passengers in a year, on wafer thin margins.

As per Infosys, based on segmentation of customer data, airlines can proactively provide a warm “human touch” to their most valuable members, when it is most required.

### Packaged solutions for CRM/Airline loyalty program

1. Customizing a COTS CRM package and integrating it with an airline's legacy systems can take a long time.
2. ROI, or value for many features of provided in CRM is not clearly established.
3. There are not many examples of CRM packages seamlessly integrated in mega airline IT landscape (unlike in other industry like retail).
4. No CRM package can ever duplicate all the features of airline loyalty programs which have evolved over last two decades.

As per Infosys, a business rules based IT system can effectively extract dormant value in legacy loyalty programs IT if combined with the flexibility of SOA based IP system.

**Towards SOA based loyalty programs:** With SOA architecture, the basic functioning of loyalty program management such as MPTs-earning mechanisms, award choices, partnership agreements, elite levels, rules, and conditions, service support, online services, etc will remain largely unchanged. Web architecture, with a rules based system would make many routine activities more amenable to automation. The following functionalities will result in enhancements such as:

## Customer Profile Managements

- Dash board for each customer profile with activity reports
- Reported/unreported miles
- Membership tier / historical, qualification mileage
- Member's partner membership tier summary information
- Exhaustive customer search capabilities
- Exception management manual interventions for any reason
- Audit trails, suspect activity summary

## Real time functionality, intensive data mining tools for,

- Web enabling most of routine transactions between member, loyalty program, and partners
- Tier / club management, program management , mileage accumulation management , communications management , reward management
- partner Billing

**Business rules based system for flexibility:** Rules based systems can set action limits for most of above functionalities. In addition, as per Infosys view, airline loyalty programs have to balance two conflicting business objectives, namely promoting long term loyalty from the existing membership base and earning additional revenue by selling seats. These seemingly conflicting objectives can be optimally balanced by rules engine;

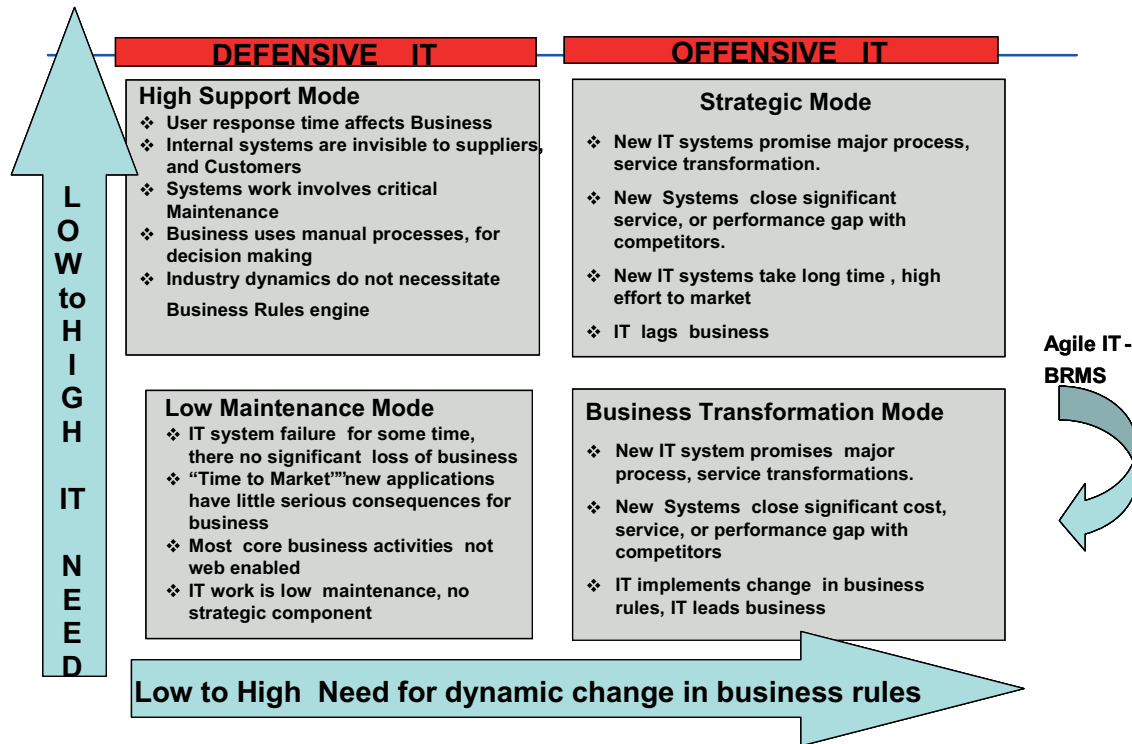
## Integrating loyalty program with revenue management principles

- Price upgrade requests differently as per demand/availability of seats in exchange of MPTs, or combination of MPTs or cash
- Up sell seats in higher RBD (?) for same class of travel depending upon the demand /availability of seats
- Price mileage points differently for members while redemption for flights, or upgrading based on “value” of the member
- Change any parameters on accrual and redemption to match competition
- Target offers from alliance partners, based on members' travel history, profile. Or specific offers on the web for FFP members based on their profile, usage, and travel details.
- Data mining of extensive FFP customer records to guide future strategies, based on parameters determined in advance.
- Special membership campaigns aimed at passive members.

## Airlines have to optimally balance divergent business objectives like revenue and loyalty of existing members by

- Dynamically charging higher points values for redemption requests from FFP members, as guided by the revenue management system
- Setting a probability (e.g. 80%) for a FFP member travel on desired sectors, if travel request is made at least 14 days before travel date, redeeming the MPTs, as per standard rates
- Amending percentage of passengers traveling on FFP awards on any flight with seasonality, revenue management guidelines, etc
- Reducing contingent liability of trip awards, expiring miles early, or maintaining free awards @ minimum (e.g. 8% of total) each year.
- Identifying weak flights, weak sectors, adjusted for seasonality, to promote redemption of FFP miles on these sectors during lean season, to safely exceed limits set without any revenue loss
- Monitoring mileage thresholds for different program members, and act ionizing (?) policies as per competitive situation

## IT Strategic Impact Grid



**Paradigm shift necessary in loyalty programs** In the 1980s, the airline industry pioneered CRM by introducing Frequent-flyer programs, then a new marketing approach. Over the years, however, few airlines have kept pace with other industries in the application of CRM. As airlines struggle to gain market share and sustain profitability in today's fiercely competitive and economically demanding environment, they need to develop systems to manage their customer relationships to optimize customer loyalty and profits from such programs.

As per Infosys view, airlines have fallen behind other industries in the deployment of CRM practices due to the flight centric, (i.e. operational nature) nature of airline IT, and the commoditization of air travel in most markets. Flight centric airline IT can be made more customer focused using agile IT in a business transformation mode, as shown in the picture above, "IT Strategic Impact Grid". Among CRM initiatives, FFPs and other ways of achieving website personalization are found to have highest ROI, making the highest impact on shareholder value, as per IBM Institute of Business Value.

However the objectives of an airline's loyalty program need to be balanced with revenue management objectives. This calls for a transformation in airline's legacy IT, using agile IT platform that meet, manage changes and amendments to business objectives, making the airline more competitive, retaining customer loyalty, while remaining profitable too.

Integrating loyalty programs with airlines' revenue management system, combined with dynamic pricing of award travel and extensive data mining of customer data, will achieve this. Business rules engine (BRE) technology facilitates the externalization of all the business rules into an easily readable and maintainable form wherein rules are expressed using business vocabulary as opposed to rules being written in technical, programming languages. In BRE technology rules can be changed, tested and deployed in a day's time, thereby greatly enhancing the agility of the IT solutions in responding to changing market opportunities.

Infosys with its deep domain knowledge of airline industry's revenue management, CRM functionalities and business rules engine technology, proposes to reengineer or custom build flexible, modern loyalty programs that synthesize the best practices of CRM and revenue management.

## About the Authors

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