Information Collection and Use

Data Source

Market

Competitive Intelligence

Third-party data

Data Source: Market

Customer behavior

What?

Transaction, customer profile, etc.

How?

Employees, scanners, or Web tracking software

Example

Grocery stores’ card-based program

Customer inquiry

Marketing research

Customer behavior: Web analytic

Transaction records, relationship tracking, clickstream analysis

Clear GIFs (also known as action tags, single pixel GIFs or web beacons)

Clickstream analysis

Referral location

Surfing paths / patterns

Time spent

Ex. <http://www.onestat.com>

Customer behavior

How can the data help?

Transaction data,

Inventory, product selection, pricing, store layout, etc.

Profile + Transaction data,

personalization

Web site surfing patterns

Site design

Shopping patterns

How to identify expecting moms? (target)

Based on baby registry data

Unscented lotion at the beginning of 2nd trimester

Calcium, zinc, etc, in the first 20 weeks

Unscented soap, big bags of cotton balls when close to delivery

Customer inquiries

What?

Customer questions or complaints

How?

Web, telephone service operators, etc.

Marketing Research

Traditional marketing research

Systematic, objective, and representative

Costly and slow

Research Methods

What (attitude, behavior)

Survey

Why

Interview, focus group, panel

Pilot test

Experiment

Marketing Research Steps

Problem definition

Research design

Sample selection

Data collection

Data analysis

Report preparation

Online Research Benefits

Benefits

Fast and cheap

Automatic data capture

Rich media possible

Flexible questionnaire

Online Research Concerns

Coverage issues

Self-selection bias

What bias?

Low response rate

Measurement errors

Errors cause by the instruments, ex. Wording, stimuli

Competitive Intelligence

Sources

Customers

Suppliers

Trade publications

Third-party data sources

Specialized data suppliers

Mailing or email lists, credit rating, geo-demographic information, etc.

Original sources of the data collection

Retailers, hospitals, government, etc.

Infomediaries

Experts in data collection, warehousing, and database mining.

File-sharing vs. CD sales

Previous study

Survey

The more one download music illegally the less likely one will purchase

Overholzer-Gee & Strumpf study

Correlate download log and CD sales record

In general, no relationship

For popular CDs, sold better when downloaded more frequently

Knowledge discovery

Analytical processing

Relationship b/w known variables (preset hypothesis)

The higher the temperature, and better the beer sales

Data mining

Unknown relationships (no preset hypothesis)

What facts can predict the sales of beer?

Example techniques: evolutionary programming, memory based reasoning

Data mining – so what?

Beer and diaper sales are correlated between 5-7 pm