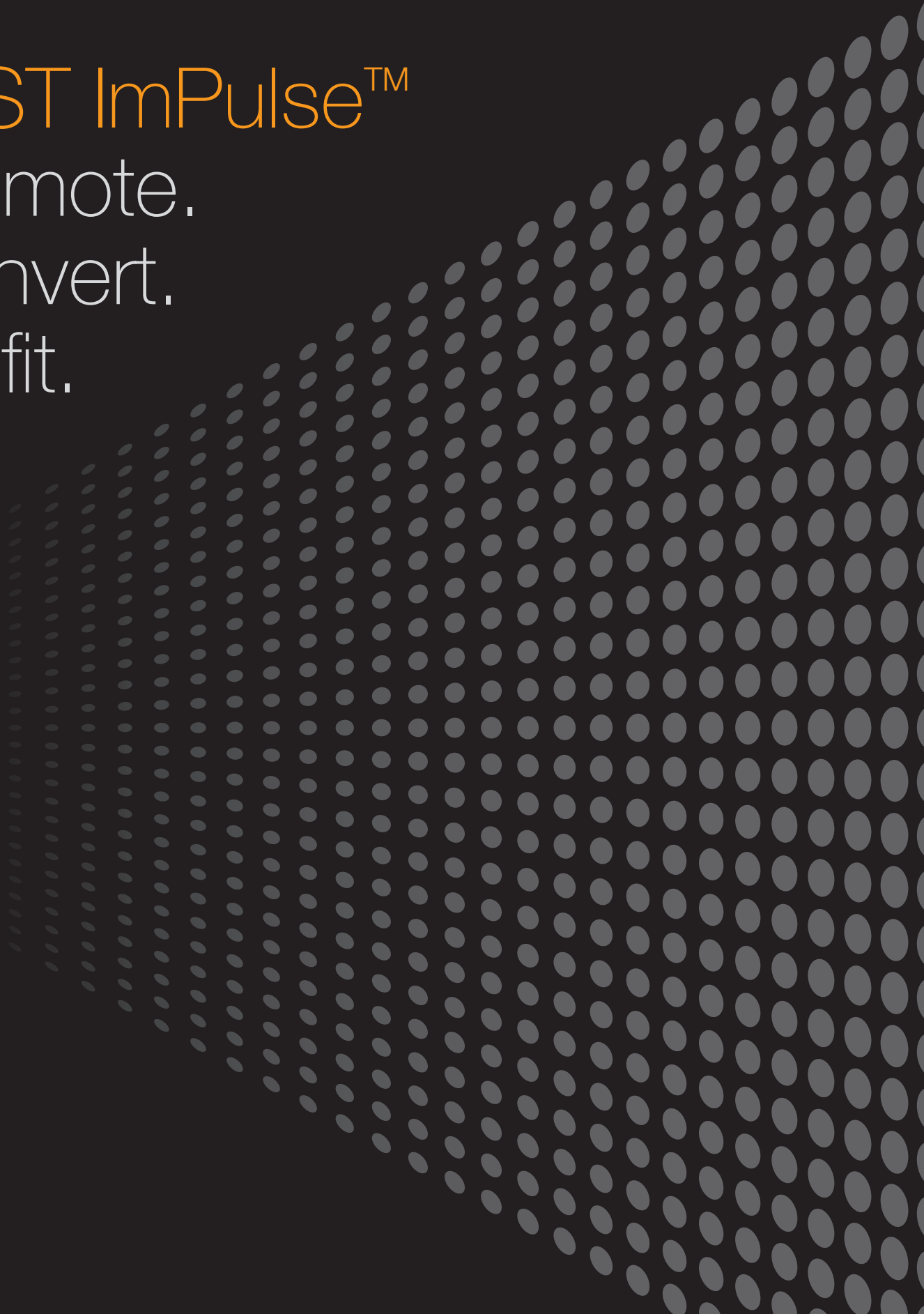# :::*fast*

FAST ImPulse™
Promote.
Convert.
Profit.

Today's online consumer is in control. She knows your products, your competitors - she knows you. Are you ready for her? FAST ImPulse is a complete enterprise eCommerce solution that provides a more intimate connection between merchandiser and consumer to promote products effectively, convert browsers to buyers, and deepen customer loyalty.

The transition from brick-and-mortar to online is occurring at a faster rate than expected (U.S. holiday season online sales from 2004 to 2005 increased 30 percent). This is good news for your online merchandising investment, but with more of your competitors doing the same, how will you stand out? Attract new customers? Move the right inventory? If traffic continues to grow at this rate, will your current eCommerce system handle the higher volumes? The last thing you want is to become a victim of your own success.

Today's enterprise eCommerce venture is more than an online sales counter. The usual indicators are there – browser to buyer conversion, average order value, customer loyalty – but the marketplace is getting crowded. The next generation of eCommerce solution must do more to help differentiate you from your competitors.

This is FAST ImPulse, going beyond the standard eCommerce capabilities to bring you closer to your customer. Not all online merchandising has to be the same.

Promote products effectively

Using promotions and spot-lighting to target trends and push cross-sells is the usual method for increasing average order value. All merchandising solutions today let you manage promotions and content spotlighting, and so does FAST ImPulse. But FAST ImPulse also lets you rotate inventory based on sales performance and economic yield, and monitor and report on browsing patterns, such as impression hits. With FAST ImPulse you have full site previewing that lets you see a promotion before it is published. You can even show future promotions, previewing the site as it will appear at a future date.

Adding intelligence to spot-lighting and a test phase for promotions show respect for the seriousness of your eCommerce environment. Providing

comprehensive reporting gets you closer to your customers and their online buying patterns. This is not simply a website, this is your business and you need precise and measured control over the shopping experience.

Convert browsers to buyers

It is common knowledge that one of the surest ways to increase your conversion rate is to decrease the number of clicks to destination. You lose a third of your audience on average for each click along the way. But how do you really shorten the path?

The conventional approaches are: recognizing synonyms in the search, eliminating incidents that return zero results, and the most common, presenting the properties of your products as navigators the user can select to refine their search (e.g. brown shoes under 200 dollars). These are all basic requirements for any serious merchandising solution and FAST ImPulse is no exception.

But there is more that can be done. First, how often have you seen a perfectly clean product database? FAST ImPulse provides an ability to add enrichment and cleansing logic to derive correct values when they are missing or are known to be incorrect. FAST ImPulse can even mine the text in any field (e.g. a description field) and extract names, locations, acronyms, phone numbers – about 40 different types of "entities" and climbing – to fill in the blanks or correct bad content.

FAST ImPulse also understands the importance of context – the environment around the customer and what you might know about their patterns and profile. Geographic location is a common variable, especially for mobile users. Imagine returning only product that is available at outlets within same-day shipping distance of their current location, as perhaps identified by the PDA they happen to be shopping on.

Finally, there is simply the ability to perform well regardless of the traffic volume at your site. If the 2005 holiday season in the U.S. is any indication of a trend, then we can expect online commerce traffic to increase rapidly. With ImPulse, you can be assured that no matter how many users are simultaneously at your site, they will never have to wait for a response to their search; FAST™ has witnessed query volumes over 2000 queries per second. A slow response is a sure-fire way of losing a potential customer.

Deepen customer loyalty

Getting customers to return to your site is often the most elusive process to nail down. The prevailing approach is to create a sense of community or family – often this translates to simply, "those who bought your product, also but these products". This works, but users are getting more and more sophisticated.

Personalization is the next stage – promoting and spot-lighting not just based on broad market trends, but on characteristics of the individual consumer. While this is a capability possible with ImPulse, we suggest you begin with a simpler first step – provide a unique and compelling site.

A large percentage of the eCommerce sites today look, act, and feel pretty much the same. Perhaps this is because they all use the same technology and it imposes restrictions on the flexibility of the user interface. Whatever the reason, avoid this trap. Instead, differentiate your site with its own look-and-feel and user interaction model. ImPulse provides no restrictions whatsoever on this task – you are free to create whatever you want.

This is true for the type of interface as well. Like all FAST products, FAST ImPulse supports search on the mobile device, which is rapidly becoming more and more popular as an alternative interface to the Internet and all of its capabilities, like online commerce.

The bottom line

As wonderful as a technology can be, it is useless if it costs too much to purchase, implement, manage, or change. Return on investment is very much an important consideration in any enterprise software investment, and total cost of ownership is a major contributing factor.

Figure 1 shows a typical FAST customer merchandizing site with the home page of our management environment in front. This conveys the style of interface we use throughout the product. In fact, the entire management environment – where you can manipulate all aspects of merchandising – was designed entirely with the non-technical user in mind.

Figure 1
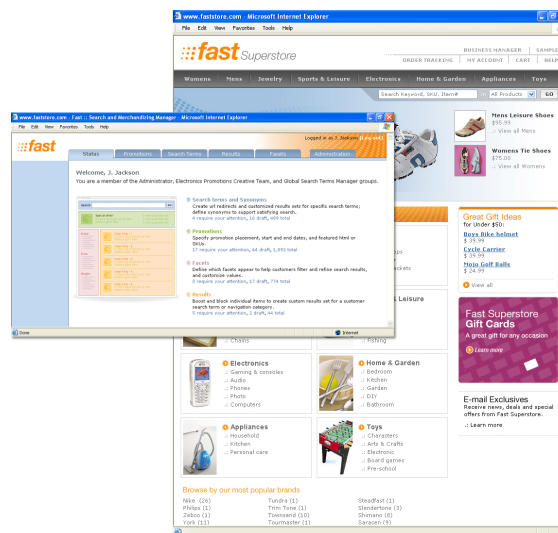
Ease of use is a guiding principal for all our development at FAST.

There is operating cost to consider. How expensive is this to run? What will the hardware cost you? FAST ImPulse is the most scalable eCommerce system today, and the most efficient in its use of hardware. A single standard Windows/Linux server can hold over 100M records and process over 100 queries per second. In fact, the entire product is architected and optimized to distribute its operations across commodity hardware.

Another consideration is how to manage multiple channels. With FAST ImPulse, you can have an Internet site, all the kiosks in your stores, and mobile devices all drawing from the same common index, and each having their own particular search characteristics. There is no need for additional applications. A common platform for all channels would reduce operating cost considerably.

FAST ImPulse

There is the cost associated with change – change in data, environment, workflow, or capabilities. FAST ImPulse has the ability to add or edit facets, promotions, boosts and blocks, synonyms and redirects in real time while the system is running with no downtime or operational impacts of any kind. One of the largest online vendors in the world is a client of FAST, and their entire sales force in effect is the site. It simply cannot go down, regardless.

FAST ImPulse also automatically detects new attributes in the data and can add them to the site on the fly as new facets. This is a great savings on development. More traditional systems require that you stop the site, code in the changes, and then re-index the data from the beginning. And if your site cannot be stopped, then you must establish a parallel site to provide a means of switching over.

Finally, FAST ImPulse includes a complete workflow process with roles partitioned around functional lines (taxonomy, asset promotions, facets, etc). Workflow and security models are two standard components in most professional enterprise solutions.

PLATFORM FEATURES

FAST ImPulse is powered by FAST Enterprise Search Platform™ (FAST ESP™), the world's most scalable and flexible search platform with over 3500 mission critical installations. Every day, millions of people around the globe rely on its "no-compromise" architecture to find the answers to their most perplexing questions.

Scale efficiently

No other vendor in the market, including the Internet search vendors, can match FAST's infinite ability to scale in terms of volume of data, number of users, and freshness of data. FAST scales in all three dimensions simultaneously and efficiently using commodity hardware and while preserving the complex processing and analysis. Efficient scalability means lower TCO, which means faster return on your assets.

Integrate with your environment

Any high-performance technology is only as good as its ability to connect with your corporate environment. FAST ImPulse is built on an open, vendor agnostic platform with a Service Oriented Architecture that supports all major platforms, operating systems, development languages, and storage configurations. It integrates with and enforces all enterprise security protocols such as LDAP, ADS, and others.

The platform can aggregate content from over 370 content sources, both structured and unstructured, with the ease and speed that is unrivaled in the market today. Such incredible flexibility means that you can integrate quickly, cause less disruption, and capitalize on your investments at lower cost.

Economies of scale

You can leverage the underlying platform installation to create search solutions to serve multiple business initiatives. Such asset harvesting and reuse increases product synergies and business agility. You can bring to market new and innovative products and services to serve the changing needs of the rapidly growing and increasingly sophisticated Internet consumer market.

In summary, the FAST ImPulse architecture pays handsome dividends, including high return on your assets, low total cost of ownership, investment protection, and a future-focused infrastructure.

Are you ready?