CUSTOMER INTELLIGENCE
A KEY TO GREATER PROFITABILITY
EVEN IN TURBULENT TIMES

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Introduction

Companies are pursuing all measures to reduce costs as they struggle to survive the economic crisis. However, some companies are supplementing cutting costs initiatives by making fundamental changes in their business in order to emerge stronger and more competitive when the economy improves. The use of customer intelligence impacts marketing, sales, service and the customer experience in ways that improve performance while reducing costs.

Customer intelligence is the ability to collect internal and external information about customers and prospects. Once this information is analyzed, you can develop treatments that are more relevant to the profitability quotient of each individual customer — treatments that are more likely to generate positive responses than those that are not as relevant to your customer.
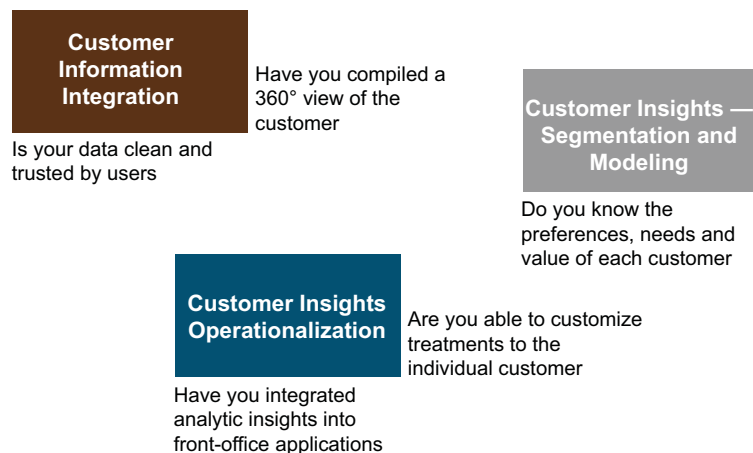
To take advantage of customer intelligence, three distinct areas of capability are required.

The Three Dimensions of Customer Intelligence

We have developed the Customer Intelligence Maturity Model to examine each of the three major dimensions of customer intelligence: Customer Information Integration, Customer Insights — Segmentation & Modeling, and Insights Operationalization.

Customer Information Integration includes customer data quality, integration and management. Customer Insights — Segmentation & Modeling encompasses customer value and needs segmentation, behavioral analysis and predictive modeling. Insights Operationalization consists of the implementation of processes that make insights actionable and installing consistent treatments across the enterprise.

Figure 1: Dimensions of Customer Intelligence

Customer Information Integration

Have you compiled a 360° view of the customer

Is your data clean and trusted by users

Customer Insights — Segmentation and Modeling

Do you know the preferences, needs and value of each customer

Customer Insights Operationalization

Are you able to customize treatments to the individual customer

Have you integrated analytic insights into front-office applications

Each dimension of Customer Intelligence must be analyzed separately but it's the sum of the parts that will bring the most value.

Within the three dimensions of customer intelligence, we have found varying degrees of capabilities. From our primary research and client experiences, we are able to categorize company capabilities into one of four progressively higher rankings:

- Basic
- Foundational
- Advanced
- Distinctive

The Customer Intelligence Maturity Model

Based upon our surveys and experiences, we have benchmarked customer intelligence capabilities across the three dimensions of customer intelligence and across the maturity spectrum. We believe that "best in class" (the best potential customer intelligence capabilities) and "best practices" (those existing customer intelligence capabilities of organizations) are those capabilities that approach and achieve a level of "Customer Intelligence Maturity Distinction" across each of the three dimensions.

Figure 2: Customer Intelligence Maturity Model

	Basic	Foundational	Advanced	Distinctive
Customer Information Integration	• Manual data clean up	• Periodic batch processes to clean up data	• Online search, lookup, validation rules applied at appropriate tiers	• Data quality maintenance using external vendors or periodic data feeds
	• No 360° view of customer	• Common IDs established for 360° view loosely coupled	• Automated integration of IDs for 360° view delivered via batch CDI	• Central system for ID management delivered via real-time CDI
	• Customer changes posted end-of-month	• Changes posted weekly	• Changes posted daily	• Changes posted immediately
	• No cross-departmental data stewardship	• Data steward FTE	• Data stewardship change control board	• Business subject area owners enforce data policies
Customer Insights — Segmentation and Modeling	• Market/demographic segmentation only	• Behavioral segmentation	• Needs-based segmentation	• Micro and multi-level needs segmentation
	• Revenue-driven customer valuation	• Profit and/or proxy-based customer evaluation	• Share of wallet analysis	• Unrealized value analysis
	• No use of predictive models	• Some proxy-based predictive model usage	• Segment or statistically based predictive models	• Complex predictive models for propensity scoring
	• Key metrics/indicators defined but not complete	• Key metrics available from multiple reports	• Key metrics assembled in an enterprise scorecard	• Key metrics support drill-down analyses
	• Same service levels for all customers	• Differentiated service for valuable customers	• Differentiated service by customer segment	• Personalized service
Customer Insights Operationalization	• No integration to front-office applications	• No production process to update insights	• Insights updated through periodic batch processes	• Real-time, rules-driven customer interactions
	• Manual processes for problem resolution	• Case management for problem resolution	• Automated case hand-off and tracking	• Enriched knowledge base for self-service fulfillment
	• No lead management system	• Leads manually distributed to channels	• Leads automatically generated and distributed	• Automated lead generation and tracking system

Customer Information Integration Agreed

Every company struggles with data quality, consistency and access. It is a constant challenge to store, organize and route increasing amounts of data. Master Data Management (MDM) is the means for standardizing data across an enterprise. There are numerous applications that generate and use data. And, there are usually multiple data repositories that store data and make it accessible to users. All of this data creates a strain on resources to keep it current, clean, accurate, reliable and accessible.

MDM creates a system of record for all of the important data in an enterprise. It includes architecture, tools, and a set of processes for setting and maintaining standards that ensure all applications and users share a common pool of synchronized data. MDM addresses typical data hygiene matters such as data cleansing, standardization and reconciliation, but it also goes beyond these standards to establish common definitions, management procedures and stewardship.

Applying MDM to all of the data in an enterprise is a daunting task. Most companies should consider segmenting the work by subject area, such as customer, product and employee. Recently, MDM for Customer Data has replaced the previous terminology, Customer Data Integration (CDI). New tools and approaches are being touted by a number of vendors in this subject area, which usually represents about 70 percent of the data in a company. Our definition of MDM for Customer Data is to integrate and rationalize customer data from multiple, disparate sources to create a single, 360 degree view of the customer across the enterprise. The consolidation may be physical and/or virtual.

Several MDM vendors recommend establishing an operational data store devoted to customer information, and we endorse this approach. A Customer Intelligence Hub that is used for standardizing, scoring and brokering customer information for use throughout the enterprise makes data integration simpler — and that is exactly what is needed to increase the effective use of customer analytics. The graphic depiction of a customer hub and its functions appears in Figure 3.

Figure 3: Customer Intelligence Architecture
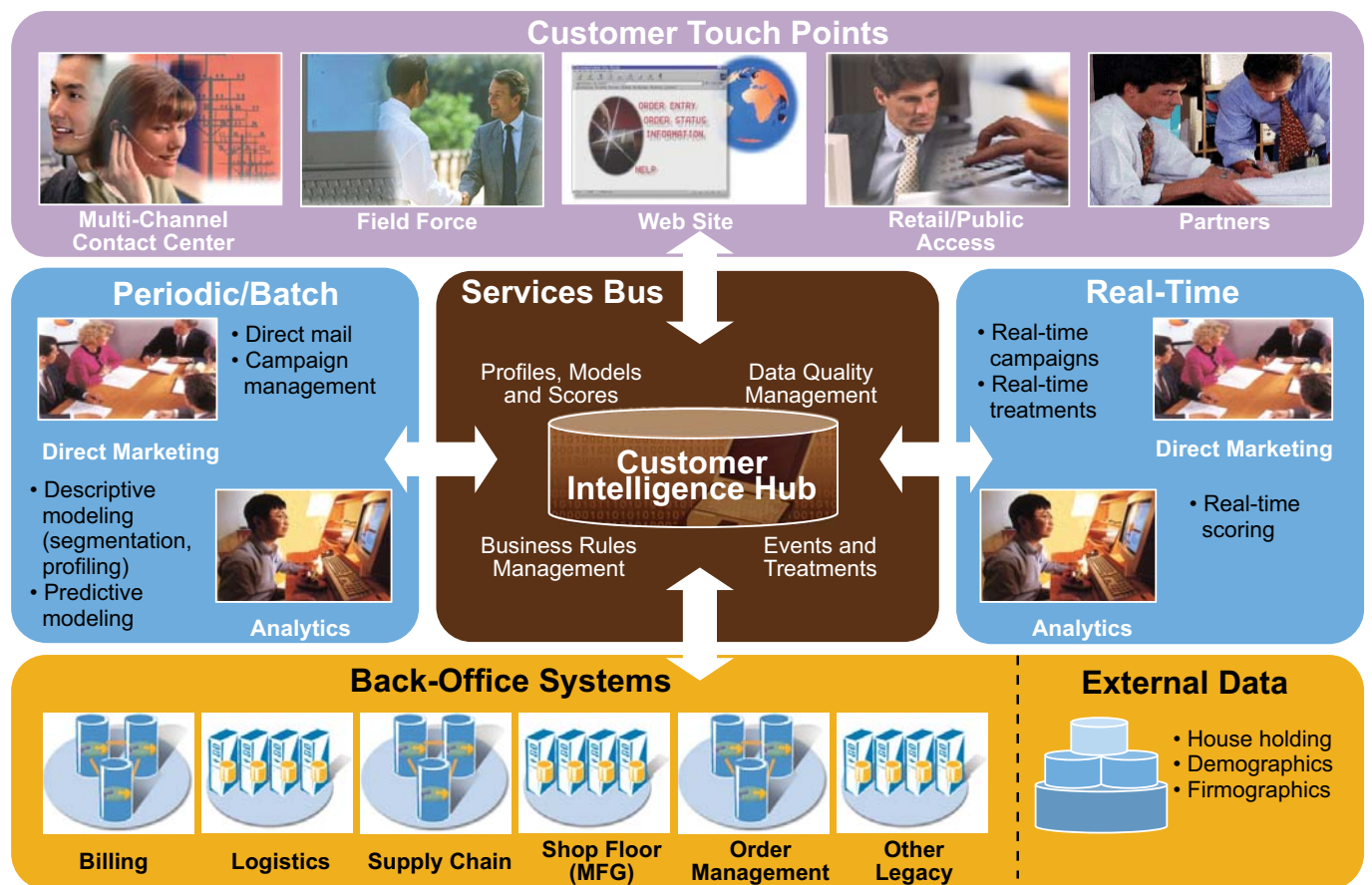
Customer data consolidation is an accelerator for analytics and treatments. Any effort expended against information silos must be replicated for all, prior to having a consolidated customer view. Typically, this is done using different tools and processes, sometimes compounding the problem.

Our practice is to bring together multiple disparate data sources into a single consolidated source of record for customer interaction. This step may be done using several different approaches which must match the customer dynamics and business drivers.

Second Customer Intelligence Dimension: Customer Insights — Modelling and Segmentation

The spectrum of analytical modeling progresses from qualitative to quantitative — or from proxy-based to financial to statistical (to neural networks — a form of advanced statistical analyses with "learning capability"), as illustrated in figure 4.

Figure 4: Modelling Segmentation

Proxy Based Analysis — Financial Analysis — Statistical Analysis

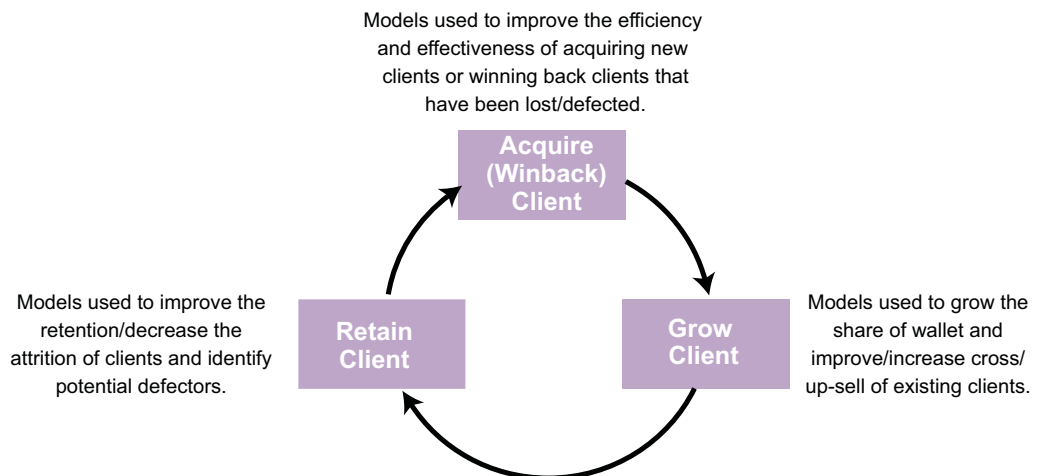Where an organization falls on this continuum depends upon:

- Current and future business need
- The application of the output
- Data accessibility

Proxy-Based is a qualitative analysis based on intangible variables and components. It is frequently applied in early stages of analytic modeling and segmentation when time is a factor and quick action is needed. It is also used as an interim solution until data limitations are overcome. Some examples can include qualitative needs analysis and customer strategic value scoring.

Financial analysis is a quantitative analysis based on revenue and cost and, if possible, cost information at the individual customer level. Discounted cash flow models are often used. Some examples can include: actual and unrealized customer lifetime value analysis, recency-frequency-monetary (RFM) modeling, and customer profitability analysis.

Statistical analysis builds on Proxy-Based Analysis and Financial Analysis, and incorporates a more rigorous analysis behind assumptions such as estimating the probability to purchase, become a customer or defect. Some examples can include: customer needs clustering analysis, next optimal product modeling, prediction-based defection modeling, and high value customer or customer response prediction models (using Chi-squared Automatic Interaction Detector [CHAID] or discriminate analysis).

Figure 5: Analytical Model

Models used to improve the efficiency and effectiveness of acquiring new clients or winning back clients that have been lost/defected.

Acquire (Winback) Client

Models used to improve the retention/decrease the attrition of clients and identify potential defectors.

Retain Client

Grow Client

Models used to grow the share of wallet and improve/increase cross/up-sell of existing clients.

To optimize the effectiveness of the analytical model, it is also necessary to determine the customer's business objective: acquisition, growth (cross/up-sell), retention or winback.

Based upon our approach to customer intelligence, we believe that three modeling and segmentation groupings are essential: customer value segmentation, customer needs segmentation and customer defection analysis. As such, we devote specific attention to these customer intelligence enablers.
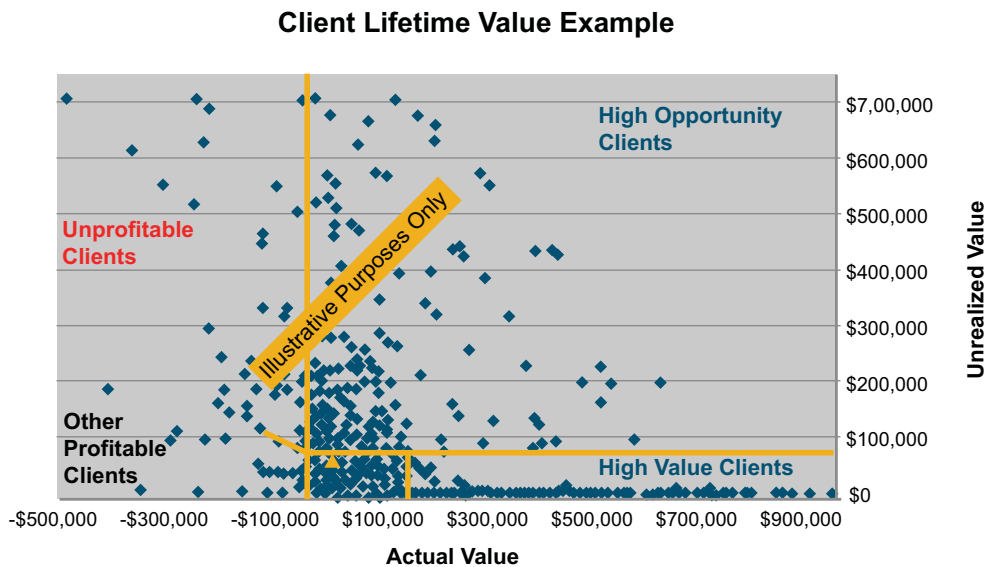
Customer Value Segmentation

Customer value segmentation, a component of analytic modeling and segmentation, is one of the backbones of an effective customer intelligence capability. Customer valuation is the relative comparison of a customer's value. By better understanding the relative value of each customer to each other, through the use of customer intelligence, a company can focus on more effective resource allocation to ensure more business from high-value customers.

Customer valuation is built upon two key models — actual and unrealized value. Actual value is a quantifiable measurement that relates to past cash flow, current value and future projections. Unrealized value looks at the total profit a company can realize from a customer if it were to develop a strategy, or take some marketing initiative, with that particular customer. As such, unrealized value allows for understanding the drivers of value beyond traditional financial variables.

Customer Value Segmentation gives insight into high-value customers and high-opportunity customers — those customers with high growth potential — and unprofitable customers.

The segmenting of customers by value is accomplished by combining the actual and unrealized customer values and clustering accordingly. An example is shown in Figure 6.

Figure 6: Example of Customer Value Clustering

Client Lifetime Value Example

Customer Needs Segmentation

The end goal of customer needs segmentation is organizing strategies and resources around portfolios of customers with similar needs. The purpose of customer needs segmentation is to customize customer treatments. As such, customer needs segmentation is the basis for building customized relationships with customers and prospects.

The first step and best way to customize treatments is by understanding customer group and individual needs.

A 'mode' is the context which defines an individual customer's current situation or frame of mind — "What are you doing today?". Although individual customers are primarily oriented toward one customer needs segment, a change of mode can temporarily alter their situational needs.
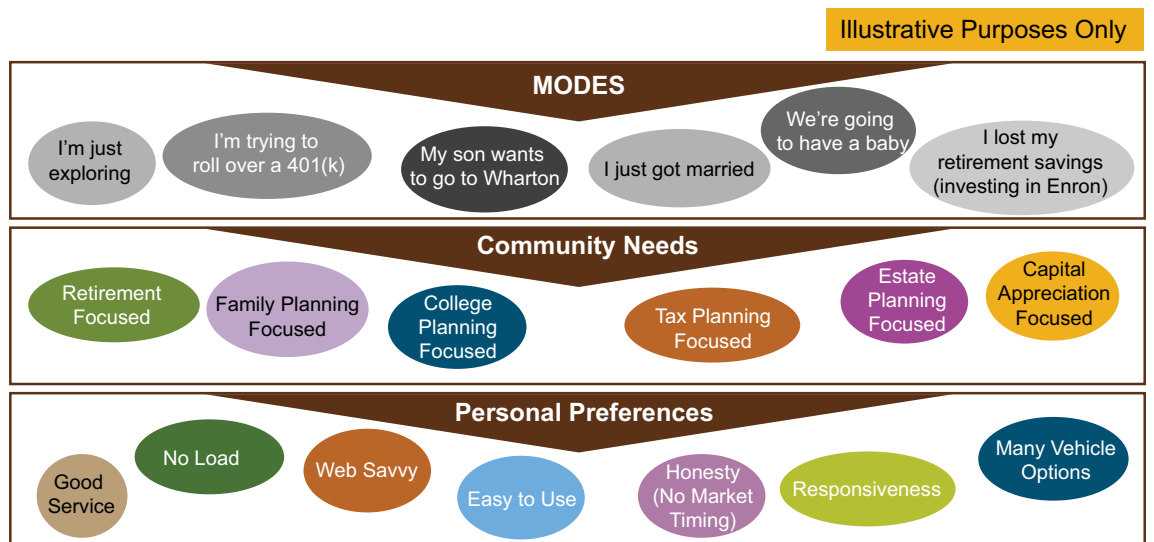
Figure 7: Customer Needs Segmentation

		Common Needs			Mass Market Advertising
		Overlapping Needs			Targeted Marketing Messages
Overlapping Needs					
Overlapping Needs					
Overlapping Needs			Overlapping Needs		
Needs Segment #1	Needs Segment #2	Needs Segment #3	Needs Segment #4	Needs Segment #5	Needs Segments
					Individual Client Needs
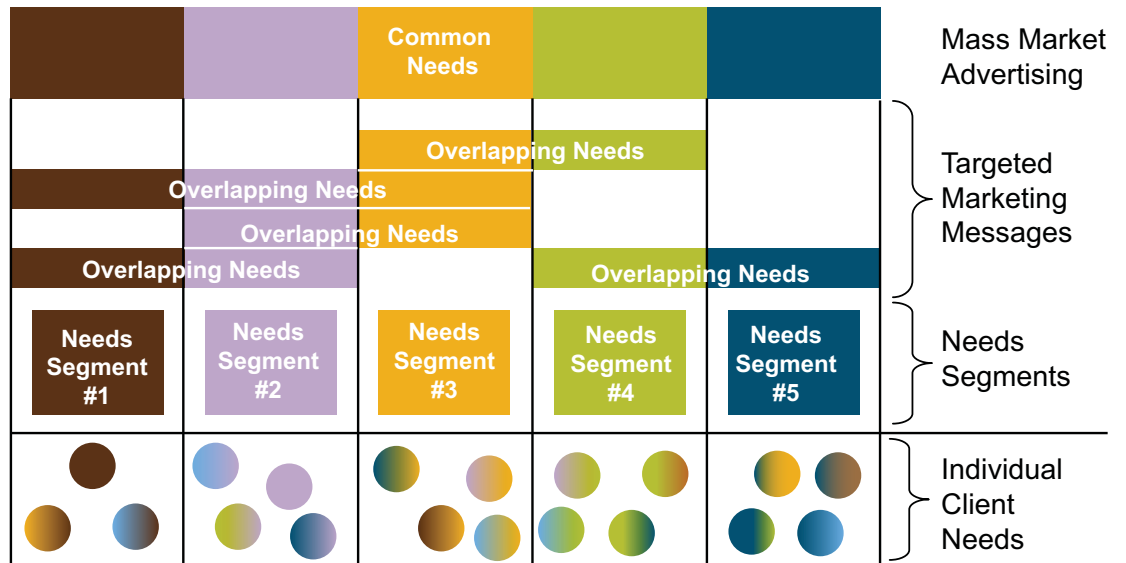
As opposed to traditional demographic and product usage segmentation, customer needs segmentation focuses on:

- "Why" more than "what"
- The individual's primary cluster (community), although it may migrate depending on circumstance/mode
- Variances in individual preferences
- Being actionable and enabling individual customer customization
- Actively providing individual customers with the opportunity to choose and collaborate
- Learning and experience with customers

See Figure 8 for an example of customer needs segmentation for the asset management industry.

Figure 8: Customer Needs Chart

Illustrative Purposes Only

MODES

I'm just exploring | I'm trying to roll over a 401(k) | My son wants to go to Wharton | I just got married | We're going to have a baby | I lost my retirement savings (investing in Enron)

Community Needs

Retirement Focused | Family Planning Focused | College Planning Focused | Tax Planning Focused | Estate Planning Focused | Capital Appreciation Focused

Personal Preferences

Good Service | No Load | Web Savvy | Easy to Use | Honesty (No Market Timing) | Responsiveness | Many Vehicle Options

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Customer Defection Analysis

We view a core component of analytic modeling and segmentation to be customer defection prediction so that appropriate retention strategies can be employed. An approach to defection analysis can run the gamut from a proxy-based approach to a financial-based RFM approach to a statistically-based predictive model to an advanced neural network model. One approach to defection modeling can use leading indicators to monitor customer behavior to highlight positive/negative trends. Some leading indicators could include:

- Tenure
- Billing acceleration (average quarterly purchases in '0X/average quarterly sales YTD '0Y)
- Special purchases, i.e., promotions

Figure 9: Customer Defection Analysis

Have shown a negative trend in at least one of the three indicator areas

Have shown no change in at least one of the three indicator areas

Have shown a positive trend in all three indicator areas

Third Customer Intelligence Dimension: Operationalization

Our definition for operationalization is to integrate customer insights into customer interaction channels to drive the right treatment to the right customer at the right time.

Touchpoint Integration

We consider Touchpoint Integration as consisting of two components:

1. A process-oriented decomposition, referred to as touchmapping
2. A technical integration process to "hook up" all the relevant customer systems into a unified business and technology architecture

Touchmapping integrates customer insights into customer interaction channels to drive the right treatment to the right customer at the right time. Touchpoint Architecture integrates the technology to support low latency customer awareness and up-to-the-minute cross touchpoint awareness.

Making this goal a reality consists of looking at the current technology state and defining innovative ways to integrate existing and new components, redefine systems of record along with data precedence and accomplish a cross-technology messaging capability for various customer events.

Touchpoint integration also increases the speed and effectiveness of marketing campaigns. Campaign execution and evaluation is facilitated through integration between marketing systems and contact center systems, the web and sales systems. Insights can be translated into business rules that are executed against events to make the customer experience truly distinctive.

This is the most ambitious effort and one which is still a struggle for most companies. Many other initiatives must be in place and working reasonably well to accomplish touchpoint integration. However, achieving touchpoint integration truly offers distinctive capabilities and competitive advantage. We appreciate that it is an iterative process to get to distinctive capabilities and that there are rewards along the way to reaching this level. In a roadmap project, our mission is to find the rewards — from basic to complex — and to help you achieve them.

Taking Control

In these difficult economic conditions, most companies have survival foremost in their thoughts and plans. But those that can also focus on investing in customer relationships will emerge stronger and more competitive.

Any effort to address the three dimensions of Customer Intelligence must naturally address organization and culture. Based upon where a company positions itself on the Maturity Model today and where it needs to be in the future, there are organizational and cultural issues that must be met. Typically, we find that a company's employees are the best source of information on where it stands in its ability to undertake change programs, the degree of alignment throughout the company and the key issues that will create barriers to success. As a first step, we urge all companies to assess where they are in the Customer Intelligence Maturity Model, along the spectrum from Basic to Distinctive and within each of the three dimensions. The next step is to determine where they can and need to be along the spectrum and then plan the roadmap and build the supporting business case.

Of course, cost-cutting moves will dominate short-term plans, but we recommend working in parallel on longer-term plans that will position your company for sustained advantage.

For more information on our Customer Intelligence practice, please contact:

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