Across Time
Around the World
Understanding Technology

Telecommunications

Compliance

Mainframe

Operating Systems

Data Center

Strategy

Development

Mobility

Understanding Your Business!

Clarifying Reporting, Analytics, & Business Intelligence

Recently a collection of terms are being used in IT and Business management areas that don't tend to have clear meaning. The ones we're referring to are falling under the headings of Reporting, Dashboards, Business Intelligence, Data Mining, Analytics, and many "variations on a theme" of these words or phrases.

The primary purpose of this discussion is to offer suggestions on why it is important for each business to give some consideration in what these terms may mean in their particular environment. Today we are overwhelmed with media and promotion on these topics, but often those solutions present a "one size fits all" image.

As is almost always the case, such an acceptance of narrow parameters like this is unlikely to succeed. Establishing the right definitions for a business whether a service provider or consumer of services (or creating processes internally) are critical.

Every business represents some kind of "cycle" of services. This presentation should help business leaders consider how to approach an understanding of reporting and analysis needs to constantly improve this "cycle" in their business.
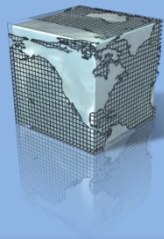
Understanding Technology
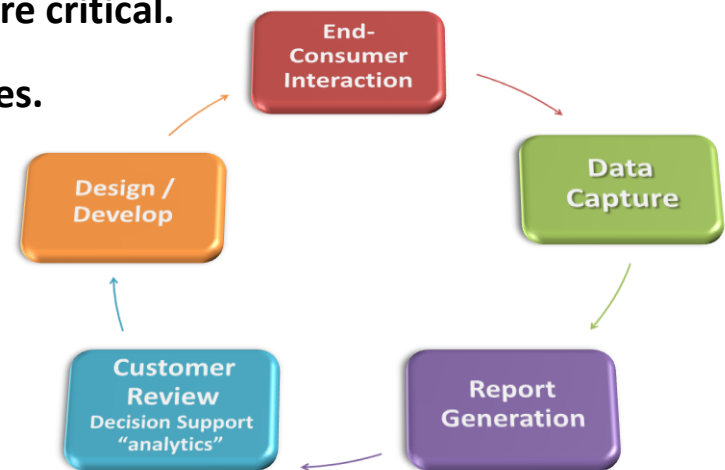
- **"Analytics" is a <u>challenging</u> term in the markeplace(s). It is important to understand what you are specifically responding to or providing guidance on.**
  - *The primary focus of Analytics "engagements" typically results in improvements in routine Reporting and Operations.*

- **Most clients are NOT looking for Full-Blown "Analytics".**
  - *Typically, the higher the value of the client, the higher their interest in more detailed information about their business and the effectiveness of a service provider.*
  - *Options for clients to select and display variable data is, often, a very pressing <u>requirement</u> but may not be "Analytics".*
  - *Most clients definitely want <u>more</u> "Decision Support" for their businesses (but, again this may not really be "analytics").*

- **Data Collection is a much bigger issue than many folks consider.**
  - *Cost of an interaction could dramatically increase to capture "all" data needed for some analytics.*
  - *More data also means more management, more risk, & more complexity.*
  - *If we make changes to capture massive amounts of data, how does that change the cost of doing business? (Does the cost of extended data capture exceed the cost of the basic transaction?)*

- **Tools help <u>people</u> solve problems, not the other way around.**

Understanding Technology

- **Clients <u>expect</u> basic <u>performance reporting</u> that describes what is happening and how well we are dealing with it.**

- **Clients are willing to pay for <u>human involvement</u> if you can prove value especially when that value goes beyond the basic service and <u>transforms</u> their business.**

- **It makes sense for "Service" companies to <u>provide consulting services</u> in addition to baseline functions (if they can demonstrate credibility).**

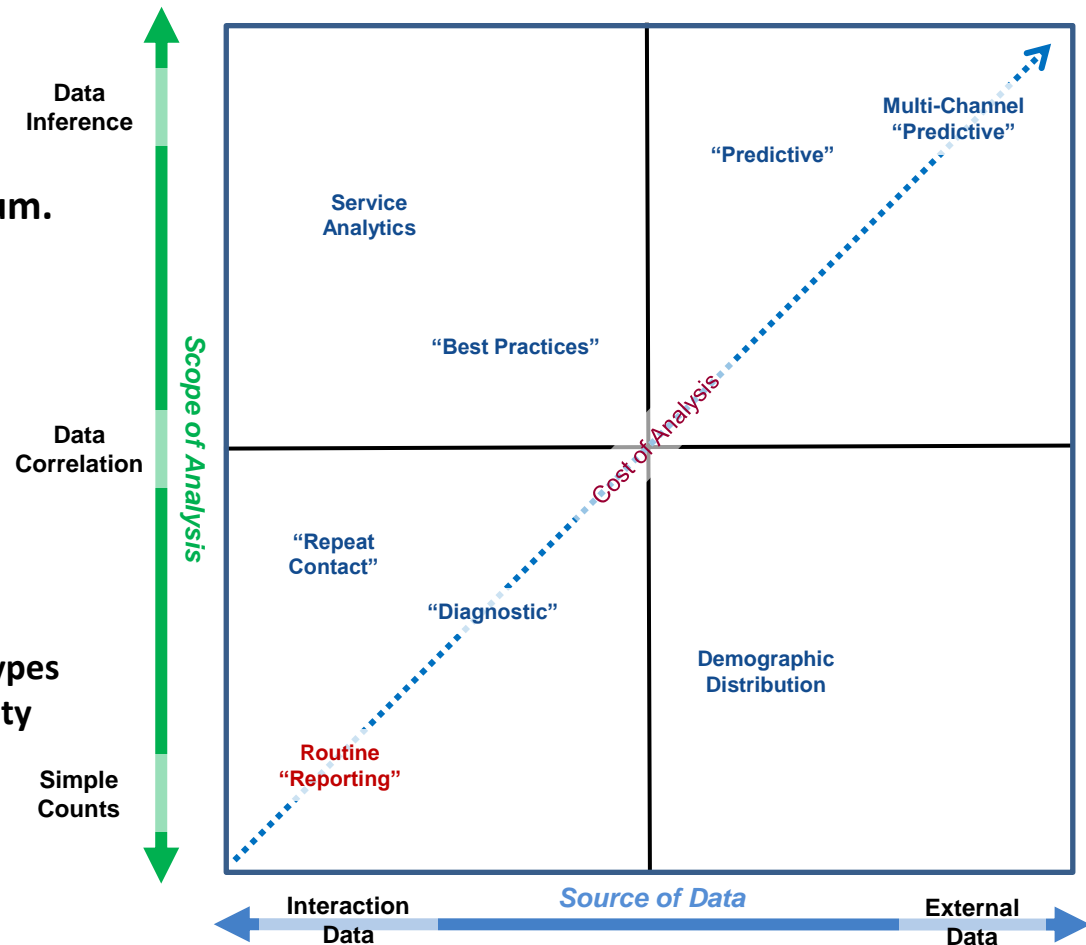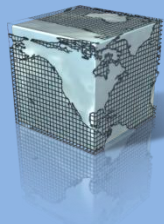Sources: Gartner Group, Forrester Research, IBM Corp.

The reality of this topic is that basic reporting and analytics are really the extremes of a continuum.

The Reporting/Analytics continuum involves two different dimensions:

1. ***Source of Data***
2. ***Scope of Analysis***

This graphic illustrates where some types of analysis efforts might fall in a variety of businesses with regard to costs and expectations of difficulty.
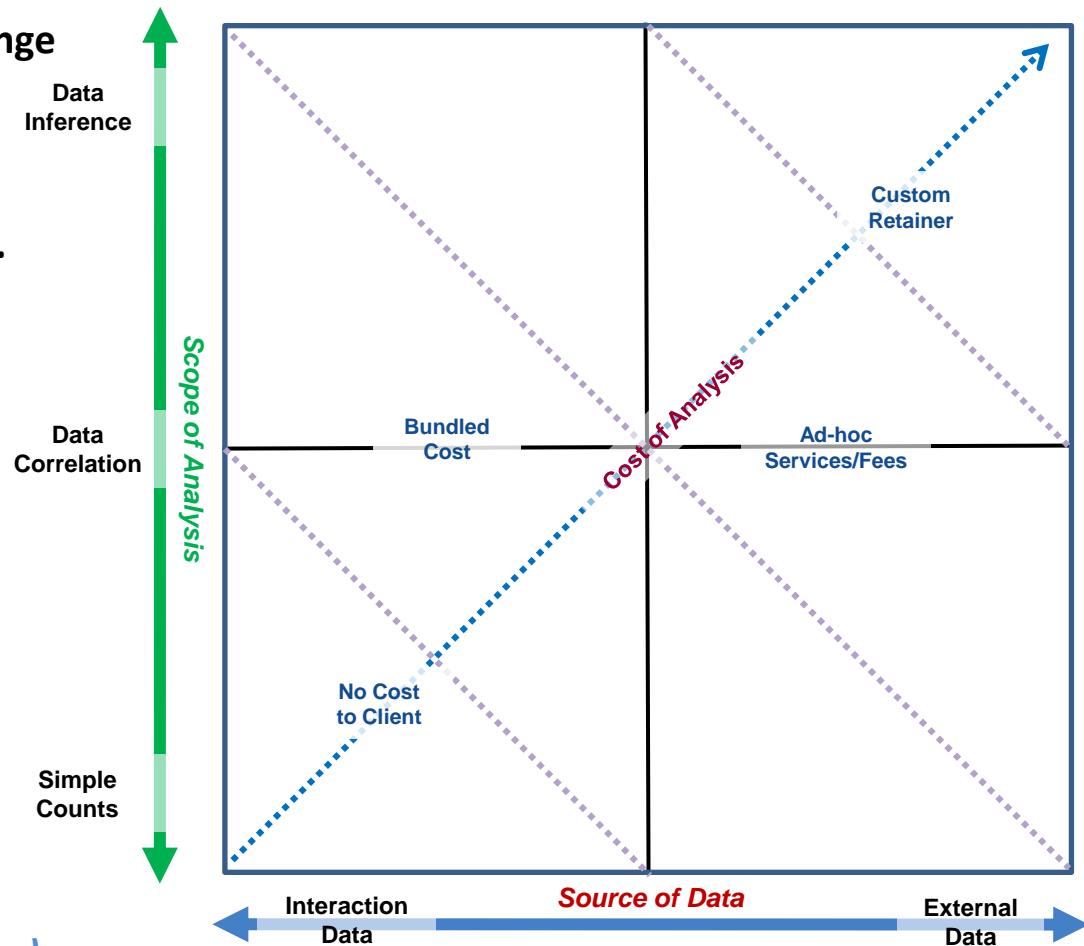

Scope of Analysis

- Data Inference
- Data Correlation
- Simple Counts

Service Analytics

"Predictive"

Multi-Channel "Predictive"

"Best Practices"

Cost of Analysis

"Repeat Contact"

"Diagnostic"

Demographic Distribution

Routine "Reporting"

Source of Data

Interaction Data — External Data

Accepting that there is a wide range of functionality in the realm of Reporting/Analytics; it becomes important to consider how the "costs" of analysis are recovered.

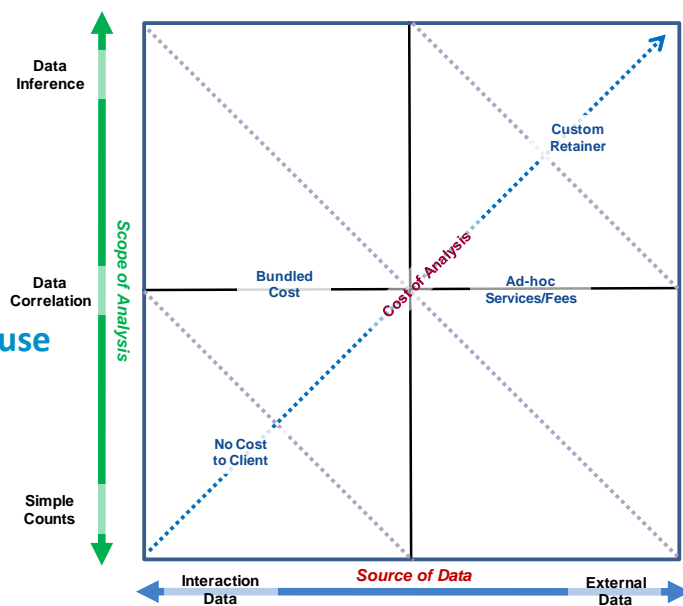## Recovering costs may be derived from several perspectives:

1. *Part of the basic business model (No Cost to Client)*

2. *Part of service/product packaging (Bundled)*

3. *Unique "Ad-hoc" service/product offerings*
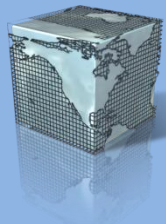
4. *Professional service engagements for fee (Custom)*

Chart axes:
- Vertical (Scope of Analysis): Simple Counts → Data Correlation → Data Inference
- Horizontal (Source of Data): Interaction Data ← → External Data
- Diagonal (Cost of Analysis)

Quadrant labels: No Cost to Client, Bundled Cost, Ad-hoc Services/Fees, Custom Retainer

Understanding Technology

The previous graphic illustrates that more complex analysis efforts that include work all the way up to drawing inferences about information from multiple complex sources should require different pricing to recover complex costs. It is recommended that this would include at least 4 circumstances:

- **No Cost to Clients**: will include the presentation of information that would be "standard" in the overall delivery of service.

- **Bundled Cost**: Optional extensions to basic features that would be the next level of logical information reduction, but probably not "free"

- **Ad-hoc Services**: would generally describe complex analysis work that would be difficult to package into products or packages because it would be associated with the finest details of a specific implementation.

- **Custom Professional Services**: the most challenging integration work that could be engaged would require professional service fees to interact with customers to fully understand the impact of data from multiple sources. This type of work is generally "high cost/high value" and would be done on a cyclical recurring basis as opposed constantly.

Data Inference

Scope of Analysis

Data Correlation

Simple Counts

Custom Retainer

Cost of Analysis

Bundled Cost

Ad-hoc Services/Fees

No Cost to Client

**Interaction Data** ← **Source of Data** → **External Data**

Because every customer or "subsystem" probably has some unique characteristics though; it is unlikely that these classifications have linear definition as in the picture.
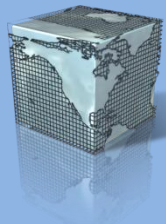
In determining how to offer services across the reporting/analytics spectrum a profile like this instead of the previous "linear" classification will undoubtedly emerge. Decisions on how to package will be based on:

Key Areas:

1. **Direct Value to Client / End-User**
   – *Operational costs or revenue*

2. **End-Consumer Loyalty & Satisfaction**
   – *How does the Business "feel"*

3. **"Other" perceived Value and Benefits**
   – *Strategic linkage*
   – *Targeted market alignment*
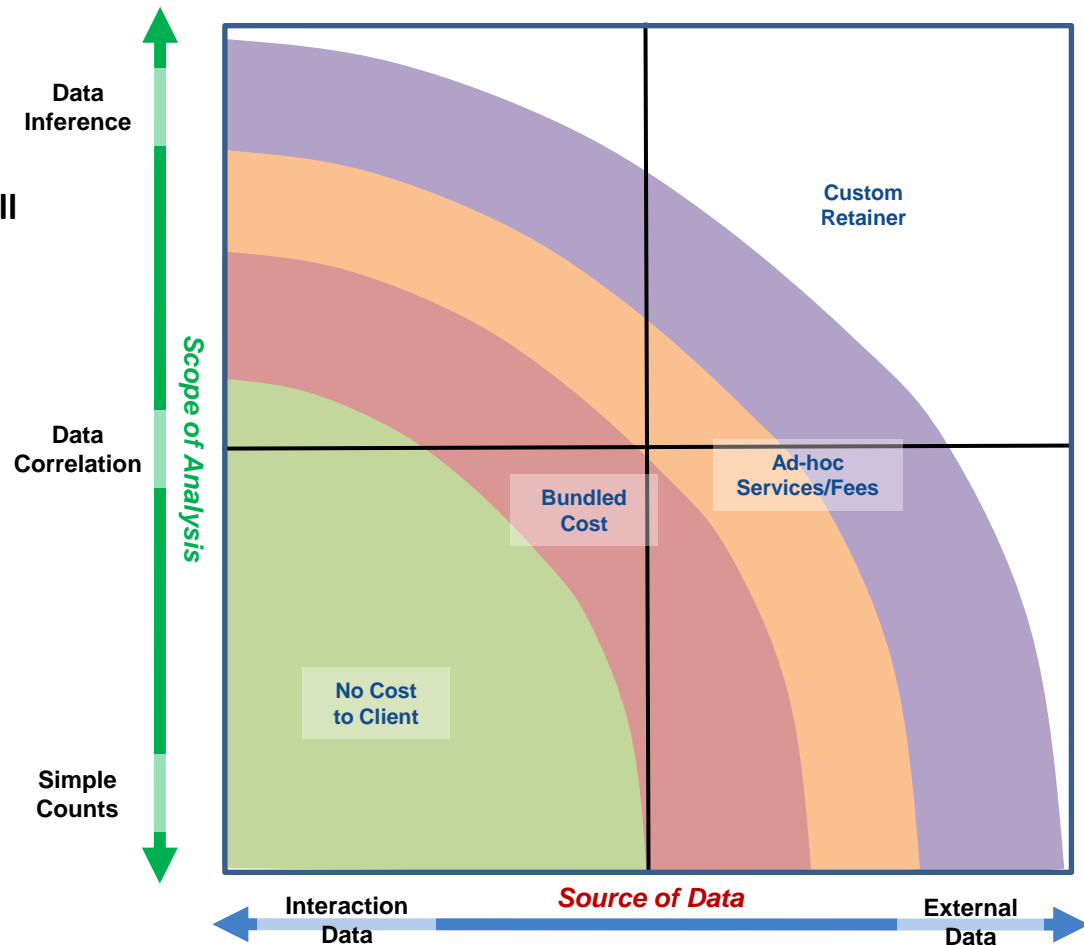
Mapping out what your business will or create in these categories is critical to the success of Reporting/Analytics.

- **What will be offered as the "No Cost" elements will have the biggest impact on business.** ("Basic" Reporting & Dashboard access solutions)
- **The nature of your offerings will vary by industry or "line of business"**
- **Offering solutions without recovering the costs will result in failure.**

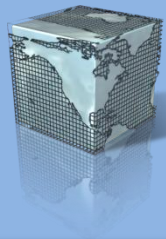*Mission: Complete Line of Business Definitions!*
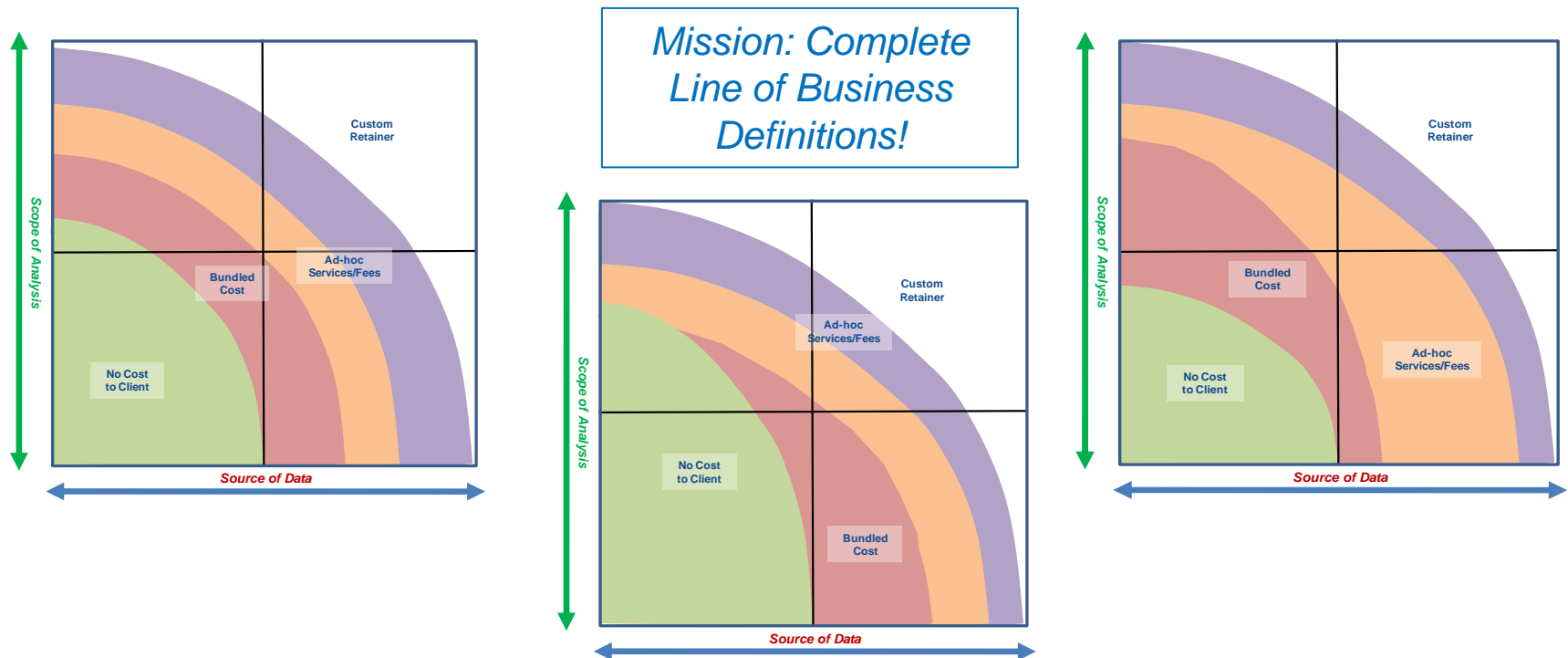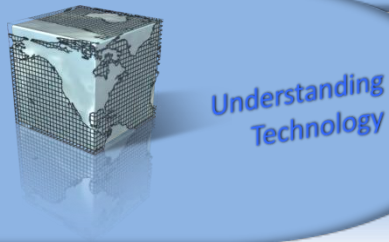
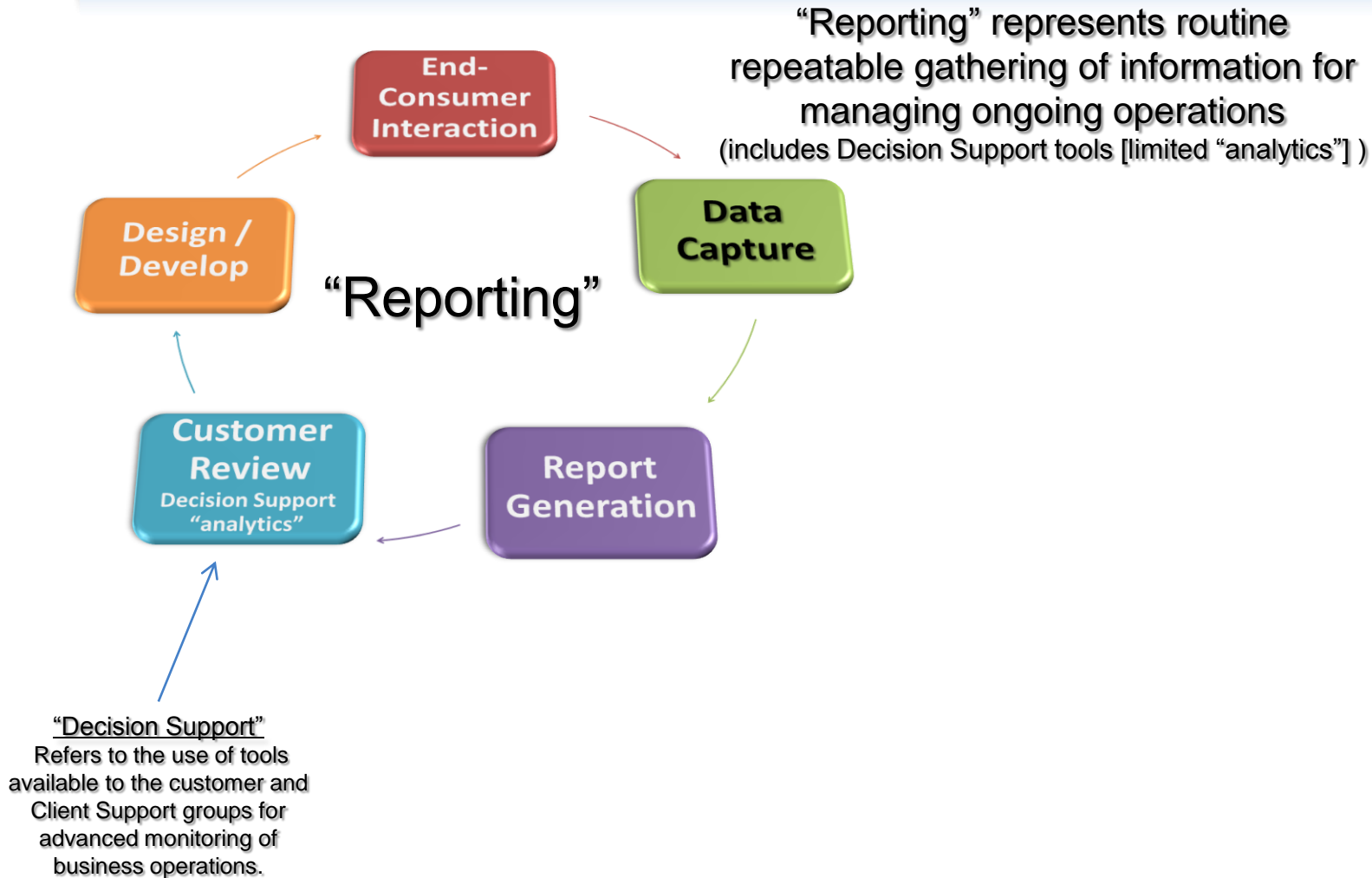# Reporting vs. Analytics: "Improved Focus"

- **<u>Reporting</u>:** represents routine repeatable gathering of information for managing ongoing operations.
  - **<u>What took place?</u> Is my business operating within "normal" parameters?**
  - **Usually based on simple "counting" and display of variable information.**
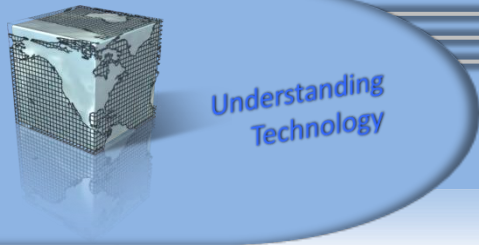 - **Can be mostly (if not fully) automated.**

- **<u>Decision Support</u>:** describes tools and techniques that are usually aligned more with reporting than more advanced analytics and providing abilities to make improved business decisions. (..might be called "lowercase analytics" or "analytics lite", or "Business Intelligence")
  - **<u>Why did things happen the way they did?</u> What business parameters need immediate attention?**
  - **Requires simple correlation between routine business data elements to identify changes.**
  - **Can be mostly automated.**

- **<u>Analytics</u>:** involves extended evaluation of data that results in enhanced understanding of business operations
  - **<u>What will happen and how can I improve?</u> What parameters need change to improve my business?**
  - **Examines complex interactions between business data elements.**
  - **Needs PEOPLE to make inferences and decisions on metrics & meaning.**
  - **Provides guidance on business parameter and operational characteristics adjustments to improve service delivery.**
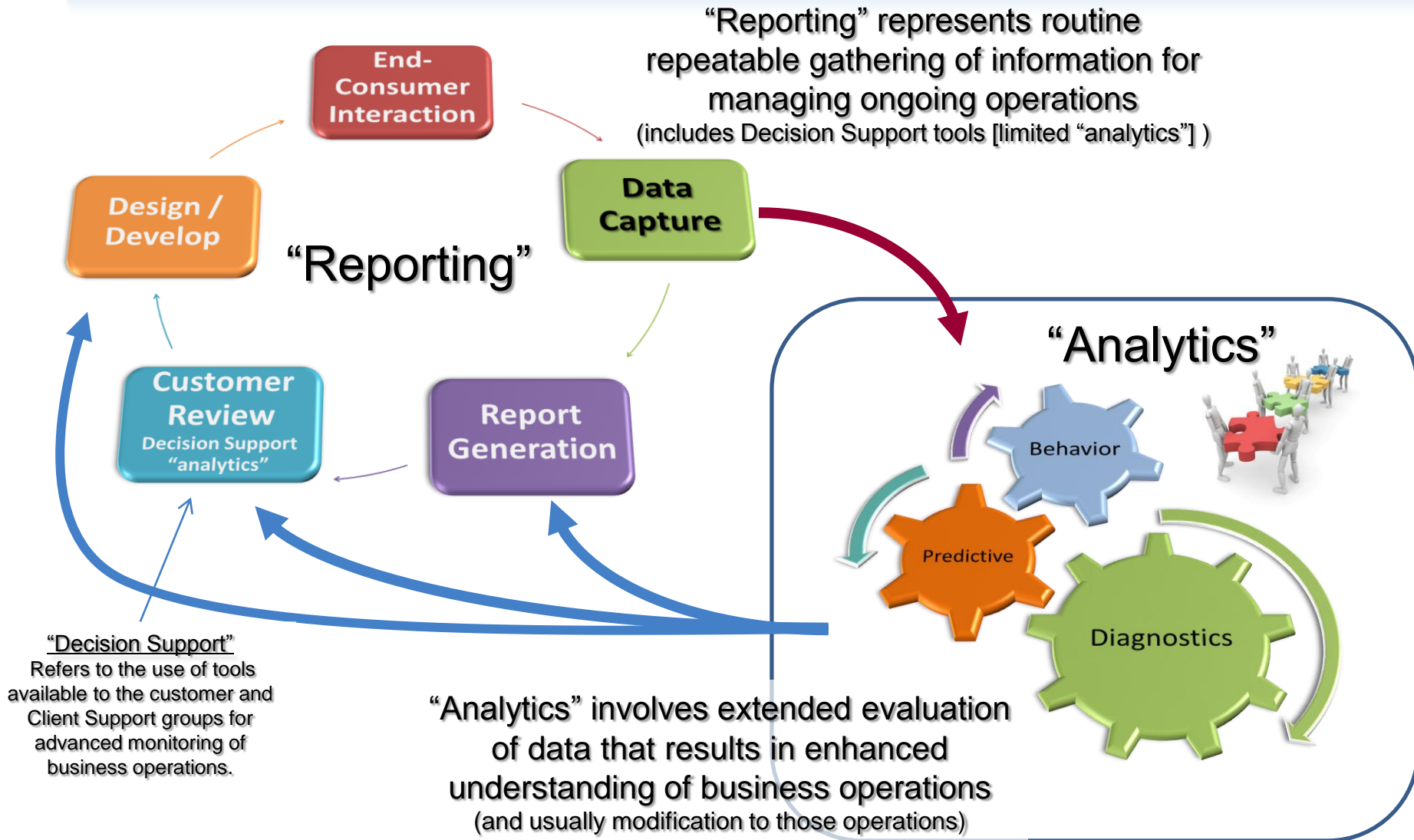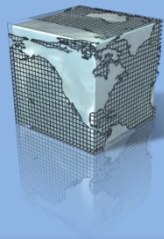
Understanding Technology

"Reporting" represents routine repeatable gathering of information for managing ongoing operations
(includes Decision Support tools [limited "analytics"])

End-Consumer Interaction

Data Capture

Design / Develop

"Reporting"

Customer Review
Decision Support "analytics"

Report Generation

"Decision Support"
Refers to the use of tools available to the customer and Client Support groups for advanced monitoring of business operations.

Understanding
Technology

"Reporting" represents routine
repeatable gathering of information for
managing ongoing operations
(includes Decision Support tools [limited "analytics"])

End-Consumer Interaction

Design / Develop

Data Capture

"Reporting"

"Analytics"

Customer Review
Decision Support "analytics"

Report Generation

Behavior

Predictive

Diagnostics

"Decision Support"
Refers to the use of tools
available to the customer and
Client Support groups for
advanced monitoring of
business operations.

"Analytics" involves extended evaluation
of data that results in enhanced
understanding of business operations
(and usually modification to those operations)

Performance Analysis Hierarchy

Visibility

Causality

Predictability
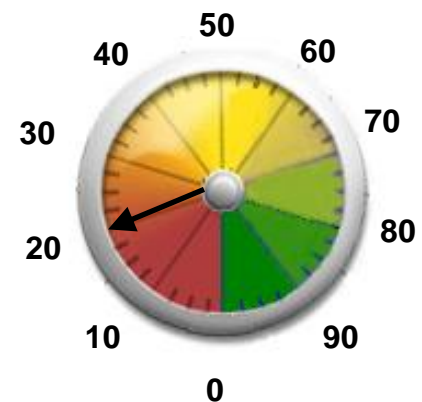
What happened?	Why did it happen?	What will happen?
• Reporting	• Data Mining	• Predictive Analytics
• Dashboards	• Channel Analytics	• Simulation & Optimization

Decision Support

"Analytics"

Understanding Technology
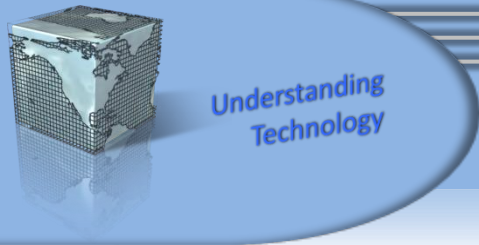
- **Confront the Issues! Define your terms!**
  - It's easy to be overwhelmed by all of the press and market hype about "Analytics". It's critical to define the meaning for your specific business.

- **Listen to your "customers"!**
  - Focus on providing information/tools that help clients manage their business today and to plan for the future.

- **Full "Analytics" is an expensive proposition** (but can have <u>VERY</u> high value returns)
  - Manage your delivery costs and $$$ recovery by aligning information and "tool" options by line of business and product packaging.

- **Optimize your reporting "cycles"!**
  - Ultimately, the major import of all this discussion comes back to understanding that all business must be run on some kind of cyclical set of processes. Using "analytics" to evaluate and improve the nature of your business cycles can result in dramatic benefit to you and your clients.