

# E-ANALYSIS

---

## CLOSING THE LOOP ON E-BUSINESS

AN ELYTICS WHITE PAPER

WWW.ELYTICS.COM • 238 BROADWAY • CAMBRIDGE, MA 02139

TEL: (617) 492-7760 • FAX: (617) 492-6220

EMAIL: INFO@ELYTICS.COM

## Introduction

AS COMPANIES EXPAND THEIR E-BUSINESS EFFORTS, THEY FIND THEMSELVES DROWNING IN DATA. BUSINESS MANAGERS NEED TOOLS TO COLLECT, SYNTHESIZE, AND ANALYZE THAT INFORMATION TO BUILD CUSTOMER PROFILES, IMPROVE THE PERSONALIZATION CAPABILITIES OF THEIR WEB SITES AND BOOST THE EFFECTIVENESS OF FUTURE SALES AND MARKETING CAMPAIGNS."

Patricia Seybold Group Analyst  
Wayne Eckerson, Internet Week,  
11/99

*"Our company recently began the transition to e-business, and the website is attracting visitors at a far greater rate than we would have expected. Although this is kind of exciting, it raises a whole host of questions that we need to answer right away. Who are these people? Where are they coming from? How are they interacting with our site? What, if anything, are they buying? And, how do we make sure that the right ones keep coming back?"*

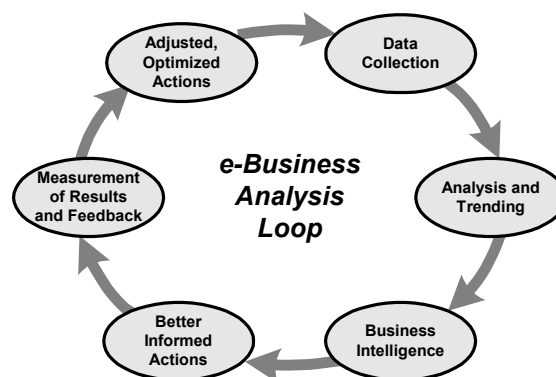
*- Established retailer making transition to online business*

Sound familiar? The Internet is changing the way business is done. E-business brings with it an explosion of new information and opportunities to understand and cater to customers, partners, and suppliers, in ways previously impossible.

As companies expand their online sales and marketing efforts, they need a clearer picture of who's visiting their Web site, where visitors originate, how they navigate, what content they view, what they buy and don't, and why.

Most online businesses recognize that they are sitting on a goldmine of information, but lack the systems and skills to convert overwhelming amounts of raw data into actionable business intelligence.

The diagram below is a summary illustration of the closed-loop analysis that will provide the underpinnings of e-business on an increasing basis in the future:



## What Has Changed

Businesses must face the challenge of cutting through the noise to capture and hold the attention of valuable customers. To make matters more complicated, these touchpoints are not always under your control.

In the expansive network of partnerships that defines online business, there might be several independent parties involved in delivering your customer's experience. How can you guarantee a product's availability and delivery date when this is handled by your suppliers? How effective are your personalization efforts if they are handled by a vendor to whom you must clearly communicate your requirements on a frequent basis? And, how are you doing on customer support?

*"THE CUSTOMER EXPECTS THE VENDOR  
TO KNOW ALL ABOUT THEM, AND THE  
BAR GETS RAISED HIGHER."  
e-Week, May 2000*

Customers have far higher expectations of vendors than ever before. They expect businesses to have a detailed understanding of their needs. They expect outstanding service and support. They expect collaboration and information-sharing. And the idea of active dialogue with providers of products and services is becoming commonplace.

Companies must not only grapple with an explosion of new customer requirements, but also with the imperative to make changes to their business model in real time. A dissatisfied or bored customer can easily be lured away by competitors just a click away. Instant feedback from a marketing campaign or site redesign dramatically reduces the cycle time for competitors to make changes.

*I REMEMBER THE DAYS WHEN I COULD  
NOT PLACE MY HANDS ON ALL THE  
INFORMATION I NEEDED TO DO MY JOB.  
TODAY I'M DROWNING IN DATA ... I  
OFTEN FEEL LIKE A MAN WHO IS  
SHIPWRECKED ON AN ISLAND. THERE'S  
WATER EVERYWHERE, BUT I CANNOT  
DRINK IT BECAUSE NONE OF IT IS  
POTABLE.  
Business Manager*

In this fluid, fast-moving world of e-business, it is a strategic imperative to have good information at your fingertips. And the key word is information, not data. The web offers a world of new data gathered across the entire customer lifecycle – from initial contact, to exploration and information-gathering, to purchases or equivalent interactions, to customer support, to loyal behavior or attrition. For businesses that can effectively analyze and interpret this data and integrate it into their operating cycles, the Web represents an opportunity: these businesses will be able to better understand and target their customers by accurately targeting profitable segments and precisely tailoring their offerings.

In this environment, "you can't manage what you can't measure" takes on a whole new meaning.

## And What Has Stayed the Same

LESS THAN 5% OF E-COMMERCE SITE

VISITORS MAKE A PURCHASE,

BUT COMPANIES SPEND AN AVERAGE

OF \$250 ON MARKETING AND

ADVERTISING TO ACQUIRE ONE

CUSTOMER.

THE GROSS INCOME FROM A TYPICAL

CUSTOMER IS \$24.50 IN THE FIRST

QUARTER AND \$52.50 IN EVERY

QUARTER THAT HE OR SHE IS A

CUSTOMER.

BUT TWO-THIRDS OF BUYERS DON'T

MAKE A REPEAT PURCHASE – SO THE

TYPICAL E-COMMERCE FIRM DOESN'T

MAKE MONEY ON THE AVERAGE

CUSTOMER.

*Results of a McKinsey &  
Company study that highlights  
how loyalty drives the economics  
of online businesses, The Industry  
Standard*

Amidst the revolutionary change being brought about by the Internet, leading companies - both dot coms and traditional players - adhere to familiar business principles.

In fact, these businesses set themselves apart from the crowd by focusing on the most important rules (e.g., know thy customer, focus on creating real value, differentiate from your competitors), and adapting tried-and-true management techniques to grow online. Some examples that are extremely relevant and topical in the online world are:

- customer retention and loyalty
- customer segmentation
- partnering/alliances strategy, and
- balanced scorecard

Take, for example, customer loyalty and retention. To date, e-businesses have focused on aggressively acquiring customers and have consequently zeroed in on basic measures like number of hits, number of page views, and page load times. Even tracking these simple metrics can create a task of gigantic proportions given the sheer volumes and frequency of data that must be handled and processed. Now that reality has hit -- online customer behavior and business models are becoming more complex, and investors are starting to demand performance on traditional dimensions -- the latter part of the Acquire, Retain, Penetrate mantra has started to assume significant importance.

## More Relevant Measures of Value

So far, most clickstream analysis has focused on operational use – analyzing traffic and usage patterns to understand how better to serve customer demand and meet response time objectives.

The next stage, which will add much more value, is using online data to better understand customers and their needs.

## Case Study: Online Sporting-goods Retailer

### **Background**

SuperSports is a fictitious sporting-goods company that conducts all its business online. The site was launched six months ago, and after the initial push to attract visitors, SuperSports must now shift gears towards fine-tuning various aspects of the business.

The Marketing department needs to better understand visitor behavior to understand issues like:

- Does the site have the content and products that visitors are seeking?
- Is shopping cart abandonment as much of a problem for SuperSports as for the online retail industry as a whole? And are there any clues about what could be driving this behavior?
- How should SuperSports think about building a loyal customer base?

### ***Does the site have the content and products that visitors are seeking?***

Ralph, a marketing manager begins with an analysis of visitors who came to SuperSports via a search engine. Looking at the keywords or search terms people used will help him understand the content and products they are seeking. He can then judge how effectively SuperSports is meeting their needs, and make decisions about how to improve the online offering.

The results are interesting. A significant percentage of visitors seems to be seeking harder-to-find sporting goods equipment. They searched with terms like, “left-handed baseball glove” and “child size hockey stick.” Ralph is not entirely surprised. SuperSports management has been considering extending the product offering beyond mainstream items, and a recent market survey suggests that there is a significant unmet need for hard-to-find sporting goods.

This analysis of online visitors confirms the trend. Ralph now decides it is worthwhile to look into the economics of broadening SuperSports’ product offering.

IN ORDER TO MAKE DECISIONS ABOUT  
THE SITE AND RELATED SALES AND  
MARKETING ACTIVITY, THE COMPANY  
NEEDS TO DECIPHER THE DATA THAT  
THEY HAVE BEEN COLLECTING OVER  
THE PAST FEW MONTHS.

Another group of visitors is looking for advice on how to choose equipment.

SuperSports has a small Advice section on the site, but no one is sure how effective the section is. Given instant feedback possible online, Ralph decides to run a small test. He looks at the current number of Advice page views to see how much time visitors spend on this section of the site. He then augments this section of the site, and re-examines the page view data a week later.

The results are crystal-clear. Online visitors need advice! Ralph decides to allocate resources to maintain and update the Advice section, and to add related content on popular topics like interviews with celebrities, sports tips, and product evaluations.

RALPH HAS RECENTLY SEEN A STUDY BY  
SHOP.ORG, AN INDUSTRY TRADE  
GROUP, THAT SAYS TWO-THIRDS OF WEB  
SHOPPERS ABANDON THEIR ONLINE  
SHOPPING CARTS BEFORE ACTUALLY  
PURCHASING SOMETHING.

### ***What is the story on abandoned carts?***

Ralph knows that cart abandonment is a hot topic in the online retail industry today as companies increasingly focus on customer retention and profitability.

Initial analysis shows that approximately 7% of SuperSports' visitors actually pick up a shopping cart. More than half this group abandons their carts before purchasing anything. Ralph decides to examine where in the process the carts are typically abandoned. He hopes that this will give him clues about what is driving cart abandonment on the SuperSports site.

A couple of findings stand out:

- A large percentage of the abandoned carts contain out-of-stock items
- Most carts are being abandoned at checkout

### ***Action on cart abandonment***

Armed with these insights, Ralph takes immediate action. Both issues involve coordination between SuperSports and its fulfillment vendor. To fix the first issue, the vendor agrees to work with SuperSports on improving the inventory process. In researching the second issue, Ralph discovers that visitors are not notified of the status of unavailable items until they reach checkout. The vendor agrees to come back with a solution involving real-time technology that will allow immediate feedback to online shoppers.

RALPH BRAINSTORMS WITH HIS  
COLLEAGUES ABOUT POSSIBLE REASONS  
FOR ABANDONMENT. SOME IDEAS THAT  
EMERGE ARE:

- OUT-OF-STOCK PRODUCT
- POOR SITE DESIGN – HARD TO  
FIND DESIRED PRODUCTS
- NOT ENOUGH PRODUCT  
INFORMATION
- POOR SITE DESIGN –  
DIFFICULT TO NAVIGATE
- DIFFICULT/LENGTHY  
CHECKOUT PROCESS

***How loyal is the customer base?***

SuperSports must define what the company means by loyalty.

A loyal customer is usually defined as one who makes purchases on a repeat basis. An alternative definition is one who visits the site on a regular basis to keep tabs on new products, read new content, or provide a customer review. Yet another definition is a customer who refers other visitors to the site – the manager has heard that many online companies have loyalty programs that include rewards for referrals.

Ralph decides to track the impact on loyalty over time of actions like extending SuperSports' product offering, expanding the Advice section, and fixing the fulfillment issues.

## Closing the Loop

*"WHY THE INFORMATION PARALYSIS?"*

*THE BOTTOM LINE IS THAT, ON THE  
INTERNET, GETTING DATA IS VERY EASY,  
BUT PUTTING IT TO VALUABLE USE IS NOT."*

*Mary Modahl VP, Forrester  
Research, Now or Never*

E-business intelligence enables companies to make informed business decisions and remain competitive. Whether the initiative of the moment is CRM, campaign management, or personalization, good information radically increases the probability of success. High-impact actions can range from modifying site design to changing product mix to more active content management. And the impact hits the bottom line. See Figure 1: How E-Analysis Can Impact the Customer Corridor.

It can take time to actually close the loop on e-business. A leading retail company introduced online package tracking for customers. Some time after the service was initiated, the staff informed management that customers were tracking a large number of orders online. The reaction they got was, "OK." A couple of months later, the staff sent out a memo reporting results from a customer survey that showed the growth in the number of customers tracking packages online. No response from senior management. It took another few months before the staff actually took the information on volume of orders tracked, figured out the cost difference between an online query and a phone call to a service rep, and made a recommendation to management about cost reduction and reallocation of resources. Then came the "Ah-ha!" Improving the bottom line is hard to ignore, and fundamental yet sophisticated analysis allows just that.

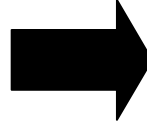
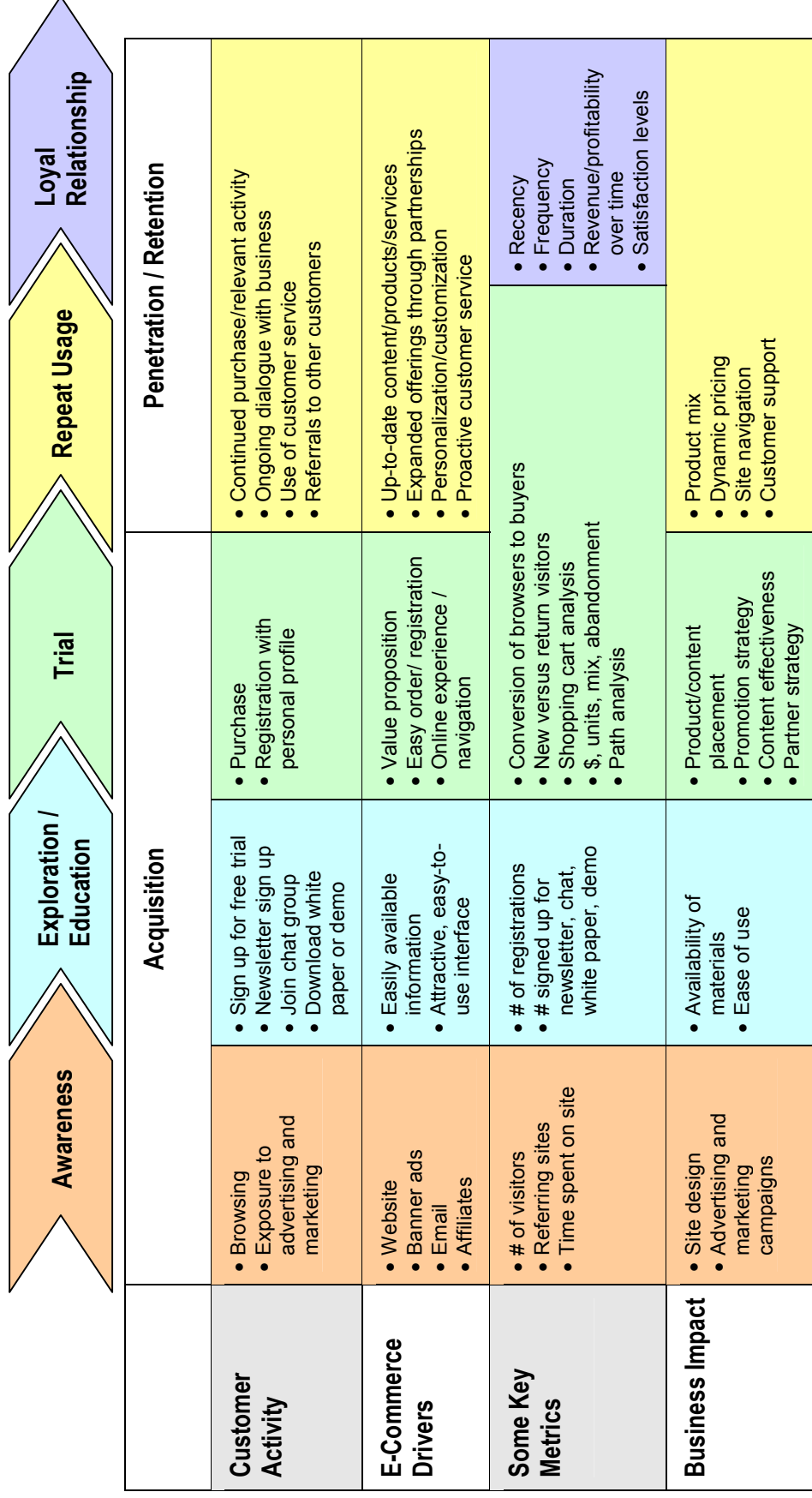
## Going Forward

There's an alphabet soup of business models out there: B2C, B2B, B2B2C, B2B2B, E2C, eMP ...And the models are becoming more complex. Transactions are being disintermediated and reintermediated. Products and services can be bundled and unbundled. Revenue streams come in a variety of flavors: direct revenues from customers, advertising revenues, revenue-sharing with partners, commissions off marketplace/exchange transactions. And the same goes for costs.

The lowest common denominator is the imperative to understand and quantify the drivers of e-business, to create intelligence out of data, and to act.



Figure 1: How E-Analysis Can Impact the Customer Corridor



Increased revenues, decreased costs, higher profitability