

# COMARCH



**RETAIL LOYALTY PROGRAMS:  
HOW TO MAXIMIZE THE CUSTOMER EXPERIENCE  
WITH COMARCH AI**

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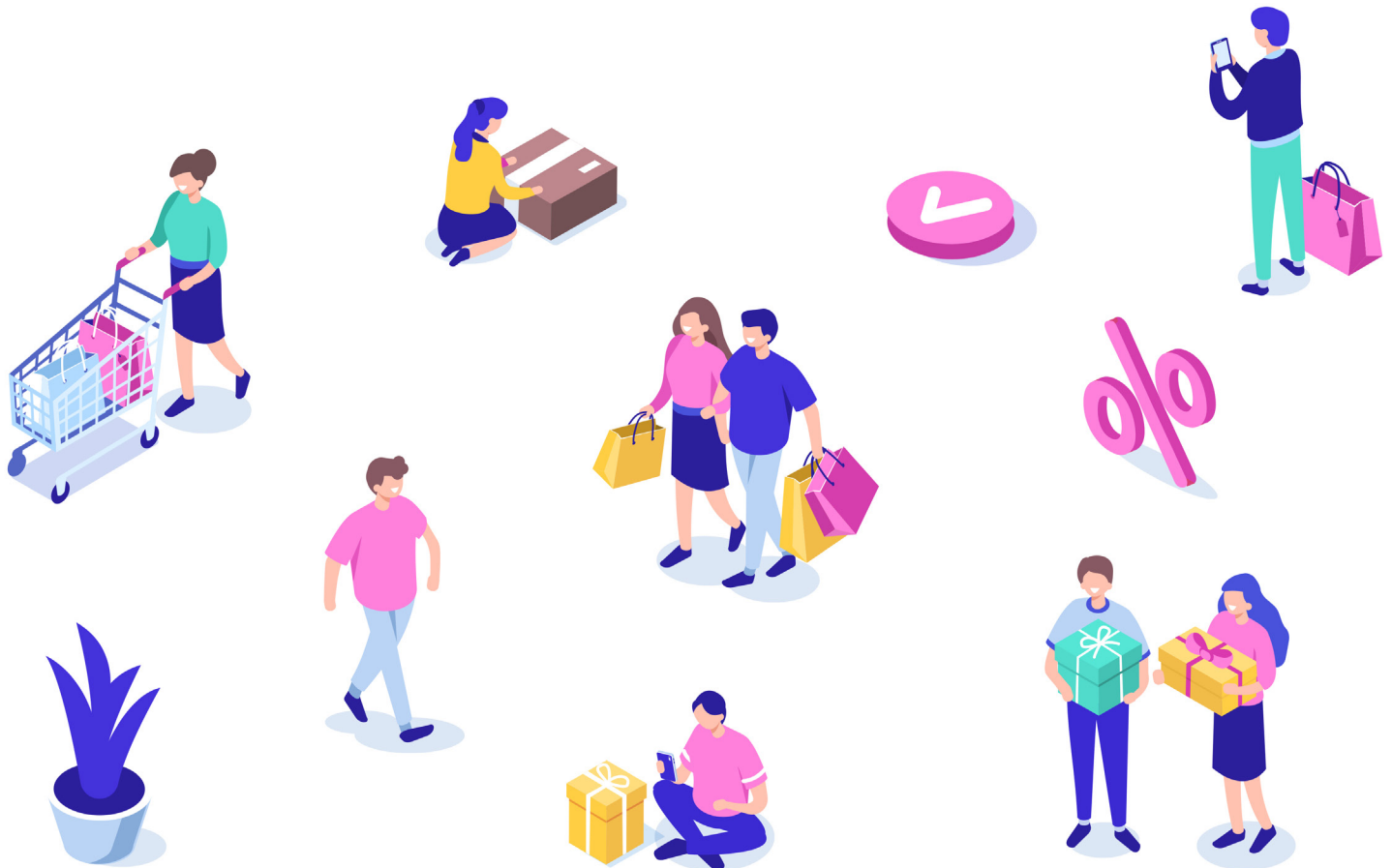
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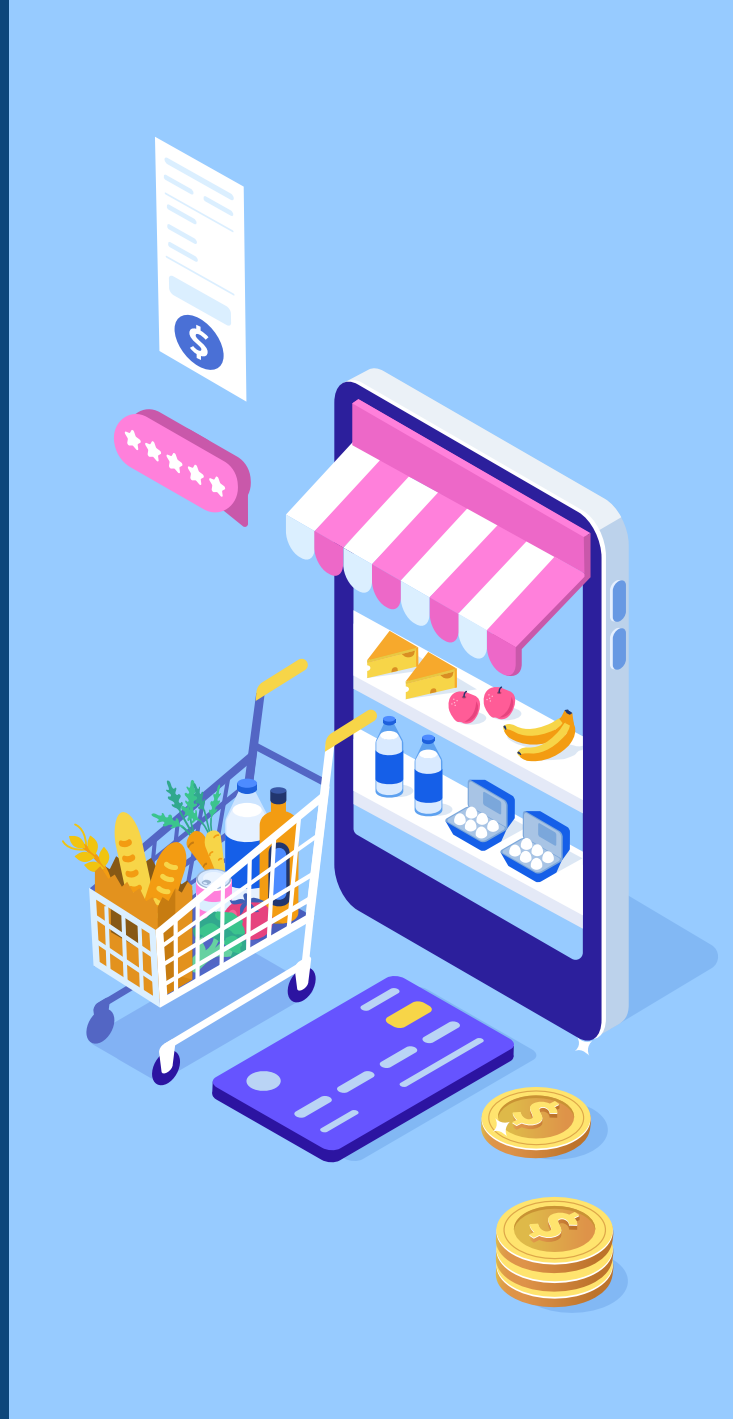
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# INTRODUCTION

Using data to drive successful marketing strategies is not a new concept. Up until recently, however, customer data has been undervalued and underutilized by brands around the world. With modern artificial intelligence (AI) and machine learning (ML) technology, brands can use customer data to revolutionize their business model – increasing profit, customer retention and customer satisfaction. Data-driven customer marketing allows retailers to invoke specific customer behaviors to both hit financial objectives, like increased sales and number of customers, and to build long-lasting relationships with their customer base.



It's nearly impossible to create a truly one-to-one relationship with customers at scale – this is where AI and ML come into play. With these tools, we can automate many aspects of the customer loyalty lifecycle, allowing brands to create unique, personalized experiences. Understanding the needs of a target audience is essential to every successful marketing strategy. Using AI and ML, brands can get insights into customer behavior and predict what they might be looking for. This advanced technology looks at past buying patterns in order to predict their future actions. Brands can see a full view of their customer base, and easily identify potential threats that may affect their buyers' journey.

In the world of retail, competition is fierce. Brands must keep up with the current trends – when it

comes to their products *and* when it comes to the customer experience. To do this, they must ensure that they are using the latest technology to build loyalty through successful customer acquisition, retention, and satisfaction.

In this guide, we will explore the four main uses of AI and ML in loyalty marketing: Personalization, Chatbots, Gamification and Loyalty Fraud Prevention, as well as specific examples of these types of loyalty program enhancements in action. From employing hyper-segmentation to preventing costly loyalty fraud, implementing AI and ML in loyalty programs allows brands to create highly personal one-to-one marketing experiences to establish customer loyalty at scale.

# 1. LET'S GET PERSONAL: DRIVING ENGAGEMENT WITH PERSONALIZED EXPERIENCES

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## WHAT IS PERSONALIZATION?

Personalization is the next level of targeting a marketing message or an offer. It takes into account who exactly we are targeting in our sales and marketing activities and how we can customize the offer depending on the audience. Up until recently, marketers primarily used segmentation methods to aid in profiling their customer base, and differentiated segments by splitting between demographics and behavior. Truth be told, these two methods must be combined in order to fully understand a customer or a loyalty member, which is a process that is difficult to automate and requires

years of experience, marketing knowledge and intuition. Instead, by using AI, we can automate much of the process of marketing personalization. AI technology allows loyalty systems to collect and process customer data in real-time and act quickly to provide personalized, relevant offers, which creates a seamless customer experience and enhances overall engagement.

*“Consumers often get inundated with advertisements and communications from brands. On any given day, a consumer can see 20-40 unique brands as they browse their social media feeds, read the news and utilize search engines – that being said, don’t expect your client base to customize their consumer experience to meet their own needs. This is up to the program, and the few seconds or minutes that the program asks of its members per day/week/month. The content delivered must be engaging and resonate with the customer, and give them a reason to not click unsubscribe or ignore another coupon or discount. At Comarch, we are strong advocates of creating a personalized user journey for each program member, along with communication, and unique sets of rules based on preferences, transactional history, and consumer behavior.”*

**SIDNEY DUNN, DIRECTOR OF LOYALTY AT COMARCH**





## PREREQUISITES FOR SUCCESSFUL PERSONALIZATION

Before personalization can be implemented, it is important to consider the quality of the data stored about an organization's customer base. This Computer Science 101 lesson applies for AI as well as any other domain: if you put rubbish data in, you'll get rubbish data out. In order to be able to apply AI to loyalty marketing, the quality of the data regarding the program members is key. Quantity plays its part too. The more we know about a member, the better. In an ideal scenario, a brand will have a complete recorded history of member or customer interaction from a multitude of channels stored in a consistent format.

Apart from the data, another prerequisite for the successful use of personalization is to set clear business objectives, metrics and KPIs. Personalization for loyalty offers can be used to improve the overall value proposition of the program, attract new members, reduce member churn and to aid cross and up-selling activities. These are just a few of the many great reasons to invest in personalization, as it can help a typical point-based loyalty program stand out amongst the rest while attracting a broader audience.

## COMARCH PERSONAL MARKETING MODULE

Comarch's in-house AI R&D team developed an AI-driven personal marketing module that dynamically consumes loyalty data and calculates metrics that can then be used to customize loyalty offers down to an individual member level. These metrics include:



**Customer value prediction** – a forecast of a customer's monetary spend in a given timeframe or before they are predicted to churn. This can also be enriched by information about how many interactions are expected for a member in the same period.



**Churn rate** – indicates the probability of a member becoming inactive, based on activity patterns observed in the program so far.



**Product recommendations** – based on the analysis of which products are often purchased together in a single transaction. This is commonly seen in e-commerce applications as “other customers also bought.”



**Next-best-offer proposal** – a prediction of what the contents of the next transaction of a given member will be, along with the date it is predicted to take place.

These insights can then be used in the loyalty system promotion designer to customize offers for individual members. Example use cases include differentiating discount levels based on the customer value predictions, creating a special promo for products

frequently purchased by similar customers and rewarding members that transact before their next predicted interaction date. When AI predictions meet the flexibility of the loyalty system promotion designer, the possibilities are practically endless.

## PERSONALIZATION IN ACTION

Personalization is used by brands around the globe. One of the largest coffee shop chains in the world used the power of AI to personalize customer offers. For instance, we discovered that 32% of members who purchase a skinny latte also choose a gluten-free brownie. Therefore, we the loyalty program recommends a GF brownie rather than a regular brownie to members who buy a skinny latte. With

the help of predictive analysis, we also adjusted rewards based on the likelihood of a member's visit. If we know someone is likely to visit 30 times in the next 3 months, we would reward them if they visited 15 times in a month. We also used AI to determine the next-best-offer based on past purchase behavior and offered 2x or 3x points for sequential purchases.

Other examples of successful personalization include :

**Hilton Hotels** built a two-foot-tall concierge robot named Connie to greet guests and make the guest experience as personal and enjoyable as possible through its natural language processing ability. It can learn about guests and provide personalized recommendations of places to visit and restaurants to try. The robot can also point guests in the right direction for various hotel amenities to meet their needs.

**Under Armour** personalized fitness recommendations with AI. Its Record app uses AI to collect health information on physical activity, sleep, and diet to make personalized recommendations on workouts and health goals. The app also serves as a personal trainer and can analyze workouts to make sure they are as effective as possible. Through this effort, Under Armour goes beyond transactional customer relationships by building personalized experiences.

**Macy's** personalizes the in-store experience through IBM Watson AI technology to power its smartphone-based assistant Macy's On Call. When a customer enters the store, they can start chatting with a digital assistant on their phone. The chatbot asks questions to direct the customer's shopping experience and provide recommendations and directions to items around the store. The bot is intelligent enough to sense if the customer is getting frustrated and alert a human associate to intercept the customer as soon as possible.

## 2. UNLOCK AUTOMATED CUSTOMER SERVICE: CHATBOTS

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Today, customer service is a vital part of a customer's overall perception of a brand or company. Customer service can make or break a brand's image. It is a great way to encourage word-of-mouth marketing, as customers are likely to recommend a brand to others if they have experienced good customer service. High quality customer service requires quick

and precise problem solving, and representatives must provide the most relevant, reliable answers to customers' questions about products and services offered by the company. Many customers tend to ask the same questions and experience similar issues, so it makes sense to automate aspects of the customer service experience.

One of the latest trends in automating this process is the use of Chatbots, which are virtual assistants designed to mimic written or spoken human speech in order to simulate a conversation with a real customer service representative.

*"Customers want seamless experiences and quick resolutions to issues. They move very quickly from one brand to another if they are unhappy or their needs are not met. A bad customer service experience can lead to a lost customer very easily and this is one of the primary reasons that Chatbots are gaining traction and can supplement the seamless experience effectively. However, it is also essential to invest in Chatbot solution providers who know the ins and outs of implementing this technology while maintaining your brand voice."*

**BINDU GUPTA, LOYALTY & MARKETING STRATEGIST AT COMARCH**



## HOW DOES CLM CHATBOT WORK?

CLM Chatbot is a modern conversational chatbot based on NLU (Natural Language Understanding) that determines the customer's intention by capturing key contextual information from the text. Then, the system selects the best response or action based on the conversation history and the use of Artificial Intelligence (AI) techniques.

Before the chatbot is made available to clients, it is important to train the chatbot on relevant

data, which is preferably taken from the existing customer service system, including historical chats with customers and the knowledge base used by Call Center agents. The knowledge base used by the chatbot can be updated at any time. In cooperation with AI technology, this allows for continuous learning and ensures that the chatbot operation improves continuously as time goes on.

## MAIN ADVANTAGES OF USING THE CHATBOTS IN LOYALTY PROGRAMS

Chatbots are most effective for customer service in industries with a large number of customer service requests, such as in retail. Operators of loyalty programs should consider using chatbots within their programs, as they can improve the quality of customer service in a number of ways:

- Chatbots are available 24/7, which is important for brands that operate on an international level.
- Chatbots' responses to questions are consistent and reliable, and they improve in accuracy over time as the system learns and develops based on customer questions and feedback.
- There are predefined loyalty scenarios based on the Chatbot integration with CLM that can further automate the process, such as:
  - Enrollment
  - Balance inquiries
  - Points expiration forecast







- The Chatbot can be implemented as a service in Comarch Cloud or installed on-premises.
- The Chatbot can integrate with many channels including the CLM Member Portal, CLM Mobile App, Facebook Messenger, and WhatsApp as well as on any website.
- They are able to provide answers quickly, which saves customers' time.
- Chatbots help to significantly reduce the cost of operating a call center, as agents can instead spend their time tending to more advanced issues or problems.

## CHATBOTS IN ACTION

Some of the most successful uses of chatbots we have seen include :

**Sephora:** The international personal care and beauty stores chain introduced its chatbot on messenger service Kik. Through a short quiz, the chatbot is programmed to learn more about the shopper once they start a conversation with them. The chatbot can offer tips and reviews on specific products along with product recommendations. Though it is not designed to deal with customer's queries, it provides other call-to-actions such as 'Book a makeover' all without leaving Kik.

**HelloFresh:** The popular meal kit service uses a chatbot called 'Freddy the messenger bot' to solve for a high volume of incoming and slow response times. Freddy can automatically reach out via Messenger with promo codes when users respond to an engaging Facebook page post in addition to creating quizzes, recommend music, sharing seasonal tips, tricks, and blog content around the holidays.

**1-800-Flowers:** 1-800-Flowers serves as a great example of how brands can benefit from adopting AI technologies. Their chatbot allows users to send flowers and gifts and prompts them to select items based on the kind of event the gift is for. Customers can access shipping updates right from the app. The app makes it easy to browse and find an appropriate gift based on the occasion.

# 3. IT'S ALL FUN AND GAMES: GAMIFYING THE CX

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Challenges, instant feedback, rewards and incentives. Gamification is all about implementing game mechanics into non-game environments. It is also one of the most effective ways to increase engagement in (nearly) every aspect of life. To achieve the highest possible level of engagement, you must set the right rules

Gamification is a key addition to a broader loyalty strategy and allows brands to leverage engagement and keep their program fresh and exciting. Gamifying the customer experience is easily one of the best ways to keep customers coming back. Applying gamification tactics can lead to large increases in both client engagement and overall brand loyalty. By making engagement fun and allowing shoppers

to participate in a game, they become involved in both the game and the brand. If members enjoy the gamification features a brand employs, their friends and family will likely want to play too.

How can brands get the most out of gamification? By defining their company's goals and keeping them in mind as they adjust activities on the platform. One size does not fit all in this case, which is why game elements must be arranged in the right way. The admin panel in Comarch's Gamification tool allows for the adjustment of different game-based functionalities including quizzes, notifications rules & content, users profile and leaderboard parameters.



## GAMIFICATION FOR EMPLOYEES:

From long-term learning to building daily routines and streamlining the onboarding process, gamification is an effective tool for creating and maintaining motivation and knowledge among employees. Game-based functionalities can boost teamwork and communication, which encourages cooperation within the team. It also helps to verify employee knowledge and expertise in a non-invasive way and add some fun and entertainment to day-to-day tasks - making the overall employee experience more enjoyable.

Positive feedback can help employees understand and develop their skills. Instant feedback is the key to catching the user's attention. These functionalities can also improve individual, team, and organizational performance, resulting in a stronger team of employees who are fully equipped to represent a brand and contribute to a seamless customer experience.



## GAMIFICATION FOR CUSTOMERS:

Upgrading loyalty programs from conventional systems to advanced, gamified loyalty environments can change consumer perceptions and enhance the overall experience. Gamification enhances data management capabilities and allows for the validation and adjustment of offers in the loyalty

program, while creating an interactive experience for the loyalty program members. Behavioral analysis based on BI data and AI algorithms is a great step to boost up-selling, cross-selling, building a daily dialogue and long-term engagement.



## GAMIFICATION IN ACTION

A popular footwear company launched a business to employee (B2E) mobile app with Comarch's Gamification tool to boost product training in an interactive, fun way. They used various games and leaderboards to encourage engagement and healthy competition as well as retain their attention for longer periods of time. For instance, we helped employees learn more about product specifications through an engaging quiz and provided additional materials to dive into more detail to continue learning. This use of gamification helped the company teach their employees about the different products they sell while developing their customer service skills through creative training exercises and scenarios.

**Fabletics:** By tapping into quiz marketing, this brand has gamified the personalization experience in a more fun and less intrusive manner. Not only does this add excitement for winning a prize as a result of participating in the quiz, but it also helps gather first-hand preference and behavior data, which can be used to make future product recommendations.



# 4. DETECTING AND PREVENTING LOYALTY FRAUD

Fraud detection and prevention is often identified as one of the key challenges of running a large-scale loyalty program. Multiple sources have reported that loyalty fraud numbers have been increasing substantially for over a decade. A 2019 study by Forter states that there was a 89% year-over-year increase in loyalty fraud incidents in the first quarter of 2019. With the popularity of loyalty programs consistently growing, it is unlikely that this trend will change anytime soon.

If it is not addressed, fraud can impact the customer experience significantly. Ensuring that the customer experience stays on par with customer expectations is vital to a company's success. If customers think that their information is at risk, they won't be satisfied with the customer experience and might just decide to take their business elsewhere.

*"The biggest issue with the current approach to loyalty fraud is that it relies on static assumptions - such as limiting the number of allowed loyalty transactions in a given period of time. This remains crucial, but with the current dynamics of loyalty programs, and the growing number of connections between various systems, static rules will only protect the program in certain scenarios. Machine Learning allows for dynamic analysis of historical data, reducing the need for manual fraud rules set up and adapting to changes in the data processed by the loyalty platform."*

**MACIEJ TYCZYNSKI DIRECTOR OF AI & MACHINE LEARNING AT COMARCH**



## TYPES OF LOYALTY FRAUD

The three common types of loyalty fraud are:



**Account takeovers [ATO]** - a form of identity theft in which fraudsters attempt to access someone else's account. A successful account takeover attack leads to unauthorized fraudulent transactions committed without the actual account owner's permission.



**Internal fraud** - harmful actions committed by staff or partners of the organization running the program (such as cashiers or contact center agents).



**Rule and Policy abuse** - exploiting a loophole within the business logic of the loyalty program for personal gain. These can be seen most often in unauthorized redemptions, accrual loops, integration flaws or process misconfiguration that, for example, lead to excessive point accumulation.

## TRADITIONAL COUNTERMEASURES

Each of the above categories requires separate detection and prevention policy and procedures. Traditional loyalty fraud countermeasures applied in loyalty programs include:

- Blacklisting, personal data de-duplication and enrollment verifications to ensure legitimacy of the member accounts
- A rule engine that limits the number or types of allowed activities within a program. For example, a loyalty program may set a limit on the number of points a single member can accrue in one day
- Password policies, bot prevention and two-factor authentication
- User management rules, minimum required access policies and regular security audits
- Program-wide reports and KPIs, which allow the system to detect issues such as a sudden surge in the number of a specific type of transaction or new account registrations

All of the above countermeasures are suitable for any large-scale loyalty program. These measures are not, however, easy to carry out and can be difficult to implement. They each require quite a bit of manual analysis, verification and assumptions that are often subjective and difficult to change once they are in place. Additionally, as the complexity of the loyalty program increases, it can become very difficult to determine all the potential fraud scenarios before they happen and inflict damage.



## COMARCH AI FOR DETECTING LOYALTY FRAUD

Comarch's solution is based on machine and deep learning solutions that are dynamically trained based on the historical data processed by CLM. The system crunches huge volumes of historical data, which allows it to recognize what typical or

standard activity looks like, which then enables easy identification of anomalies and outliers. It does not require fixed rules or static assumptions, but rather the historical activity of the program so far.

By constantly analyzing loyalty data in the background, our AI models are able to highlight a wide range of anomalies that may indicate:

- Rule abuse – members finding ways to “game” the system for personal gain
- Internal fraud – site staff / CLM users abusing their privileges
- Early signs of account takeovers
- Business rule misconfigurations
- Integration or technical vulnerabilities
- Unusual or suspicious behavioral patterns

Finally, applied AI solutions improve over time. The accuracy of the program increases each time a case of fraud is detected and confirmed. This means that

finally, program owners can have the power to stay ahead of fraudsters and detect suspicious activity before it causes any damage to the program.

## COMARCH LOYALTY FRAUD DETECTION IN ACTION

A large American multinational oil and gas corporation employed Comarch's AI Solution for Loyalty to a recent project. It was used to identify anomalies and suspicious user-behavior among gas station employees and their loyalty program members. As one of the largest fuel retailers in the world, this corporation is no stranger to fraud. This, combined with the fact that the rewards program offers members great earning and redemption opportunities, positioned the loyalty program to

be potentially targeted by outsiders that were not well intentioned. With this in mind, and by using Comarch's AI and Machine Learning Loyalty suite, the brand sought the help of Comarch to analyze historical transactions from the rewards program, hoping to find anomalies in the data which could lead them to identifying fraudulent behavior.

Ultimately, by incorporating key metrics within the Comarch AI/ML module, as well as the member's location, account balance, and historical clusters, Comarch was able to detect anomalies which

revealed fraudulent behavior that took place both at the member level and also within the fuel retail locations.

# SUMMARY

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While AI and ML are still daunting to many loyalty program managers, they have become integral to the success of loyalty platforms. In order to provide customers with a modern, advanced customer experience, and to stay top-of-mind among competitors, brands must incorporate AI and ML into their loyalty and marketing strategy.

With Comarch's AI and ML Loyalty suite, brands can create individualized customer experiences, ensure frictionless customer service, enhance customer

engagement with gamified elements, and protect their program from both internal and external threats. While implementing AI and ML can be a game changer, brands must be careful how and when they do so. With over 20 years of experience implementing and integrating loyalty programs and strategies, Comarch experts understand the importance of using AI and ML the right way and are ready to help retailers connect with their customers like never before.



# COMARCH

## ABOUT COMARCH

Comarch is a global provider, with more than 25 years of experience, of technologically advanced software designed to help enterprises improve their business efficiency, reduce operational costs, and build strong relationships with all of their partners and clients. Comarch has made its name by working with some of the most renowned brands and organizations in the world, including various airline holding companies, telecoms, financial institutions, retailers, and many others. Comarch's clients include JetBlue Airways, Heathrow Airport, BP, Carrefour, Heineken, Goodyear, Pepsi, and Vodafone.

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