

A VINVOX White Paper



Telematics and Consumer Loyalty

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Conventional wisdom holds that there is a direct correlation between customer satisfaction and customer loyalty... It is a perfectly reasonable concept, except for the fact that it isn't particularly true

Why Consumer Loyalty Matters

Conventional wisdom holds that there is a direct correlation between customer satisfaction and customer loyalty. As a result, the industrial world has made huge investments in business processes that focus on customer satisfaction and the ways in which to measure it. It is a perfectly reasonable concept, except for the fact that it isn't particularly true.

How could something so intuitively obvious fail to be a correct interpretation of human behavior? In part, it is because causality in human behavior is a tricky thing to unravel. It is only in the last 20 years or so that statistically relevant studies have revealed the primary drivers of consumer loyalty in the context of real business practices. Today, there is good scientific evidence that can guide the application of resources and technology in a way that promises large and enduring advances in customer retention. More than that, an improved understanding of the factors that actually drive loyalty provides a solid foundation for systems specifically designed to increase customer retention, and thereby yield the best possible return on investment (ROI).

In the early 1990's, Fed Reichheld, a prominent management consultant and thought leader in the area of loyalty effects, summarized it this way:

"Creating value for customers is the foundation of every successful business system. Creating value for customers builds loyalty, and loyalty in turn builds growth, profit and more value."

Although it may seem like common sense, this principle has often been misinterpreted or, at least, misapplied in service organizations. Nevertheless, done correctly, the economic rewards of increasing retention by creating incremental value for the consumer can be enormous. Across a wide array of industries, a 5% improvement in customer retention has been consistently shown to yield 25-100% improvements in profits.² This is because improvements in retention touch on so many elements of the customer relationship, resulting in either an increase in direct revenue for the service provider, or a decrease in costs including the substantial cost of initial customer acquisition.

The question that remains, however, is this:

What represents "value" to the consumer, particularly in the context of service transactions?

"The simple truth is that satisfaction surveys alone don't yield the information that companies need to have about delivering value to customers."

*Fred Reichheld et. al.
European Business Journal, 2000*

"...delighting customers doesn't build loyalty; reducing their effort – the work they must do to get their problem solved – does"

What Drives Loyalty and Retention?

Customer satisfaction (CSAT), as it is traditionally measured, has a significant impact on the value of a brand in the eyes of the consumer. This, in turn, has an impact on both initial and recurring purchases of new products. However, what is equally clear is that CSAT is a poor predictor of loyalty and customer retention in the context of service transactions.

In a recent paper entitled "Stop Trying to Delight Your Customers" published in the Harvard Business Review, the authors examined data from actual customer service interactions with 75,000 people across a wide range of industries. Their somewhat counterintuitive, but robustly supported conclusion was that there is:

"...little relationship between satisfaction and loyalty. Twenty percent of the "satisfied" customers in [the] study said they intended to leave the company in question; 28% of the "dissatisfied" customers intended to stay."

The two critical findings of this study, albeit previously suggested by Reichheld and others, were that:

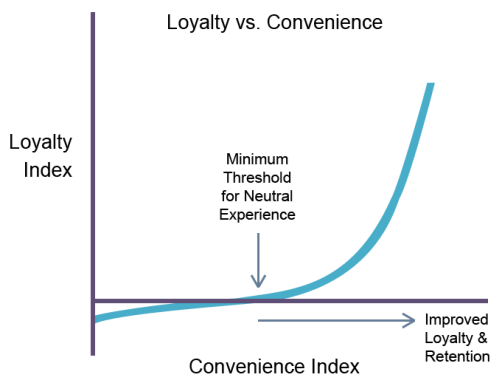
"First, delighting customers doesn't build loyalty; reducing their effort – the work they must do to get their problem solved – does. Second, acting deliberately on this insight can help improve customer service, reduce customer service costs and decrease customer churn."

This could be re-stated as the following basic design principle for service transactions:

Consumer convenience is the basis for consumer loyalty.

The simplicity of this conclusion makes it possible to focus on the things that are actually relevant in building customer loyalty. It also allows the creation of simple tests to determine the value of new or incremental processes and technology.

In practice, creating convenience for the consumer is often a matter of simply **anticipating needs** and **removing obstacles**. Applying these guidelines to business processes and the systems that support those processes is fairly straightforward. A good example is an activity familiar to most of us: the process of having our vehicle serviced.



Loyalty (leading to long-term customer retention), is positively correlated with the ease of service interactions

Vehicle Service – Make it Easy

The very nature of the vehicle ownership experience provides Dealers and OEM's with an excellent opportunity to build customer loyalty. Every single interaction with the customer related to the maintenance of a vehicle can build incremental loyalty if that service is provided efficiently and with a high degree of convenience. In this context, "convenience" means arranging and providing service in a way that is personalized and streamlined, with a minimum of distraction for the customer. In other words, **make it easy**.

In many situations, the multiple steps and diversions demanded even by the simple scheduling of a service appointment are a bane to consumers. These elements are analogous to the friction in a machine, and any steps taken to eliminate such friction are steps toward improved customer retention.

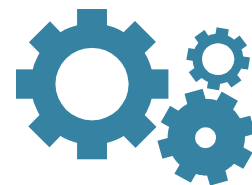
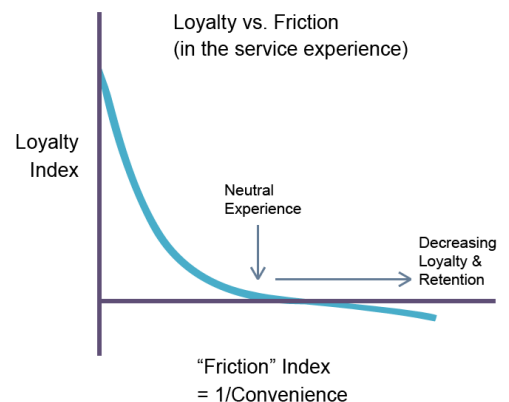
Designing systems that are optimized for "low friction" is simply a matter of minimizing the number of diversions imposed on the customer. Some examples include:

- Reducing or eliminating "channel switching". A transaction initiated electronically (perhaps as an attempt to self-schedule a service appointment), that subsequently requires the customer to switch to a voice channel for confirmation is a good example of a system with high friction. *
- Minimizing the number of individual decisions and actions required to accomplish a particular task. In electronic transactions, this can mean minimizing the number of clicks necessary to complete a function.
- Providing some flexibility and choice, but only in limited quantities. The "dilemma of too much choice" is an interesting behavioral phenomenon that can strongly color a customer's perception of his or her experience.

A strong focus on decreasing the friction in service processes is the key to building solutions that successfully build consumer loyalty. It is then possible to leverage the latest telematics and enterprise systems technology in the most effective way and with a high ROI.

"The immediate mission is clear: Corporate leaders must focus their service organizations on mitigating disloyalty by reducing customer effort."

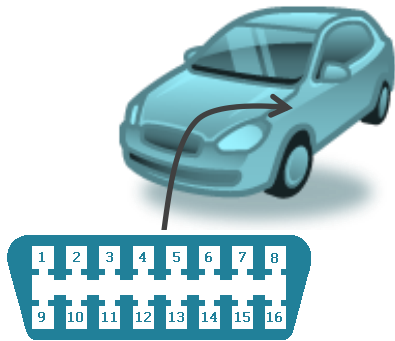
Mathew Dixon et. al.
Harvard Business Review, 2010



Prudent use of technology to eliminate friction in vehicle service transactions can significantly improve consumer loyalty and retention, providing a high ROI.

* One interesting result revealed by the Harvard study was related to the level of consumer acceptance for purely electronic or self-service interactions. Contrary to the generally held belief that customers prefer live phone service to self-service, the data indicated that customers are actually indifferent. Considering that the cost of self-service can be made to be dramatically lower than live service through the careful application of technology, this provides a significant opportunity for higher profitability.

Telematics in Every Car... Today



The OBD port (shown here head-on at approximately full scale), is located inside the passenger compartment, typically within 12" of the steering column, and in a position that is generally invisible to the driver

Every vehicle sold in North America today is equipped with a data port for the purpose of connecting diagnostic scan tools to the car's on-board computers. The port itself is located inside the passenger compartment, typically within 12 inches of the steering column, and in a position that is generally invisible to the driver. In fact, the vast majority of drivers are oblivious to the existence of the port since it is only accessed when a technician is troubleshooting faults with the vehicle. The exposed connector is known as an On Board Diagnostic (OBD) port and it provides direct access to various high- and low-level protocols linking the complex on-board network of computers.

The foundation for innovative and often unexpectedly useful business applications are the standards that allow transparent operation of systems on multiple platforms. To some degree, the OBD connection provides this capability by implementing a standardized communications protocol known as OBD-II. The protocol is purpose-built to expose vehicle status information that can facilitate troubleshooting of various faults. But the intended scope of the protocol also limits its usefulness, and a wealth of information maintained by the vehicle still lies buried beneath the OBD-II surface. This is a critical fact that dramatically restricts the true usability of on-board data for telematics applications: OBD-II does not provide enough information for many highly automated (and therefore "low-friction") telematics applications.

Fortunately, the same OBD port also provides a more direct connection to the entire network of computers distributed throughout the vehicle. Since 2008, all cars sold in North America have been required to implement a standard signaling protocol, ISO 15765-4 which is a variant of the "Controller Area Network" (CAN) bus protocol. Although originally designed specifically for automotive applications, the CAN bus is now used in various and diverse industrial automation applications.

Accessing the CAN bus layer makes it possible to read the data collected by each discrete electronic module in the car. For example, although the OBD protocol does not provide odometer information, using the CAN protocol makes it possible to interrogate the embedded computer in the instrument cluster and to retrieve that value. This single piece of critical data can enable a whole host of applications, including such things as a highly automated, "low-friction" service scheduling application. Or pay-as-you-go insurance, or the generation of targeted sales leads based on actual usage patterns, or countless other solutions. The possibilities are almost limitless, but only with technology that can access the full set of information monitored by the vehicle.

...the intended use of the [OBD-II] protocol also limits its usefulness, and a wealth of information maintained by the vehicle still lies buried beneath the OBD-II surface

Designing Systems for Retention

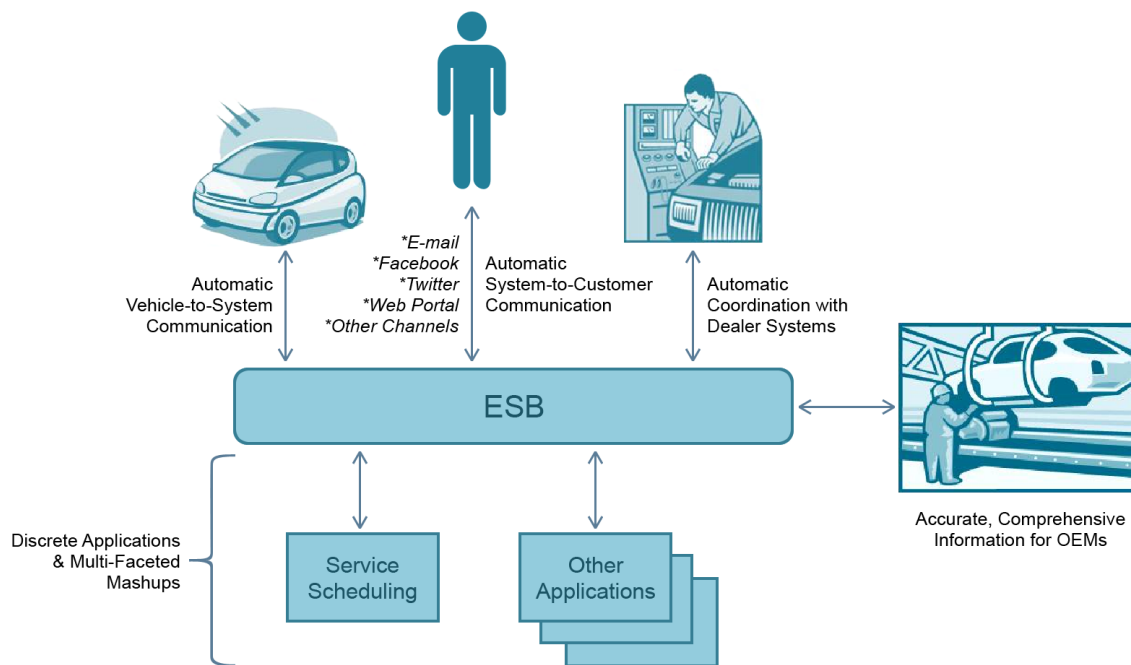
The research shows that low-friction consumer experiences form the primary basis for strong consumer loyalty in service-oriented scenarios. Technically, it is feasible to support such experiences by automatically capturing, transmitting and analyzing a wealth of accurate, real-time information about the vehicle.

So, what sort of solution architecture can bring it all together? What design can support a wide range of highly-automated applications working together to streamline business processes with minimum friction?

The high-level outline of such an architecture is shown in the figure below, along with typical points of interaction with the service providers and consumers in the model. The principle actors in this scenario include:

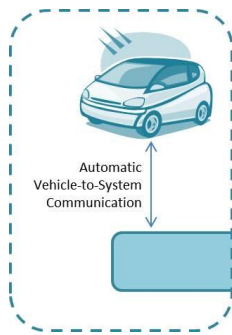
- The vehicle, empowered - through the use of telematics technology - to essentially speak for itself;
- The vehicle owner, as the target of the retention strategy;
- The dealership, as the provider of services and the primary financial beneficiary of a successful retention strategy;
- The vehicle manufacturer, with a strong interest in the loyalty felt by consumers not just towards the brand, but all aspects of their ownership experience. In fact, incremental loyalty, however it is generated, translates into improved sales and profits throughout the supply chain.

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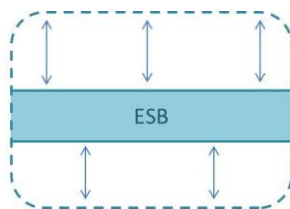


Collect, Communicate, Connect

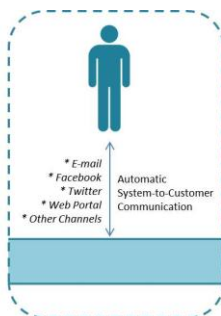
At the level of abstraction in the architectural diagram, there are really only three critical parts in the design:



Collect



Communicate



Connect

1 A "Retriever" device, capable of mining relevant OBD and CAN data in real time and transmitting that data to an enterprise system in support of one or more business processes. For example, the transmission of the current odometer reading can trigger maintenance notifications based on pre-determined thresholds. As an aside, this can eliminate the need for traditional promotional mailings that are distributed on the basis of wildly inaccurate projections of vehicle usage. These materials are often discarded by the vehicle owner because they are irrelevant at that particular point in time. At best, such non-specific, non-personalized marketing tools represent a neutral factor in building loyalty – at worst, they are considered a nuisance and have a negative impact.

2 An "Enterprise Service Bus" (ESB), which acts as a universal translator and router, brokering messages between various points in the system. In general, the ESB is designed to accept inbound message traffic through purpose-built adapters, apply business logic to augment and/or re-assemble the incoming data, and send an appropriate message stream to one or more application nodes requiring that information. The power of the ESB approach lies in the singular and relatively generic interface that can be exposed to any new applications. With the addition of a simple adapter, those applications can share functionality and information with one another to create new and interesting business processes. This is the basic premise for a "mash-up", a powerful way of leveraging existing technology investments to produce incremental business value.* The ESB is an elegant solution to the problem of reducing integration costs while simultaneously enabling new business solutions, which is why it is widely used in many Fortune 1000 companies with transactional and information-centric infrastructures.

3 Robust, bi-directional support for communication with the vehicle owner using his or her preferred channels, including all popular social media channels. It is clear that the most friction-free method of interacting with consumers is to use the medium that they themselves use most often. With Facebook recently outpacing e-mail in terms of worldwide message traffic, this is forcing a change in the way companies do business. Fortunately, the technical challenges related to this issue are well understood and easily overcome.

Using an architecture based on these three fundamental components, the possibilities for assembling low-friction, customer-centric solutions are almost limitless. And it is these systems that will ultimately drive customer loyalty and retention in a tangible way.

* Over 5000 illustrative examples are listed at: www.programmableweb.com/mashups

Key Conclusions

1. Traditional measures of customer satisfaction are not good predictors of customer retention in the context of service transactions.
2. Low-effort consumer experiences are the basis for consumer loyalty, and increased consumer loyalty yields significantly improved profits with a disproportionately high ROI.
3. New technology can help dealers and OEMs create a more streamlined service experience for the end-consumer, and consistently retain those consumers as a result.
4. Ubiquitous vehicle features such as the OBD connection in every late-model car already provide a common platform for machine-to-machine telematics applications that enable low-friction customer experiences.
5. It is important to embrace the communication channels preferred by customers, including the newly dominant social media channels.
6. Enterprise systems that incorporate accurate telematics-based data sources, advanced ESB backbones and sophisticated customer communication channels are uniquely positioned as practical solutions that will build consumer loyalty and increase retention.

The Author



Bob Rybak is the Chief Technical Officer for VINVOX. He is responsible for the Company's technical vision and oversees all technical aspects of product research, development, positioning and deployment.

Rybak is an innovator and entrepreneur with a diverse background that has spanned both the public and private sectors, and has touched a wide range of industries including Distribution, Auto Insurance and Finance. He has been working with Telematics technologies since the 1980s.

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VINVOX is an innovative telematics company with products that directly support the sales and service operations of Dealers and OEMS, while delivering unprecedented value to vehicle owners. The VINVOX Interaction Platform (VIP) * collects real-time operating data from vehicles and uses that data to create a highly relevant and personalized service experience for consumers. The VIP allows auto manufacturers and their affiliated dealers to enhance the vehicle servicing process, more closely manage customer relationships and reduce costs. The solution is designed from the ground up to enhance brand loyalty while leveraging the entire spectrum of electronic and social media channels.

For additional information about VINVOX, please contact us at info@vinvox.com.

** Patent Pending*