

Taking security to heart

Heartland Payment Systems has grown to become the fifth largest payments processor in the US and ninth in the world since it was launched over a decade ago. Steven Elefant, chief information officer at Heartland, speaks to **Ronan McCaughey** about its commitment to fully disclosed pricing, the impact of the security breach within its processing system in 2008, and the company's investment in end-to-end encryption technology

What are the main trends and issues affecting Heartland and other payment processors in the US?

Among the trends we are seeing, fraud is on the rise as the bad guys get smarter and we have to come up with ways to leapfrog them and be proactive – rather than be reactive. The economic downturn has certainly hit all of us too and we have had to work harder to continue to grow our business. Heartland processed 4.2 billion transactions in 2009 and is the fifth largest processor in the US. We are continuing to add new products to our mix and expand our business. Currently, we are exclusively processing in the US and Canada, but are looking at possible international expansion in the future. The payment processing sector in North America is extremely competitive. There are a lot of processors and independent sales organisations, with many players vying for merchants' business. Overall, it is a very healthy and robust industry.

How does Heartland differentiate itself from other players in the US?

Our philosophy has been to be very open in the way that we work with merchants and our customers. We do not have the hidden fees that some others use. Instead, we show our customers what we are charging and what they will ultimately pay. That has been a differentiator. Another differentiator is the fact that we have the largest national sales force. On the technology side, being a fairly young company, we have state-of-the-art equipment and not 30-year-old

mainframe systems. Consequently, our systems are nimble and give us the ability to add new features, as can be seen with our encryption programme.

In the case of our encryption programme, what we have done is come out with our line of hardware and software that is the first of its type in the US. We did this because we found that when we looked at other manufacturers, none of them had the levels of security we were looking for. Now there are other manufacturers who are adopting what we are proposing. Encryption is the glue

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that holds the whole security solution together because it takes data that is entered into the terminal at the point of swipe and encrypts it all the way through until delivery to the card schemes.

The last part of the solution is what we call post-processing tokenisation. This means that once we get a transaction,



Steven Elefant, Heartland Payment Systems

we send a token back to the merchant so that any future need for a credit card number is alleviated. What I am told by the US National Security Agency and others in the cryptography world is that you can take all the computers in the world and you would not have enough processing power to break the cryptography that is used in our system. We have started with a clean white board and want to make the system as secure as possible.

Was the security breach that Heartland experienced in 2008 the main reason for developing this new encryption programme?

We had been working on the encryption programme before the intrusion occurred, but it was another reason that shows the importance of having this type of technology available. During the intrusion incident of 2008, unfortunately we had a SQL injection that we found within 24 hours ourselves, but that put very sophisticated malware into our system and when we were alerted to a possible compromise by the card schemes, we brought in forensic analysts to help us find the malware, which we did. Unfortunately, it took a while for the forensics companies and us to be able to find the malware.

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focused on security, but we have since redoubled our efforts and we have got enterprise-wide encryption technology to make ourselves hopefully the most secure processor in the world.

In order to ensure this type of intrusion does not happen to us [again], and help teach and protect others in the industry, we have started a group here in the US called PPISC – the Payment Processors Information Sharing Council. In doing this, we invited our top peers and competitors in the US to join us in sharing information as we fundamentally believe that threat information should not be a competitive differentiator.

The council now has 13 of the top 15 processors, which represents 77 percent of the transactions done in the US. At the first meeting that we held last year, we shared a USB drive with software to help detect more than 100 pieces of customised malware, which included the ones used to attack us and none of which were in any of the anti-virus programmes. Later in the year, we also had the US Secret Service provide malware and IP addresses to the PPISC.

Heartland

- Heartland was founded in 1997 and the company is headquartered in the US
- Heartland's primary business is managing payment processing services for merchants in the US
- The company also helps merchants in related specialty areas such as payroll processing, cheque management, gift cards and loyalty programmes
- Heartland is traded on the New York Stock Exchange (NYSE) under the symbol HPY
- Heartland's initial public offering was on 11 August 2005 with an opening share price of \$22.50. The share price at the time of writing was \$19.36

When does Heartland expect all of the settlement cases relating to the 2008 security breach to be resolved?

We hope to be able to settle with all the brands. We have already settled with two of the top four and are continuing to work through this. The

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Visa announcement that was made in January 2010 was very significant because Visa is the largest payment brand in the world. Our business is strong and we are a profitable company. Between the money that we have, the insurance we had and access to the capital markets, we are able to cover all the financial settlements that are necessary to put the breach behind us.

What is your view on the interchange debacle between merchants and payment providers?

One of the things that we have tried not to do is hide any of the fees, so we show exactly what the interchange rate is. When interchange rates change every April and October in the US, some people in the industry take that as an opportunity not only to increase interchange, but to add additional fees. At Heartland, we do not do that at all and we try to keep it very open. There are some players who feel that merchants should have to pay a security tax for encryption and PCI. However, we believe that merchants should not have to pay more to be secure. Therefore, the millions of dollars that we have spent on the encryption solution is not being passed on to merchants. We do not charge any additional fees or transaction fees. It is a one-time hardware upgrade.

How successful has Heartland's merchant bill of rights been?

We published the merchant bill of rights after consulting with a number of different merchant groups and the bill is something we feel strongly that merchants are entitled to. Just recently,

we announced a partnership with the National Restaurant Association, which is one of the largest associations here in the US. It is things like the merchant bill of rights and how Heartland conducts its business that are attractive to organisations like the National Restaurant Association.

As an acquirer as well as a processor, what are the key themes in the US and Canadian acquiring sector?

It is a focus on security and functionality. We continue to rollout new products. For example, we have just made an announcement about a product called SmartLink, which is a product that consolidates the communications traffic for places like petrol stations where they have numerous data lines. Heartland does much more than cards. We have a payroll division with more than 10,000 merchants for payroll services. We also have a micro-payment division that services venues, such as laundrettes and campuses. We see micro-payments as a big opportunity. This is because consumers want to be able to use their payment card for everything from a Coke machine to a washing machine at a laundrette. In addition to these services, we also have a big business in cheque processing, gift cards and loyalty processing. Loyalty is a growing market for us and it is a solution we are offering to all large and small merchants. ●