

*Executive Summary & Table of Contents:*

# **Decision Science & Customer Analysis**

---

*Competitive Advantage or  
Necessary to Compete?*



*Accelerating Performance by Calculating Results™*

## Table of Contents

Executive Summary.....	3
Competitive Advantage or Necessary to Compete?.....	3
Customers Create the Information Businesses Purchase & Use: .....	4
Building the Business Case for Information Analysis Market Entry .....	5
Market Opportunities:.....	6
Chapter One: Information Sources & Services .....	9
Capture, Analysis & Utilization of Customer Information .....	9
Sources of Business Information.....	10
Sources of Consumer Information.....	10
Competitive Advantage or Necessary to Compete?.....	12
Current Vendor Landscape: Major Players .....	12
Chapter Two: Business Requirements & Industry Usage .....	18
Building the Business Case for Investment.....	18
America Online, Inc.: Case Study.....	19
Wal-mart: Case Study.....	19
Oracle: Case Study .....	20
Categories of Information Analytics/ Decision Science Services:.....	22
Companies that Invest in Information & Decision Science Services .....	23
Chapter Three: The Three P's: Partnership, Packaging & Pricing Models.....	24
Partnerships & "Quid Pro Quo" .....	25
Pricing & Packaging of Solutions & Services .....	26
Chapter Four: Summary .....	28
Standing Out in a Crowded Vendor Market.....	28
Conclusion: .....	29
Appendix A: Research Methodology.....	32

## Executive Summary

---

Information is the currency that companies have used for competitive advantage in business since the earliest beginnings of barter negotiations and commercial commerce. Success in barter commerce often depended on knowledge of sources of food, labor or materials that could be exchanged. In today's highly competitive global economy, knowledge of consumer and business behavior, socio-economic, lifestyle and/or demographic information, can be transformed through information analysis [Known as Decision Science, Marketing Science or Customer Analysis] into actionable insight. It is this insight that provides key decision-making support to companies that seek to enhance profitability and/or gain a competitive business advantage.

### **Competitive Advantage or Necessary to Compete?**

[Wal-mart](#), [American Express](#), [Cocoa-Cola](#), [Staples](#), [Best Buy](#), [Harrah's Entertainment](#), [Proctor & Gamble](#), [Toyota](#), [Hilton International](#), [AOL](#), [IBM](#), [Oracle](#) are among numerous blue-chip companies that believe leveraging business and consumer data is necessary to compete in today's economy. What used to provide a 'secret sauce' or competitive advantage to companies savvy enough to exploit the value of customer data within their own proprietary databases, has now become a rather lucrative service business for vendors able to provide these key components:

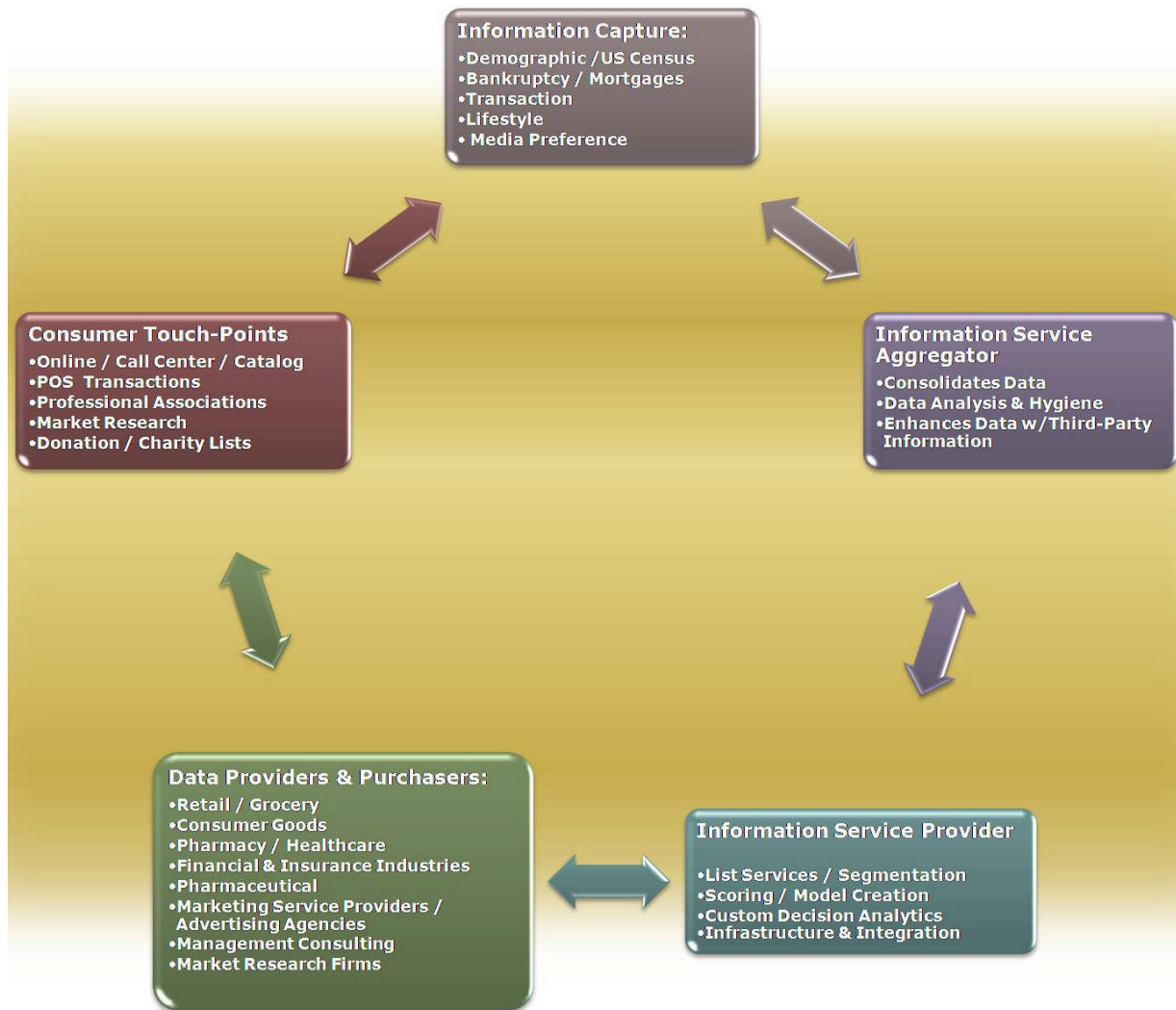
- ✓ List and Data Enhancement [Demographic, Lifecycle, Behavioral, Transactional, etc...]
- ✓ Customer Analysis / Customer Scoring / Cluster Analysis
- ✓ Packaged Models or Solutions Templates [Ex. Customer Retention, Propensity, Credit Risk]
- ✓ Web-based Subscription to Analytical Database [by Industry or Product-Category]
- ✓ Custom Information Analysis Services
- ✓ Customer Data Integration, Data Quality/Hygiene & Infrastructure Services
- ✓ Database Marketing Services: Design, Production, Fulfillment
  
- ✓ Integrated Digital Marketing Services

### **Customers Create the Information Businesses Purchase & Use:**

If customer expectations for historical knowledge, service and support, and value-added products and services seem high, it is because they are aware that industry is tracking them at a granular level—by brand preference, warranty card registrations, product and service transactions, online behavior, demographic information and lifestyle stage. Moreover, advances in online and telephone self-service and support coupled with a rapid reduction in services, serves to shift costs from a company's bottom-line to both business and consumer customers. In turn, customers expect that information gathered will be used to personalize the next interaction or communication they receive from businesses from whom they regularly purchase. Figure 1 illustrates the nature of demand and supply creation by providing an overview of how consumer information is captured, managed, analyzed and utilized by various information service providers and purchasers of consumer information

Two trends have emerged within the last few years. Approximately 50% of companies surveyed prefer to create an internal center of excellence comprised of statisticians, analysts and database marketing experts that provide Decision Analytics services across the organization. These companies use information service vendors for tactical services such as list enhancement, data hygiene and/or prospecting. Other organizations, preferring to focus on critical core competencies such as sourcing and producing products, tend to outsource most of the above capabilities by partnering with a full-service

**Figure 1: Supply & Demand Chain: Information Services & Decision Science**



Source: ©2008 Hypatia Research, LLC

Marketing & Information Services provider [MSP]. The benefit of this approach is to gain key expertise in multiple disciplines without incurring the overhead and maintenance of hiring employees internally. This flexible approach is especially attractive to companies that provide seasonal products or services. Expertise is easily sourced and available per project, per season, or on an annual service basis. Customer-centric organizations that strive to deliver anything, anytime, anywhere to their own customers, now demand this same granularity and knowledge from Information and Decision Analytics vendors that service them.

### Sources of Business Information

By virtue of federal tax and state tax laws and financial reporting regulations, business or professional license application and vehicle registrations, numerous public and proprietary data marts capture information on businesses in the United States. Moreover, credit history, incorporation documents, business transactions between partners, suppliers and customers is both taxable and thus, traceable. Many of the information analysis and services providers also rely on subscriptions to professional and industry-specific publications, online business purchases [example: office furniture or

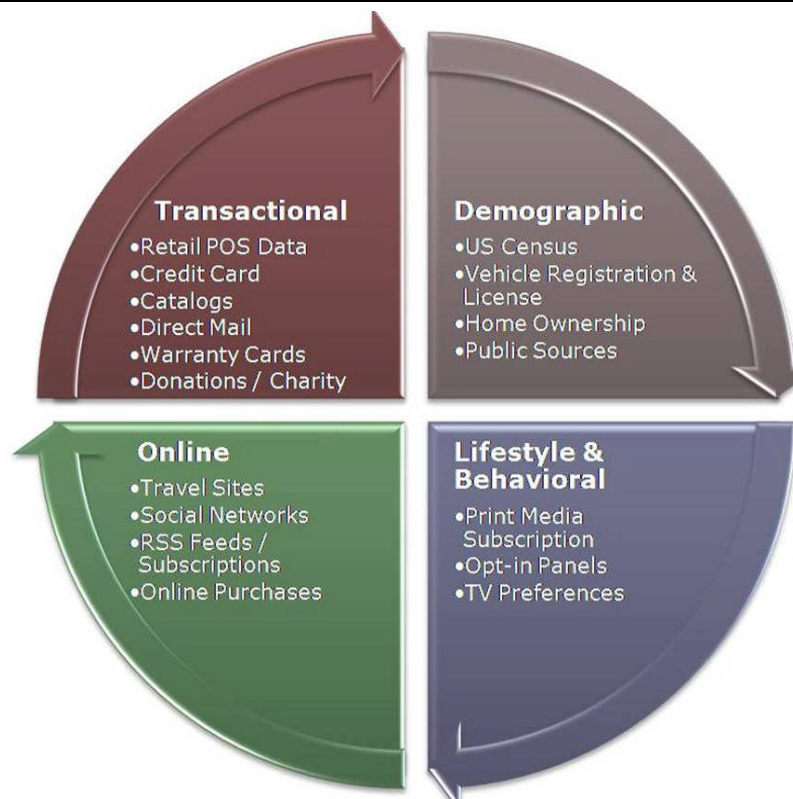
computers purchased on corporate accounts], legal filings or complaints to reporting agencies such as the Better Business Bureau.

Business to business industries such as telecommunications, software, manufacturing, professional services [law, accounting & advertising agencies], retail office suppliers, financial services and insurance rely on this type of data to ensure company contact records are up to date, companies are credit-worthy, and that service and transaction histories are accurate. Typically B2B information analysis services are utilized by organizations that seek to optimize their investments in business development and marketing initiatives.

## Sources of Consumer Information

Similar to business information, consumer information is sourced through multiple channels, consumer touch-points, proprietary and public information. Moreover, consumers are very aware that industry is tracking them at a granular level—by brand preference, warranty card registrations, product and service transactions, online behavior, demographic information and lifestyle stage. In fact, customers expect that information gathered will be used to personalize the next

Figure 2: Sources of Consumer Information



Source: ©2008 Hypatia Research, LLC.

interaction or communication they receive from businesses from whom they regularly purchase. At a high level, Figure 2 illustrated the most common avenues used to capture information.

## Create an Effective Decision Science Eco-System

To create an operational foundation for data analysis and decision-support, leading organizations most often take one of these three approaches in capturing, analyzing and utilizing consumer information derived from multiple sources of data:

- 1) **Self-Reliant:** Create an internal center of excellence comprised of statisticians, analysts and database marketing experts for Decision Analytics services. Partner with the internal IT department to develop a cohesive customer

data management process through utilization of a robust data warehouse and business intelligence platform [inclusive of ETL, data and text mining, data modeling and predictive analytics capabilities] in addition to select marketing automation, web analytics, customer relationship management, data integration and quality tools. Our research revealed organizations taking this approach most often reported deploying software from vendors such as [SPSS](#), [SAS](#), [KXEN](#), [Business Objects](#), an [SAP](#) company, [Informatica](#), [Oracle](#) and [Teradata](#).

- 2) **Source Expertise:** Partner with one or more providers of information services for flexible, on-demand expertise in:
  - a. List and Data Enhancement [Demographic, Lifecycle, Behavioral, Transactional, etc...]
  - b. Customer Analysis / Customer Scoring / Cluster Analysis
  - c. Packaged Models or Solutions Templates [Ex. Customer Retention, Propensity, Credit Risk]
  - d. Web-based Subscription to Analytical Database [by Industry or Product-Category]
  - e. Custom Information Analysis Services
  - f. Customer Data Integration, Data Quality/Hygiene & Infrastructure Services
  - g. Database Marketing Services: Design, Production, Fulfillment
- 3) **Hybrid Approach:** Utilize in-house expertise combined with outsourced information services on a flexible per project basis, annual retainer or subscription model.

## **Provide Higher-Levels of Customization & Service**

Especially in consumer-rich industries such as retail, pharmaceutical, healthcare and financial services, opportunities could be quite lucrative. Larger financial service companies [in the category of Bank of America, Capitol One, or Citicorp] with numerous portfolio offerings that include credit cards, retirement, college and other lifecycle stage products are reported to have spent \$60M annually on consumer credit information, data enhancement and decision science or customer analysis services. Smaller, regional banks were found to have spent \$5M-\$10M annually.

Data-rich environments such as retail are not challenged by capturing consumer information. In fact, they are literally overloaded with multi-channel data from various sales and distribution channels such as online, catalog, call center, distributor and physical box store. Several retailers reported having more than 10 discrete data marts of customer information—each with different data schemas and dimensions. Opportunities with retailers are comprised of data infrastructure, integration, hygiene & enhancement in addition to customer analysis, modeling & scoring of their own proprietary data. Annually, larger retails invest ~\$1M while smaller retailers hold the line at ~\$100-\$300K.

Our assessment is that use of Decision Science & Customer Analysis will move from ‘competitive advantage’ status to ‘necessary to compete’ for the next decade. Organizations will either develop in-house capabilities or partner with service providers to capitalize on the customer intelligence derived from multiple sources of data. Likewise, we expect information analysis providers to partner in delivering greater capabilities and higher-levels of customization to clients.

### ***About the Author:***

Leslie Ament is a Customer Intelligence Management thought-leader and industry analyst who focuses on how organizations **capture, manage, analyze and apply** actionable customer insight to improve customer management techniques, reduce operating expenses and to accelerate corporate growth. Her research coverage include: Business Intelligence, Media Intelligence/Search/Text Analytics, CRM, Web Analytics, Marketing Automation and Customer Data Management/Data Quality.

Previously, Ament served on management teams and lead global marketing and market research groups at Demantra, Inc. (acquired by Oracle), Arthur D. Little Management Consulting, Harte-Hanks, Banta Corporation, International Thomson Publishing (Chapman & Hall, UK) and Carnegie Hall, Inc. She is a member of the American Marketing Association, Society for Competitive Intelligence Professionals, Customer Relationship Management Association, DataShaping Certified Analytic Professional, Arthur D. Little Alumni Association, Software Industry Information Association and a Board Member of the Product Management Association.

Ament completed her doctorate Phi Kappa Phi at the University of Illinois, Urbana Champaign and her Master's and Bachelor's degrees at the Indiana University-Bloomington. Her passions are international travel, spicy food, classical music, jazz, and Chicago-style rhythm & blues. Contact her at [LAR@HypatiaResearch.com](mailto:LAR@HypatiaResearch.com).

---

Hypatia delivers high impact market intelligence, industry benchmarking, best practices, technology vendor selection, ROI assessment, and consulting services that reduce cycle-time and influence customer management, product strategy and channel development goals. Since 2001, clients have relied on our industry insight, expertise and independent research for guidance in assessing various technology, solution and service options. Like our namesake, Hypatia, we are committed to *Calculating Results<sup>TM</sup>* for our clients.

*Hypatia of Alexandria* (c.370-415 AD), invented several scientific devices--the astrolabe, plane sphere, and hydroscope (hydrometer). These instruments were used to calculate the distance between planets, the position of visible stars at any time of the year, and the gravity of liquids respectively. Hypatia was the first woman to make substantial contributions to the development of mathematics, astronomy & philosophy.

©2008 Hypatia Research, LLC. All Rights Reserved.

[www.hypatiaresearch.com](http://www.hypatiaresearch.com)

617-230-0067

**NOTICE:** Information contained in this publication has been sourced in good faith from primary, secondary and end-user research and is believed to be reliable based upon our research methodology and analyst's judgment. Ultimate responsibility for all decisions, use and interpretation of Hypatia research, reports or publications remains with the reader, subscriber or user thereof.

---