



Get dynamic, get relevant, and engage your visitors!

a white paper from

Speed-Trap

Today, your customers expect their experience of dealing with you to be personalised, dynamic, relevant and enjoyable – in a word “engaging”.

If this experience is to be truly personalised and dynamic it requires you, as a pre-requisite, to understand your visitor. To understand your visitor you not only need to know what they are doing right now, (their “session state”) but also what they have done in the past (their “customer state”).

This paper discusses how Speed-Trap’s real-time “RTE” sub-system (in conjunction with its “ABI” module) can be used to provide the data and insight you need to deliver highly personalised, dynamic experiences across your touch-points. It explains how these solutions will operate, regardless of the technology you use to build your websites, write your mobile applications, drive your marketing programmes or power your call centres. Finally, it discusses how this information can be gathered without significant changes to these applications or websites.

What do you want to deliver?

To succeed today any site (other than the most humble village sports club site) will want to provide some level of personalisation for the visitor. Whether that be **explicit** (the user updates their profile which drives specific content to them) or **implicit** ("if they do this, maybe they like this") or **modelled** ("given this user is type 'C' I am going to offer them a better price on the policy"), they are personalised, dynamic experiences; experiences that appeal to the circumstances, aspirations and intent of your visitor by being truly relevant and engaging.

So what kind of things would you want to deliver to achieve this personalisation? This is of course unique to your organisation. Some examples may be an **offer** for a television, an **advert** for the latest iPod, a link to a special deal on home insurance, a **movie** on the detriments of smoking, an **SMS** detailing an RMA number, an **e-mail** promotion for flights to Paris; the list is endless. You want to make them an **offer**, and to do that you need to deliver some content to them. Whether that **offer** is stored within a Web Content Management System, marketing automation system or on a web server; whether that content is a simple banner, a redesigned web page, a rich-media application, a simple e-mail or a video.

Make it relevant

However, it is all well and good making this offer to the user, but is it appropriate? Why would you want to show an offer on televisions if the visitor has already bought a television? Maybe they have been looking at various home insurance policies in the last three days and they are ready to buy, so a small incentive to purchase today might be all that is required? Why show a link to a special on home insurance if the visitor was not entitled to it? Why show them a cut-price holiday when they are browsing luxury vacations?

You need to know three things before you attempt to select and present this offer. You need to:

- 1 know the individual
- 2 know the current behaviours they are exhibiting
- 3 understand the behaviour they have exhibited in the past

So selecting the right content based on your visitor's current and historic behaviour is what is needed to deliver a truly personalised, relevant experience.

Speed-Trap's RTE and ABI modules can help your organisation deliver this experience, allowing your application to simply "plug" into Speed-Trap's open interfaces, and let it provide you with a 360° degree view of your visitor. A view of historic and current behavioural state and environmental information – **all in real-time**.

What are they doing right now?

Speed-Trap's unique, patented Dynamic Collection™ technology makes it easy for organisations to collect information about what your visitors are doing via the online channel. With a single line of JavaScript inserted into each of your web pages¹ or a single change to your rich media applications, real-time "events" from the current visitor's interactions can be captured. These are time stamped to the millisecond and record not only the event that occurred e.g. clicks, text inputs, page views etc. but a wealth of other metadata such as the "product id" being clicked on, the name of the field where text is being entered, or the price you are offering for the product on view.

This "digital minutia" is a second-by-second real-time stream of events generated by the users' interaction with your web site or application. With Speed-Trap's RTE module, these events are transformed into "business events" in real-time. Speed-Trap knows this as the visitor's "session state".

Some examples of these business events might be

- Which campaign drove your visitor to the site?
- What is their e-mail address?
- What is their account number or customer ID?
- What search keywords did they use in external search engines?
- What did they search for once they landed on the site?
- Have they put a product into the basket?
- Have they removed a product from the basket?
- Have they dropped out of filling in a form?
- Which part of the form did they stop at?
- Have they subscribed to an RSS feed?
- Are they watching a movie?
- Are they looking at a particular product?
- What was their landing page on your site?

¹ This is usually within a footer template or inserted via a proxy for zero-touch Tag-Free™ deployment.

Real-time segmentation

These behaviours can be queried in real-time via a SOAP or XML API. They can also be linked to position your visitor into an appropriate user segments in real-time e.g.

User segment	Behaviours exhibited by the visitor
The "Sony" User	<ul style="list-style-type: none"> • The user has looked at three Sony items • Added at least one of them to the basket
The "Hot Home Insurance" Renewer	<ul style="list-style-type: none"> • Came to your site from a Google campaign • Has done a home insurance quote • Has asked for a call-back
The "Possible Fraudster"	<ul style="list-style-type: none"> • Logged in as three different people • Entered credit card data from five cards • Made more than three typing errors • Is using a machine set to different language to card holder's
The "Week-end Breaker"	<ul style="list-style-type: none"> • Searched for flights to six holiday destinations • All searches were for the same weekend • Searching for dates next month • Looked at "late deals"

Can it get better than this?

These "segments" can then be used to either drive content straight into the page, or as a feed into decision management systems for more complex applications e.g. best next action, or even to drive back-office systems or offline processes, like targeted e-mails or call centre actions.

The ability to understand and act upon an individual's behaviour within their current session is extremely powerful. This alone may be enough to drive a truly dynamic, personalised experience. But it becomes so much more powerful if you can relate what your visitor is doing right now to their customer history.

Speed-Trap's ABI module allows you to build up a profile of your users over time. This record contains "profile" data captured from their previous visits (or added by your back-office systems, so it could include data from their store card or your call centre) and it also includes key "behaviours" which they have performed online.

This combination delivers a 360° view of your visitor's behaviour, brand experience and preferences. Speed-Trap describes this as a record of "customer state".

Putting it all together

As Speed-Trap's ABI module builds up this profile of each user's behaviours over time, it calculates RFM information (Recency/Frequency/Monetary or Metric) against each behaviour, (as well as keeping a time stamped record of what behaviours a user exhibited) building a complete history of the "journey" of the individual as they engaged with your organisation or brand.

ABI's "customer state" can be automatically used to augment the RTE real-time "session state" information to provide an instant and truly complete, multi-touch point view of your visitor or customer.

RTE can pre-fetch this key customer history at the very start of a browsing session and eliminate the traditional "latency" which has made previous generations of "real-time" personalisation systems too slow to link real-time behaviour to historic behaviour on-the-fly.

The right time

Sometimes a real-time response to behaviour or an event is what is needed, and RTE can certainly meet this need. But on other occasions a later response can be better... (a reminder of a relevant offer delivered with the monthly statement etc.). ABI's customer datamart can be used to feed CRM, e-mail marketing or other systems focused around the individual as it holds that cross-channel view of the customer.

... and given ABI's open SQL data structures and RTE's easy-to-use SOA interfaces you can ask almost any question you want:

- Has my current visitor spent more than £100 on TVs in the past?
- Do my current visitor's RFM scores suggest they are at risk of defecting?
- How often does my current visitor watch streaming movies?
- What status is my current visitor (platinum, gold etc.)?
- What products does my back office modelling suggest we offer my current visitor?
- Which social demographic segment is my current visitor in?
- Do I have any open "customer problem" tickets for my current visitor?
- What is my current visitor's credit or account status?

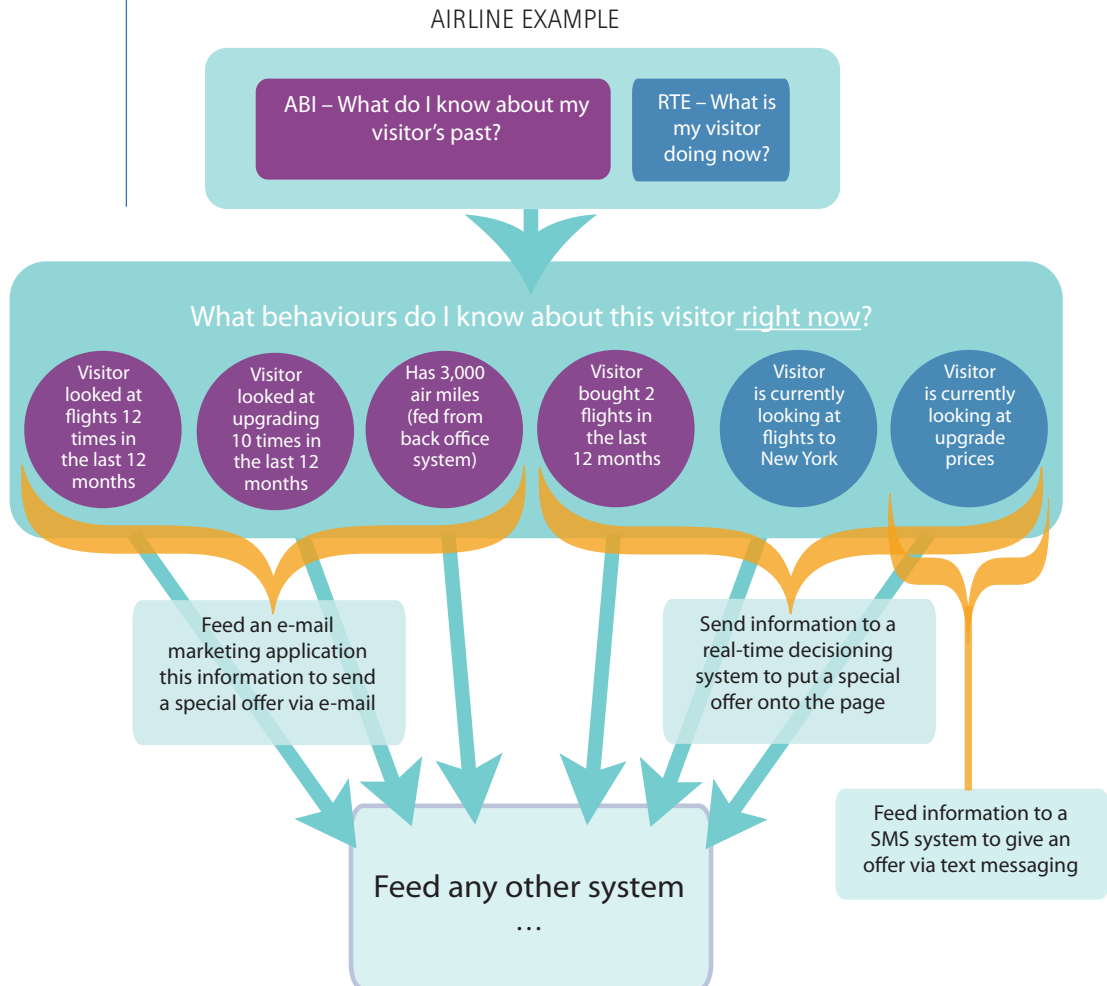
Complex Event Marketing

Armed with this breadth of data you can look for far more complex "business events" in real-time. These can help you understand the aspirations of your visitor, based on what they have done in the past and what they are doing right now, and help in driving a "best next action":

Business event	Proposed Best Next Action
My current visitor has come from an external campaign for an offer on Sony Blu-ray players, and has looked at Blu-ray players four times in the past month and owns a Sony TV.	<p>This visitor aspires to watch movies in high definition.</p> <p>Populate the page with an offer for a "Today Only" discount on the Blu-ray player if they purchase the Blu-ray player in the next 24 hours and list their TV as one of the ones it is compatible with.</p>
My current visitor has added a product into the basket but not yet purchased. Their defection status is high (close to defecting) but have put over £1,000 of product into the basket in the last week but not purchased.	<p>This visitor is keen to spend a lot of money on products.</p> <p>Place a "call me" feature into the page for a one-on-one service, offering assistance through the checkout process to see if there is a hidden problem with this customer you can fix.</p>
My current visitor is using a mortgage calculator. They have used the mortgage calculator three times in the last week and currently have a fixed-rate mortgage that is almost at an end.	<p>This customer is ready to purchase a mortgage.</p> <p>Notify the call centre via e-mail or SMS that this customer is in the market place for a new mortgage and should be contacted immediately.</p>
My current visitor has booked six business flights to New York in the last twelve months and is currently looking at flights to New York for two adults and two children.	<p>Is this regular business flyer interested in a family break?</p> <p>Notify e-mail marketing system to send the "New York Family Special" campaign e-mail to this customer.</p>

Drive decisioning systems

Speed-Trap's RTE and ABI systems provide the perfect source of data to drive decisioning systems, e-mail marketing tools, credit card purchasing systems, SMS notifications etc. In fact, any application capable of utilising an XML, SQL or SOAP service.



Forrester Research

Forrester Research recently produced the "Customer Experience Predictions for 2009" Report, listing five factors that will raise the bar for customer experience in 2009 and beyond. One of these factors was that organisations will design experiences that appeal to people's emotions:

"More firms will design experiences that appeal to people's emotions. Few consumers find the experience they have with companies enjoyable. But customer experience professionals are trying to fix that: 80% said improving the enjoyability of online experiences was an increasingly important priority this year"

Megan Burns – Senior Analyst, Forrester Research

"Customer Experience Predictions For 2009" January 2009

Understanding your visitor's emotions, aspirations and intent can help you drive more relevant content to the visitor. Content that will enhance the visitor's experience; that is engaging; that will drive increased customer retention; lower customer churn and improved profitability.

Conclusion

With the web being most organisations' first (and maybe last) point of contact with the customer, it is even more important to ensure their web experience is "relevant", "engaging" and "enjoyable"

With Speed-Trap's RTE and ABI modules, developers get instant access to the behaviours your visitors are exhibiting now, as well as historic information, all via a set of open, accessible interfaces and services.

Speed-Trap: Some background

Speed-Trap is a provider of software that uses Web 2.0 technology to capture and analyse interaction at the user interface – whatever the device e.g. mobile, iPhone, PDA, gaming console, or technology deployed e.g. web page, Flash, Flex, AJAX etc. – to deliver complete real-time data on every visitor and user of your online applications – **complete online customer insight**.

Speed-Trap's systems have come to define a new approach to the integration of online applications into an enterprise's Information Architecture. The system's User Interface Capture functionality provides a definitive, flexible and reusable source of customer, behavioural, process and performance data from any internet, intranet or extranet application.

Speed-Trap's customers use their patented and tag-free Dynamic Collection™ solutions to drive applications as diverse as Fraud Detection, Marketing Automation, Campaign Measurement, Usability & Design, CRM systems and Web Analytics.

With an integrated, interactive reporting suite and options to directly populate Enterprise Data warehouses, it represents the leading edge of advanced online channel data capture, analysis and delivery systems. Companies utilise Speed-Trap's technology to provide data for analytics and marketing tools to provide integrated cross-channel marketing and customer insight.

Based in the UK, Speed-Trap delivers its solutions directly and via a range of OEM, reseller and system integration partners around the world.



Speed-Trap

Complete online customer insight

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