

An ongoing commitment

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Having recently advised on the US\$150 million system-wide upgrade to electronic toll collection in Puerto Rico, a large network with over 200 toll lanes, the authors reflect on the pivotal role of the customer interface and support functions – new territory for many old tollers

The decision to employ Electronic Toll Collection (ETC) technologies is one of the most significant that a toll authority can make and one that will fundamentally change the way that they do business. Forget about the fancy roadside technology – that's the easy part. Let's introduce a new, important and quite demanding set of stakeholders to the business model: real customers.

For sure, conventional tolling systems have customers but the customer interface – an attendant in a toll booth – is very straightforward and highly visible. The level of customer support extends only to giving change and answering the occasional enquiry. ETC changes all of that in a number of important, yet all-too-often overlooked ways.

Customer support

Encouraging driver participation in a programme is the key to a successful ETC deployment. Advanced publicity and promotions combined with simple and readily accessible enrolment procedures are required. The benefits of joining the scheme must be real and obvious. Patrons and potential patrons will have questions – and an infrastructure (see next section) needs to be in place to

ensure that these questions can be answered promptly and in full.

Transponder stocks need to be maintained to meet customer demand. The transponders need to be dispatched quickly to new patrons and, as above, support needs to be provided. Despite the provision of instructions and other transponder-related literature, people will have questions. Additionally, transponders can fail (unexpectedly) and have a finite battery life (so will fail eventually). Customer support needs to address all of these issues.

Most authorities are keen to (or simply have to) offer alternative payment mechanisms and billing arrangements to their customers. From the authority's perspective, payment by credit card remains the favoured – read 'least expensive by a margin' – vehicle, and enrolment procedures and related publicity can subtly steer people in that direction. However in many parts of the world, such as Puerto Rico, credit card penetration is low and alternatives have to be accepted. This can have serious resource implications because of the volume of transactions that many authorities process.

The system in Puerto Rico is big – but it is not one of the biggest – handling over 750,000 transactions a day.

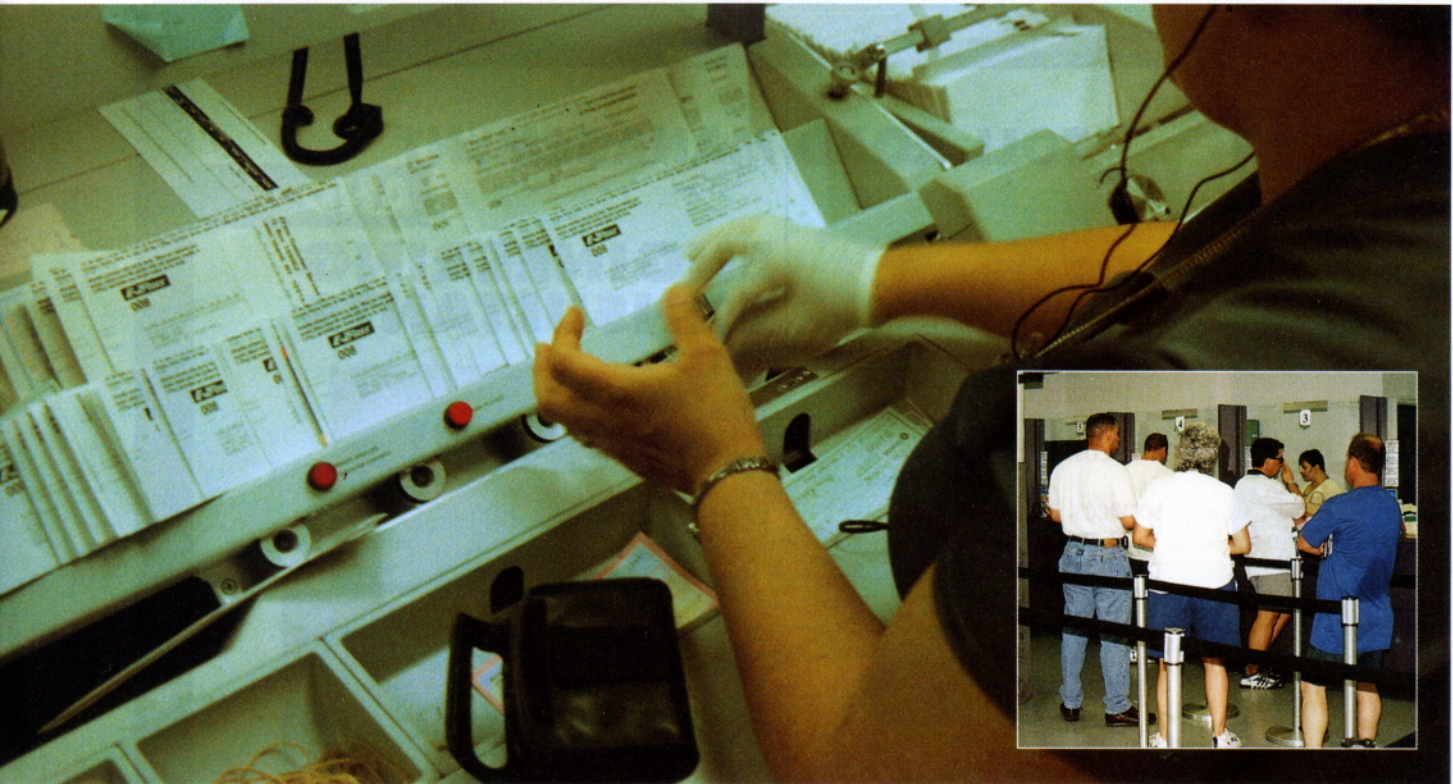
If only one per cent of customers paid by monthly cheque, there would still be a lot of cheques requiring manual processing – never mind the time spent dealing with insufficient funds, incorrect cheque preparation and difficulties determining which user account has to be credited (see box 'Alternative payment methods').

Furthermore, users will have questions about the status of their accounts with the toll authority and even in the best-managed facilities there are customer complaints to be addressed and/or resolved: "Why should I pay when the traffic was backed-up because of construction work?", "You overcharged me", "I didn't make that trip" and so on.

Customer support demands an ongoing relationship with users. Even those who never make an enquiry or a complaint will need to be contacted regarding annual credit card updates, toll rate adjustments, system extensions and so forth.

Violations

All barrier-free ETC applications require some form of enforcement for drivers who abuse the ETC lanes (vehicles without a valid transponder). Typically, this involves taking one or more photographs of the violator's licence plate and a



Tolling operators ignore customer service and back-office operations at their peril

process – part automated and part manual – to retrieve ownership information from the Department of Motor Vehicles (DMV) or similar authority.

Experience has demonstrated that the interface with vehicle registration databases and those who have custody of them may need a little more effort (resources) than is commonly anticipated. Additionally, vehicle records may be incorrect or incomplete, requiring further intervention (resources). On top of all that, violators may choose to ignore the notice sent to them and will need to be pursued through other – invariably more time-consuming – means. This could involve a further interface with the DMV so that further action is triggered when licence plates are renewed, or recourse to the judicial system.

Even when the violation process works ‘perfectly’, how does the toll authority credit monies back to the appropriate customer records? For example, if the annual licence plate renewal process costs US\$50, the customer fines are US\$10 and a remittance is made at the licence plate office for US\$60, another process is required so that the US\$10 is recorded against the customer’s account and they are effectively taken off the black list.

Financial control

Each toll transaction must be accounted for and sufficient controls need to be in place to ensure that trips are recorded at the correct amount and, at the end of the day, traffic and payment records can be reconciled – with funds deposited in the authority’s bank accounts. Also, various bank and credit card charges must be properly accounted for.

We realise that this may come as a surprise to some, but occasionally banks do make errors and these have to be detected, reported and adjusted if accounts are to be managed correctly and auditors are to be kept satisfied.

A multifaced customer interface

Marketing your new facility to ensure appropriate levels of transponder penetration becomes extremely important once you have committed to ETC (see later). Appropriate promotional and educational publicity needs to be coordinated, typically including a mix of leaflets, posters, mail drops, radio and TV spots. This adds additional expense to operations and requires serious (professional?) thought if the desired outcomes are to be realised. The standard marketing approaches may not always be the best guarantee of reaching your transponder penetration goals –

Alternative payment options

In parts of the world where credit card penetration is low and a significant percentage of the vehicle-owning population do not have a bank account, imaginative payment mechanisms for ETC need to be explored. Although, at the time of writing, this matter has not been resolved in Puerto Rico – largely because of a change in administration and a subsequent delay to the ETC procurement process – one of the alternatives that was the subject of careful consideration was a pre-paid option with an ETC ‘pack’, complete with transponder and instructions that would be available from vending machines. This option was being discussed with a major fuel distributor on the island.

In such cases, it is often instructive to look at the utility sector in a country to see what lessons can be learned from them and their service payment arrangements. For example, pre-paid phone cards are very popular in Puerto Rico (as they are in much of Latin America), so this is clearly a payment vehicle that people are familiar with and like. Hence the interest in a pre-paid solution for ETC.



The benefits of joining an electronic toll collection scheme must be obvious to potential users



this is not about selling cars or boxes of cereal.

Most toll authorities create strategically located walk-in centres to enrol customers, distribute transponders and provide information and visibility for the facility. During roll-out, these permanent centres may be augmented by other, temporary facilities at service stations, shopping malls and so on, designed to heighten awareness of the new ETC programme.

Third-party partners (gas stations, banks and so on) who disburse self-enrolment kits or accept payments can be of very valuable assistance during roll-out and also to meet ongoing customer needs. More than one toll authority has overlooked partnering opportunities, many of which can be beneficial to both parties at minimum added expense.

Telephone call centres need to be created to respond to customer queries and provide customer support. This would include Integrated Voice Response (IVR) technologies to minimise staff costs. Even with such technologies, however, call centres can be quite extensive facilities employing over 50 people. Mail services need to be established to handle applications for transponders, customer payments, letters of complaint and so forth.

Increasingly, toll authorities have developed Internet-based customer support interfaces providing information, on-line application forms and password-protected access to individual account records. Clearly, the broad objective is to satisfy customer requirements as economically as possible, hence the considerable interest in (and pressure to develop) interfaces which minimise human contact.

All of the interfaces mentioned above are standard in a number of business sectors – particularly those dealing

with a high volume of low-value transactions, such as utilities – however many are completely unfamiliar territory to toll authorities. The creation of a modern call centre, for example, could be the subject of a small book, as this is a highly specialised skill which requires careful and thoughtful planning if it is to meet an authority's and its customers' needs.

Getting it right, first time

The majority of ETC systems in the world are 'mixed systems' catering for both ETC and non-ETC (that is, cash) customers. The most sensitive time for this type of ETC deployment is when somebody – at last – presses the 'on' button. A backward journey through a nightmare (but potentially very real) scenario demonstrates the full significance of strong customer support. The need for watertight customer interfaces will become apparent:

- The last thing that you want is bad press/media coverage for your new ETC system. That can do irreparable damage to the programme's credibility and cause enormous discomfort to politicians who supported the not-inconsiderable investment in ETC;
- The easiest way to attract bad press is for congestion to be worse after ETC deployment than before. This has happened to a number of toll authorities;
- The easiest way for congestion to get worse is for few customers to be using the upstream highway capacity and toll lanes dedicated to ETC patrons. That means that more drivers than before will be trying to use the remaining (non-ETC) system capacity;
- Few customers will be using the

ETC facilities if the benefits are not obvious and few have registered to become ETC patrons;

- Few customers will be ETC patrons if your customer support functions are not fully operational in advance of and during the system roll-out phase;
- Unanswered telephone calls and busy signals are not what people expect from professional service providers; most toll authorities realise that this is NOT what they want to have happen.

Underestimate the importance of customer support and your ETC system will be on the early evening news (and subsequent bulletins). Be warned!

Ongoing commitment

Once the roadside technology has been deployed and tested, is operational and all the engineers have moved on to their next big project, the customer support commitments and interface performance elements of ETC take centre stage, leaving you with all of these pesky customers and their demands. More than one toll authority has been subjected to severe and sustained media criticism for its inability to effectively respond to customer requirements. You don't want to join that club. ■

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