

*Management Brief*

# **Business Rules Modeled**

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*A primer on modeling business rules  
and inference networks using Rational Rose.*

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## Executive Overview

### Customers Are Big Business

In the burgeoning world of e-business, Customer Relationship Management (CRM) is receiving a lot of airplay. At this writing there are scores of dot-com companies trotting out CRM point solutions, while established vendors are adding CRM modules to their software suites and platforms. The topic is getting a lot of copy in trade journals, face time at conferences and popping up in innumerable articles, opinions and broadcasts on the web. It's a virtual bazaar of CRM and it's all there for your asking.

If your company is serious about winning new customers and keeping established ones happy you should be excited about CRM and its possibilities for both business-to-business (B2B) and business-to-customer (B2C) applications. But like all IT headlines that appear seemingly out of nowhere, CRM has some obstacles to overcome. While clarity of purpose, diligence, innovation and planning are key practices when developing any strategic IT program, there is one immutable critical success factor woven into the fabric of CRM: your customers. Despite the horde of tools available and the software designed to get you up and running fast, companies that "hear" the voice of their customers throughout their CRM evolution are most likely the ones to reap the rewards of sustaining and delivering value to each customer.

This paper discusses a few of the obstacles that companies must overcome if they wish to be successful with Customer Relationship Management. It also discusses the importance of the voice of the customer and how this trait should thread its way through the entire CRM development process, which is discussed in detail. Last, it explains the role of the voice of the customer in powering a different brand of CRM: *Personalized Relationship Management*.

### What's Wrong with the CRM Picture

If you've been watching the IT game long enough you may see a similar predicament beleaguering the growing Customer Relationship Management (CRM) industry. This predicament is not new. One problem with CRM is exactly what has happened in past IT revolutions: too many application vendors are offering one-stop, does-it-all software. This year it's CRM; recently it was Enterprise Resource Planning (ERP), and before that it was Data Warehousing, Total Quality Management (TQM), and Manufacturing Resource Planning (MRP-II), to name a few.

The sheer number of B2C CRM applications offered today is substantial and the number of application platforms and tools for B2B applications is steadily growing. These trends shouldn't be a surprise. After all, two facts of life seem to drive application marketers. First, these companies are product driven entities that measure themselves on product sales. Except for a handful, few vendors focus on delivering high value to their customers by listening to their needs, offering consultative services to define unique solutions and then providing the right software to make it all happen. Second, software development tools and trends have made it increasingly easy to launch software applications. With next-generation application development tools here today, web building blocks rampant and application programming interfaces defined for most enterprise-level software platforms, pushing out applications like CRM is

relatively easy for those firms who have proven software development skills and some competencies in customer information collection and analysis.

The problem plaguing the CRM revolution is that too much focus is aimed toward introducing tangible technology (shrink-wrapped software and tools) and not enough on the industry's most valuable player: the customer. Plainly put: CRM is about customers, not products. It's about listening to their wants and needs. It is about establishing and then deepening a unique relationship with each and every valued customer throughout the lifetime of the relationship. Hearing the voice of the customer is the most important thread of execution that a company can deploy when evolving a CRM program. This should be foremost in your mind if you wish to be successful with CRM.

## Personalized Relationship Management: Creating E-Business Best Practices

It is difficult to describe electronic business transformation in static terms. Several years ago, while industry was toying with the promises of web-enabled business, *e-commerce* jumped the fence and morphed into *e-business* almost overnight. Along this continuum, it is likely that e-business practices will swell into *e-everything*, which in time, as industries continue to transform, it is imminent the favorite mascot modifier "e-" will fade into obscurity.

But here and now, under the growing umbrella of *e-business*, there are those service and technology disciplines that have the greatest potential for companies who wish to better understand and serve their customers. These disciplines would empower a company to:

- Provide highly productive—even enjoyable—customer experiences when interacting in some way;
- Create a one-to-one experience that evolves as knowledge of the customer increases and the relationship deepens;
- Deliver sustained value to its customers; value that reinvents and enriches the experience over the life of a customer's relationship with the company; and,
- Build a corporate presence that extends beyond its operating boundaries (e.g. walls, processes, products, services, and existing customer channels).

This family of disciplines is called Personalized Relationship Management (PRM) and it encompasses techniques, approaches and enablers to create personalized customer experiences through *touch points* that are critical (i.e. relationship, dissemination of information, community) to growing a company and sustaining market presence.

## PRM versus CRM

PRM is more than just Customer Relationship Management. While CRM may be viewed in its most simple sense as integrating processes to build relationships, PRM does this and more by drawing from multiple e-business and more traditional disciplines to create a one-to-one experience for each customer every time they seek a *dialogue* (e.g. request for information, service or sale) with a company or community. To deliver a personalized experience to a customer, PRM by its very definition must be closely fused to a customer's needs each and every time he engages the company's touch points. Figure 1 illustrates how a PRM model might be implemented.

By listening to the voice of the customer, PRM seeks to leverage a 360-degree view of the customer by:

- Creating repeatable interaction mechanisms that strengthen relationships and deliver results of meaningful value to the customer;
- Motivating these customers<sup>1</sup> to continually engage a value-centric space defined by the company;
- Proactively finding and then quickly reacting to opportunities that provide value to a specific customer; and,
- Always capitalizing on the ability to learn from the customer through zero leakage of information and zero loss of knowledge.

These tenets are the cornerstones of PRM strategy.

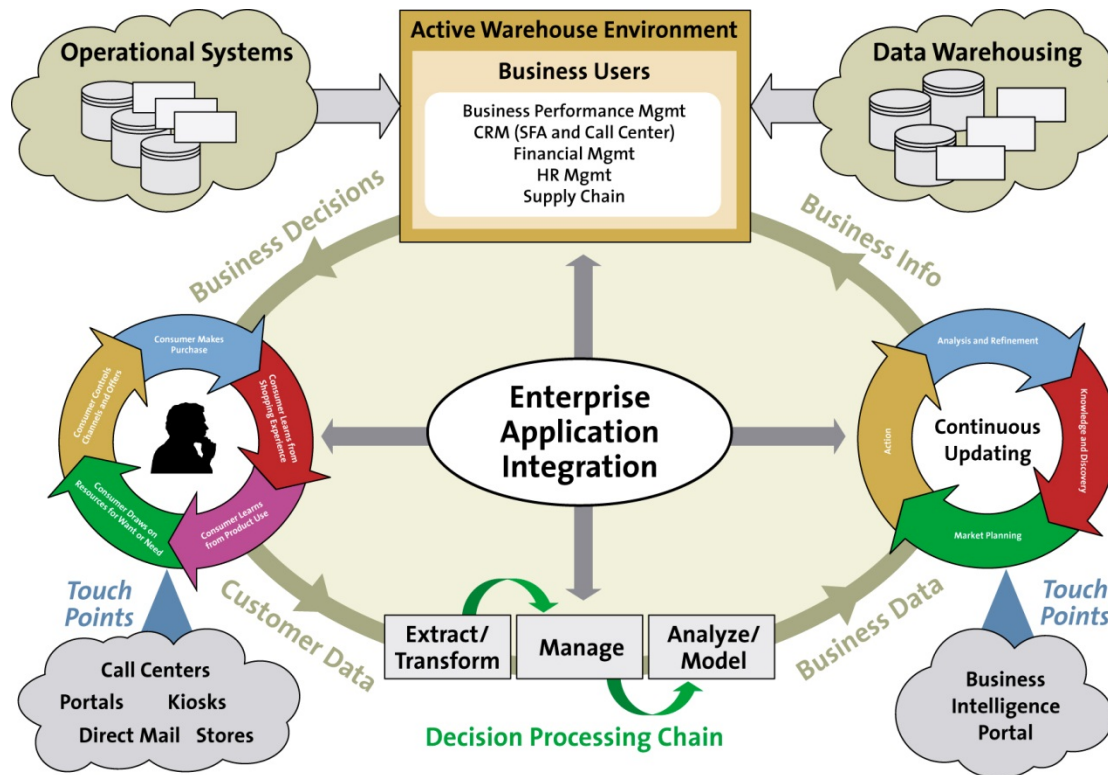


Figure 1: Example of a PRM closed loop fusion model.

<sup>1</sup> In the scope of this discussion, customer is any *participant* in the experience. This could be users, individuals, employees, trading partners, even an *e-community*.

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## B2B and B2C: Distant Cousins at Best

Personalization and CRM have seen significant press in the B2C market; however, there is an equally large if not more difficult challenge in bringing personalization and CRM to the B2B market. B2C personalization is focused on modeling the behavior of a customer base that is potentially large and diversified. In the B2B world, while the average company may have comparatively less trading partners or customers, the demands for personalization are as high as B2C, and may be even more sophisticated.

Three challenges differentiate the B2B market from B2C when implementing a PRM strategy. First, the concept of customer is different with B2B. We tend to think of the customer as an individual when discussing business-to-customer applications, that *consumer*—you and me—clicking and scrolling through a web site, looking for merchandise or information. In a business-to-business relationship, the customer may not be an individual, but rather a department or a team. It may be the logistics department who accesses a portal to your ERP platform to see when an order will ship. It may be the procurement officer—any officer working that day—that wishes to download the latest standard pricing schedule. Personalization in these cases strives to understand the habits and requirements of groups of users, not individuals. The voice of the customer may be plural, though it may be treated as a whole.

Second, when defining personalization and the desired customer experience for B2B customers, you may have to factor in each customer's business processes and corporate culture. How each company is used to doing business and the specifics of its procurement practices (among other trading activities) can be deeply ingrained in its corporate culture, organizational structure and its operating philosophy. Unless you are prepared to shepherd revolutionary change in your buyers, you will have to consider these "personality traits" as part of your PRM solution.

Last, another challenge is presented by a growing business concept: the *buying community*. If you sell to dealer networks, trade groups, buying consortiums—whatever the term to indicate associations of companies who band together to purchase product and services—then you will likely have some extra work when modeling the personalization and desired customer experiences of these constituencies.

While the PRM models for B2B and B2C may at a glance appear similar, the economic and behavioral characteristics of each segment will demand different approaches in understanding the voice of the customer. Characterized by higher purchase volumes, higher ticket prices, the possibility of multiple currency and cross-border trading, complex logistical and distribution issues, comparatively long buying histories, and more sophisticated buying practices, the B2B market is a markedly different PRM challenge. It will require more investment in the customer experience and relationship planning steps (described later).

### ***Voice of the Customer: What Drives PRM***

*The customer is number one.*

*The customer is the reason we do everything.*

*The customer is the soul of our existence.*

While mantras like these are the main sails of many mission statements, it is surprising how few companies take the voice of the customer into the heart of the organization. Traditional *customer listening* has focused on determining ideal product requirements, service requirements, cost, and

delivery. Through surveys, feedback, test marketing, and customer focus groups, manufacturing and service firms do their best to deliver what the customer needs, wants, thinks he wants, and in many cases, didn't know he needed. These processes describe the traditional voice of the customer: translating the buyer's demands into something he will value.

Personalized Relationship Management makes new and larger demands of the voice of the customer. Never before have there been more ways of interacting with customers to deliver information, sell product, fix problems, and understand their dynamic needs. The number of access channels, or touch points, has increased as has each touch point's capabilities to sustain sophisticated "dialogues" with the customer. Touch points have exploded from the traditional four—store front, call center, salesperson, and field service—into channels that present new opportunities to hear the customer: static and dynamic web pages; portals; kiosks; captive interactive applications; point of sale systems; handheld communication devices (cell phones and personal digital assistants); enhanced Interactive Voice Recognition systems (IVRs) and Computer Telephony Interfaces (CTIs). The list continues to grow as more smart devices hit the shelves. At each and every new touch point, customer needs can be captured, analyzed, and results delivered in real time<sup>2</sup> to the customer.

## Opportunities and Challenges for PRM

The opportunity to begin a PRM program is presented when a company seeks to enhance its ability to listen to its customers and continually provide an integrated but personalized service experience. The following opportunity qualifiers are discussed:

- **Recurring, Consistent, New Interaction** – You have or desire an environment that promotes frequent interaction with customers. The environment should create demand for frequent dialogue with the customer by answering his diverse needs, which only increase and become more sophisticated as the relationship deepens. Though the resulting customer experience should be new, it should be consistent: your customer should recognize—be comforted by—both company and brand image, even though the service experience may be fresh.
- **High Touch Collaboration** – You want to raise the bar by seeking a more enlightened relationship with your customers. You wish to learn from them, capture their needs in new ways, provide enhanced value, and anticipate how their needs may evolve as the relationship evolves. Attaining a high touch relationship is expanding customer interaction from a transaction-based experience into one that is knowledge-based.
- **Build Trust** – You wish to reach and sustain mutual trust with your most valued customers. Attaining this trust will allow you to learn more about each relationship and how to best deliver value. It liberates customers to share more intimate details about their product and service requirements.
- **Improve Touch Point Value** – You see opportunities to improve the value of your current customer access channels. The more you can learn about a customer through a given touch point (i.e. hearing the voice of the customer), the more it can deliver value.

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<sup>2</sup> Real time, as seems to be the case in all discussions surrounding this topic, is a relative term. In this context it refers to the comfort factor of the customer when using the specific touch point: the expected and reasonable response time for a user in a given touch point scenario. For example, customers using a web portal or kiosk would expect almost immediate responses to inquiries while they may be more patient with an IVR.

Though there may be compelling reasons to launch a PRM program, a company must be resolutely aware that its organization will be heavily impacted by the planning and implementation process.

Successfully adopting PRM:

- Requires integration of all touch points;
- Demands a 360-degree view of the customer;
- Succeeds by virtue of buy-in and collaboration of all company organizations that interact with the customer;
- Necessitates back office business intelligence, knowledge management and data warehouse integration;
- Requires sophisticated technology to extend and enhance;
- Depends on the desire to enhance, change or obsolete business processes, workflows and practices; and,
- Demands continual vigilance to re-invent and evolve.

## Relationship Planning: Analyze This!

So far we have discussed the importance of the voice of the customer in planning and implementing PRM and its ultimate importance in providing a valuable customer experience. But how do we take what the customer has taught us and put it to good use by delivering results that customers value? Through numerous touch points, customers conduct dialogues with us by purchasing, ordering, making requests, navigating through screens, clicking here and there, make inquiries, giving information, reporting problems, and offering advice. It is true two-way dialogue, because you aim to fill orders, provide requested information, sell promotions, upsell and cross-sell as opportunities arise. And as these dialogues continue over time, knowledge is accumulated and opportunities to deepen the relationship increase. This process of enhancing the value of dialogues is accomplished by *relationship planning*.

Relationship Planning supports the analytical elements of PRM. It is the only way to determine what system building blocks and solution framework will help you deliver PRM through your touch points. Many system integrators, product manufacturers, service organizations and solution providers pay little heed to the necessity for strong Relationship Planning capabilities that must be integrated with customer interaction systems like PRM.

Relationship Planning enables a company to match its IT, process and knowledge resources with its customers' needs in the most optimal manner. This requires that customer data be collected throughout the entire lifecycle of customer interaction—each and every dialogue must be collected, categorized, analyzed and then transformed into actionable information. In many organizations, relationship planning is done poorly if done at all. This is partly due to the fact that customer relationships have traditionally been viewed as static and one-dimensional. When planning new initiatives—let's call this *marketing planning* as compared to relationship planning—companies depended on the same warhorse formula, often with the same dismal outcomes. Customer and market analysis would be performed periodically resulting in broad conclusions about certain customer segments. Once the analysis was complete, new customer profiles would be created and new marketing campaigns conceived to reach these new segments. Not surprisingly, there was often a considerable time gap—several months or



more—before the results were reflected in sales and promotion activities. Additionally, the all too general (and sometimes plain ill-conceived) promotions and solicitations were only on target for a portion of the customers in that segment.

Relationship planning aims to reduce this problem by leveraging the immediacy of many of today's touch points and the availability of business intelligence tools and using these to hear the voice of the customer and respond by delivering high value. In the web-enabled world, to use a popular saying, customers want it all and they want it now. To accomplish this, relationship planning requires four initiatives that are necessary to building an effective PRM program:

- 1) Identifying the unique characteristics of each customer;
- 2) Modeling the current and potential value of each customer;
- 3) Creating proactive, personalized relationship strategies, operational plans, and business rules that will produce the desired experience for the customer—starting with the most highly valued customers; and, last but not least,
- 4) Redesigning the organization, processes, technology, and reward systems to implement the relationship strategies.

What may not be obvious here is that the aforementioned initiatives are not static line-item actions that a company executes to achieve PRM. Instead, they are dynamic, continual activities that evolve as the customer's needs and characteristics evolve.

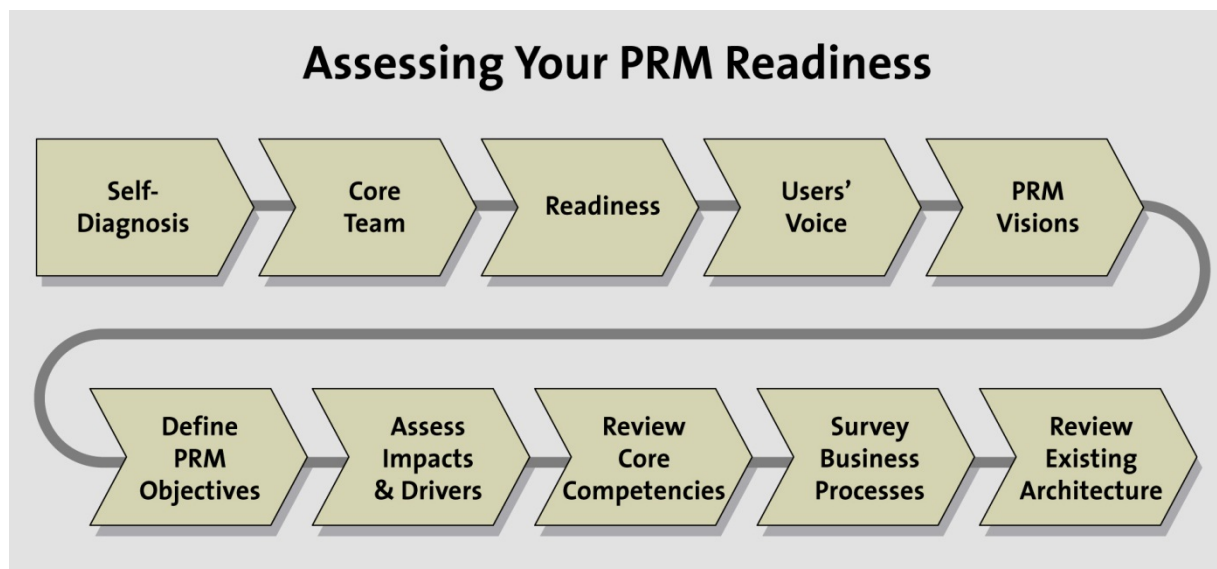
To support these initiatives, the components or enablers of Relationship Planning often include:

- **Campaign Management** – The planning, execution, and assessment of highly targeted marketing promotions and the management of customer relationships through the entire lifecycle. Though campaign management is widespread, its cradle-to-grave cycle times must be vastly reduced to meet the specific, here-and-now demands of a specific customer profile. Too, the number of campaigns may vastly increase owing chiefly to the increased number of highly qualified customer profiles.
- **Data Mining** – The iterative process of selecting, exploring, and modeling large amounts of data to uncover previously unknown relationships. It requires analytical, data manipulation and visualization tools that enable the user to discover opportunities and apply this newfound knowledge to achieve specific business goals.
- **DSS/OLAP** – Tools and platforms such as Decision support systems (DSS) and online analytical processing (OLAP) support operational processes by monitoring and optimizing their efficiencies. They enable decision processes by rapidly providing the right combination of accurate information. Part of the business case for DSS is that it allows for continual and rapid tracking of an increasingly changing and uncertain market.
- **Data Mart** – A time-dependent system designed to help address pre-defined business questions. Data marts tend to be solution-specific or application dependent.
- **Data Warehouse** – A time-independent system that uses historical detail data to support custom-developed applications and help address business questions that may not be pre-defined.

If Relationship Planning is not incorporated into a company's Personalized Relationship Management initiative, the effort will be incorrectly focused on optimizing its channels, rather than on optimizing its customer base and mechanisms for hearing the voice of the customer. A lack of strategic analysis and planning in this area increases the risk that a company will focus on selling the wrong products to the wrong customers through the wrong channels.

## Assessing Your PRM Readiness

Now that we have discussed how the voice of the customer plays a role in the PRM program as a whole, let's examine how you would begin a PRM initiative. This section describes numerous factors in assessing a company's readiness for planning and implementing a PRM program, and it should give you a general idea what groundwork needs to be done before erstwhile planning begins.



*Figure 2: Typical steps in assessing readiness for PRM.*

### Looking in the Mirror: Self-Diagnosis

Before a PRM Strategy can be identified, it is critical to understand the current state your enterprise. Questions you should ask:

- “What are we about?”
- “What do we stand for?”
- “How do we measure success?”
- “How do we create value for our customers?”

It is helpful to ask these questions because it defines common ground among your core team and outside consultants.

## Determining the Core Team

When selecting a core team<sup>3</sup> for developing your PRM program, pick members from across the organization that have a unique understanding of the customer touch points as they currently exist. All departments with a stake today and in the future-state should be represented. Owners of key customer-centric business processes should also participate. If key trading partners or trade unions are impacted, bring them aboard as well.

Though it may seem obvious, it should be stated: an executive with the ability to influence, mobilize and effect change should own the PRM program. This is key because an integrated customer experience across all touch points traverses organizational boundaries and political fences. Your goal is to eliminate organizational barriers as much as possible. And because PRM is more of a way of life than a set of projects, you will probably rotate executive ownership as PRM progresses. Highly visible sponsorship is crucial to the first project win and long-term success.

## Gauging Organizational Readiness

Because implementing a PRM environment is so wide ranging and impacts your enterprise at all organizational levels, it is critical that you be able to prepare and mobilize all departments that will be impacted. Ongoing communication campaigns and workshops to address uncertainty, questions, and fears (as well as to garner support) may be mandatory. At this stage however, it is recommended that you look inside your organization to determine its general state of readiness. This can be accomplished in a facilitated workshop setting using tools such as readiness checklists and questionnaires. A likely deliverable might be called an *Organizational Readiness Scorecard*.

## Hearing the Voice of Your Users

It is important to get the pulse of the various organizations that will be impacted by the PRM program. To do this, the core team can use a pre-designed interview worksheet to classify the kind of information offered by users<sup>4</sup> during informal fact gathering and interviews. Though the interviewer seeks to conduct an orderly exchange of questions and answers, most interviews take on a life of their own. The interview worksheet is aimed at capturing relevant information and classifying each article against pre-determined affinities. The goal of the worksheet is to attempt to capture as separate entities:

- Clarifications and corrections of written assets (i.e. strategic plans);
- Goals and priorities of the user(s);
- User requirements in the unique “voice of the user”;
- Priorities of the department (there may be a difference);
- Successes and failures (lessons learned);

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<sup>3</sup> If your PRM initiative is being assisted by outside consulting organizations, the core team will partner with this team once roles and responsibilities are defined and agreed upon.

<sup>4</sup> Users in the context of this paper are generally the “knowledge workers” of an organization, those persons who have a stake in the customer interaction process, or customer experience. They may be channel experts, subject matter experts, sales and service personnel—anyone who currently touches or, in the future-state, could touch the customer.

- Changes to the environment or infrastructure (including new business developments and outside influences from hardware/application vendors, etc.);
- Obstacles and threats;
- Enablers; and,
- Constraints (including manpower, budget, process, and timeline).

## Brainstorming E-Business and PRM Visions

Determine in general terms the visions for PRM. These should be supported by the overall vision for e-business. Visioning is typically executed through one or more workshops with the core team. This exercise encourages participants to provide qualitative *wants* for the PRM Program by identifying and delineating PRM visions and larger scope e-business visions. The visions need not be substantiated at this time, only classified whether they are indeed e-business or PRM in scope. Visions are documented in the *voice of the user* (exact words are used). If there are many visions identified, grouping common visions according to like affinities will help the participants combine visions and cancel out duplicates.

Once the qualitative list of visions is agreed upon, they can be prioritized, typically by voting or assigning values (i.e. 1 to 5) of importance. Once the visions are scored, a final exercise is agreement on the cut-off point (if any). Should any visions be dropped or parked due to their low score? SWOT<sup>5</sup> analysis of visions is an optional exercise if participants are struggling with prioritizing each vision. It encourages further definition of the vision and subsequent rating/scoring.

## Defining PRM Program Objectives

Determination of tangible initiatives called *Program Objectives* that will ultimately support the PRM visions follows the visioning activities. Using affinities such as *established*, *modified* and *new* will enable participants to further define and normalize objectives that are listed. The outcome of this and subsequent exercises (below) will ultimately be the raw material for developing a *Business Case/Value Proposition*. Program Objectives should be prioritized as a standalone list using the same scoring techniques during visioning. SWOT analysis of objectives can also be used here to encourage further discussion, if needed.

Once a normalized, prioritized list of PRM objectives is determined, they can be compared against the visions to see how they may support each. One common outcome of this exercise is a reprioritization of visions and/or objectives, the addition (or even deletion) of objectives. If the scope of the PRM Program is relatively large, then a planning horizon should be established. Once this is documented, the objectives can be scored once more and a first draft list determined. Those that the participants deem as not being feasible within the planning horizon can either be parked for later discussion or dropped.

<sup>5</sup> SWOT – an acronym for Strengths, Weaknesses, Opportunities and Threats. SWOT is a commonly used brainstorming/facilitation tool.

Other activities that can be performed while planning program objectives are:

- **Brainstorming/Confirming and Classifying Business Issues** – Determination of issues and barriers, both outstanding and recently discovered. Once this list is developed and agreed upon, a list of affinities will be determined (i.e. *Organization, Roles/Responsibilities, Business Process/Workflow, Technology/Enablers*). Each issue can then be grouped or mapped against an affinity.
- **Business Issue/Objective Matrix** – The list of issues (with affinity) is compared to the first draft list of objectives and, using a scoring scheme as before, rated for critical importance. Those issues that score high against high scoring objectives are to be considered critical and will demand resolution.
- **Roadblock to Resolution/Resolution Action Plan** – There are two types of roadblocks that may be identified during client team workshops: (1) roadblocks to completing an objective and (2) roadblocks to resolving a business issue. In each case, a brief action plan should be identified and assigned to one or more of the core team participants.
- **Use of the “Parking Lot”** – Throughout the workshops, items under discussion may be “parked” at the suggestion of the facilitator or one of the participants. Items are sent to the Parking Lot for several reasons:
  - There are business issues or roadblocks that are unresolved that impact the topic under discussion.
  - Not enough information is known about the topic and an action plan must be developed or an action item assigned to a person or persons in the working group.
  - The topic is a hot debate item and little progress is being made at the time, or, the topic requires more discussion time than is budgeted. It is parked and revisited at a later time.

## Assessing Impacts and Drivers

PRM is not a me-too endeavor for the simple reason that its design, implementation and success are dependent on the system being able to deliver personalized value to each of your preferred customers. (This is the principal reason many CRM point solutions and shrink-wrapped applications fail.) Therefore, if you wish to overcome technological and competitive parity, then you must determine the contributing factors that may influence your intent to implement a PRM system:

- **The Outside Forces** -- Determine what marketing trends or economic forces influence your decision to implement PRM. Document how each factor is an opportunity or threat.
- **The Competitive Landscape** – It may be important to understand how your known competitors might impact PRM strategy. Are these companies implementing CRM? Are you losing market share or customers because of a competitor’s enhanced abilities? Questions you may ask yourself are: “What are my competitors doing in PRM (or not)?” or “How can I differentiate our PRM offering and not look like a *me-too* or *also ran*?” Though competitive analysis can be valuable when assessing PRM readiness, it can also work to your disadvantage by coaxing you to adhere to convenient biases and beliefs about your long-time competitors as well as bolstering your *facades of habit*, something you should aim to remove.
- **The Inside Issues** – Within your enterprise, has organizational change had an adverse impact on sales or service levels? Are your organization’s stakeholders ready for PRM? Are there outside

influences such as trade unions or service level agreements that must be accounted for? Is the workforce sensitive to change, especially if there have been recent reorganizations or staff cutbacks?

- **The Technology Maze** – Though this area will be examined in detail during the planning stage, you should address any technological barriers up front. Have you committed to a computing architecture or software platform that may impact your ability to deploy PRM? Are there infrastructure obstacles in your overseas operations that may make consistency of customer experience difficult? Does your IT strategy and spending plan need to be revised? Though proponents of change frequently dismiss technological barriers as minor obstacles to be shoved aside, it is often technology issues—and not organizational ones—that muddy the water of new initiatives.

## Reviewing Core Competencies

Document what you believe are your present core competencies and analyze how these will help or impede the successful introduction of PRM. Companies often build products and services around core competencies that may not deliver value to its present or desirable customers.

## Surveying Business Processes

In theory, business processes<sup>6</sup> help deliver core competencies and are the manifestation of what a company believes are its best practices. But similarly, business processes are often built along organizational boundaries and responsibilities or they are dedicated to products and services with only rare emphasis on improving customer satisfaction, fulfilling a desirable customer experience or delivering value to the customer. Rarely do business processes have “voice of the customer” written all over them in indelible ink. Documenting key and relevant business processes that exist today help you understand how these business assets (or hindrances) will be impacted by the introduction of PRM. It may mean wholesale revamping of some business processes (and elimination of others) to support the requirements of PRM.

It is important to note the scope of this activity during the assessment phase. You should not expect your survey effort to be on a par with that of a full-scale reengineering effort. Instead, one or more workshops can be held to describe each process, its inputs and outputs, other process dependencies, actors and resources required, cost, measurable results, and, if possible, quantifiable value to the customer.

## Reviewing Existing Architecture: Taking Stock of IT Raw Materials

Because this is time consuming, if you haven’t already done this, it is helpful to begin a survey of the existing IT infrastructure and assess how the current architecture will be impacted by (or will impact) a PRM initiative. While we discussed technological barriers earlier, this effort aims to take inventory of your “IT raw materials” and size them up against your PRM objectives. You must gain an understanding

<sup>6</sup> For the sake of brevity and simplicity, business processes may also include what organizations may refer to as *workflow*.

how the current infrastructure investment will contribute to the execution of your PRM. As we discussed before, relationship planning tries to accomplish what is required by the customer with what is available, both now and in the future-state.

Analyzing the following system & infrastructure assets will set you off on the right foot:

- Any existing documentation of overall system inventory and architectural depictions of the current and, if relevant, the proposed infrastructure. It is important to distinguish what proposed means. Most IT organizations of medium to large companies have a strategic plan, which, until now, probably have not considered PRM as a strategy. A gap analysis between what is planning for IT and the PRM future-state may need to be performed.
- Any existing depictions of the current infrastructure and its relation to the client's overall IT infrastructure.
- Descriptions of hardware configurations and software applications.

Examples of IT raw materials you may wish to document include:

- Customer centric applications;
- Enterprise resource program applications;
- Knowledge centric decision support systems;
- Data warehouse platforms;
- Data marts;
- Collaboration and communication enablers (email, groupware, team productivity tools); and,
- Middleware and other enablers.

## Planning Your PRM Strategy

Once your assessment is complete, you should have an understanding of where and how to begin the PRM planning phase. This section describes a systematic approach to defining your PRM framework by envisioning personalization, capturing the voice of the customer through defining the ideal customer, customer experiences, touch points and customer touch point scenarios, customer value delivery and PRM architecture. It concludes with a discussion of other key aspects of planning, such as relationship planning, scoring of business processes, and finally, measuring success. Once complete, a business case and value proposition can be produced.

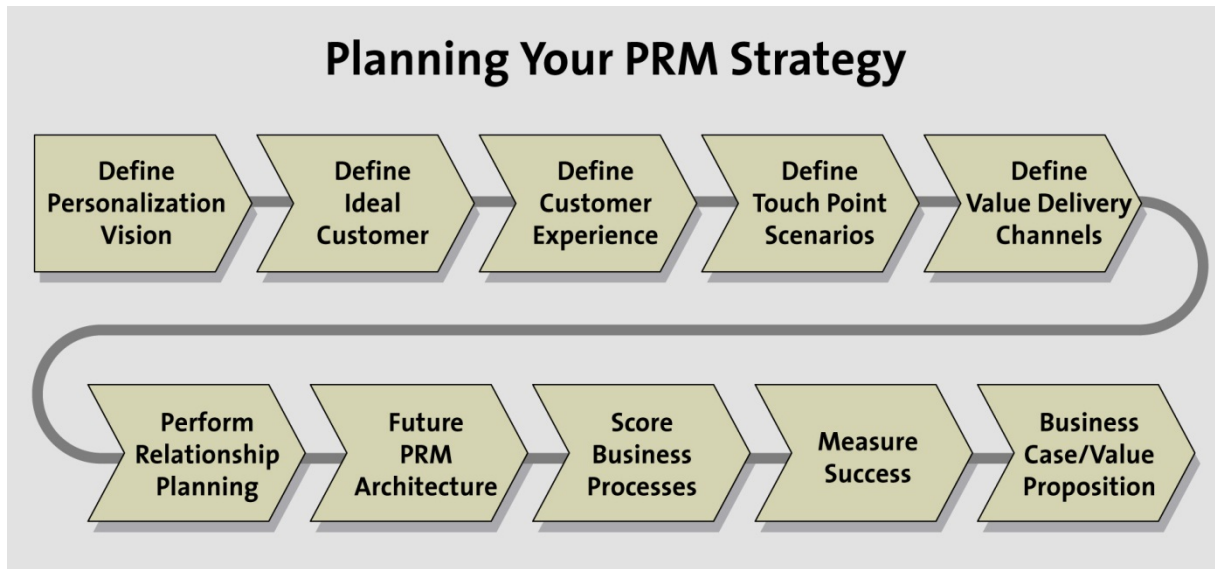


Figure 3: Typical steps in planning PRM strategy.

### Defining Your Personalization Vision

It is critical that your vision of personalization be captured and defined, especially if there may be confusion over what personalization means in the realm of customer relationship management (CRM). Personalization to an account executive may be completely different than that defined by the logistics manager. Personalization for your most valuable customers—those purchasing more goods and services, let’s say—may be more sophisticated or responsive than the casual customer who orders from you once per quarter. There may be numerous definitions of personalization and it is acceptable to have several, though it is probably unwieldy to have a dozen. Using a workshop approach, the goal here is to capture in the “voice of the user” (your organization, not your customer) what indeed personalization is. Be careful to not confuse personalization with customer experience. *Personalization* is a qualitative description of a customer interaction, or dialogue; *customer experience* is a detailed, often quantified, description of how a customer interaction should be executed and what the customer’s experience should be.

This exercise encourages participants to provide qualitative wants for the PRM program by defining just what is meant by customer personalization. As before, visions are documented in the voice of the user (exact words are used). Personalization visions can be prioritized and categorized using the same techniques described in the PRM visioning exercises above.

Though is not likely possible at this stage in planning, it will be important to measure personalization with perceived customer value through the use of customer focus groups. This will be performed later in the planning stage but may be discussed during the workshop.

### Defining Customer “Experience”: Hearing the Voice of the Customer

Though it is the primary focus of this paper, it bears repeating: if there ever were a singular critical success factor that could make or break a PRM effort, it would be the ability to “hear” the voice of the



customer loud and clear throughout the PRM program planning and implementation process—and beyond! How do you hear the voice of the customer? The customer's voice rings from every nook and cranny of the company enterprise, such as:

- Customer surveys;
- Customer correspondence;
- Trade shows;
- Warranty claims;
- Repair requests;
- Support questions;
- Call center feedback;
- Payments made;
- Focus groups;
- Market research;
- Personal feedback from meetings and other contacts;
- Customer referrals;
- What a customer buys (products and services);
- How much a customer spends (monetary value);
- Customer loyalty or churn; and,
- Negotiated contracts, terms and conditions.

There are also seemingly obscure sources of the voice of the customer, especially in the age of e-business in general, such as:

- How, when and where a customer uses an information portal;
- The *clickstream*<sup>7</sup> patterns and activity of each portal session;
- How a customer navigates through established interfaces such as IVRs;
- How closely coupled a customer's business processes are with yours;
- The buying patterns of a customer (i.e. serial, seasonal, other comparisons), derived from data marts, data warehouses and business intelligence tools;
- What emotional investment a customer makes in your company;
- What financial investments (i.e. stockholder) a customer makes;
- The customer's relationships with your competitors; and,
- What a customer's life path is and how he/she uses your products/services to fulfill that path.

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<sup>7</sup> *Clickstream* is the point-and-click activity of a user during a session within an application, web site or portal.

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To accurately define a customer's experience, or "PRM Experience," a company must be able to capture all occurrences of the voice of the customer and be able to understand each occurrence and its relative value to delivering an effective PRM program.

## Defining the Ideal Customer

One goal in choosing to implement PRM is that you should identify your ideal customers and seek to deepen your relationship with these most valuable players over the lifetime of the relationship. The ideal customer differs from company to company, but a few qualities might be:

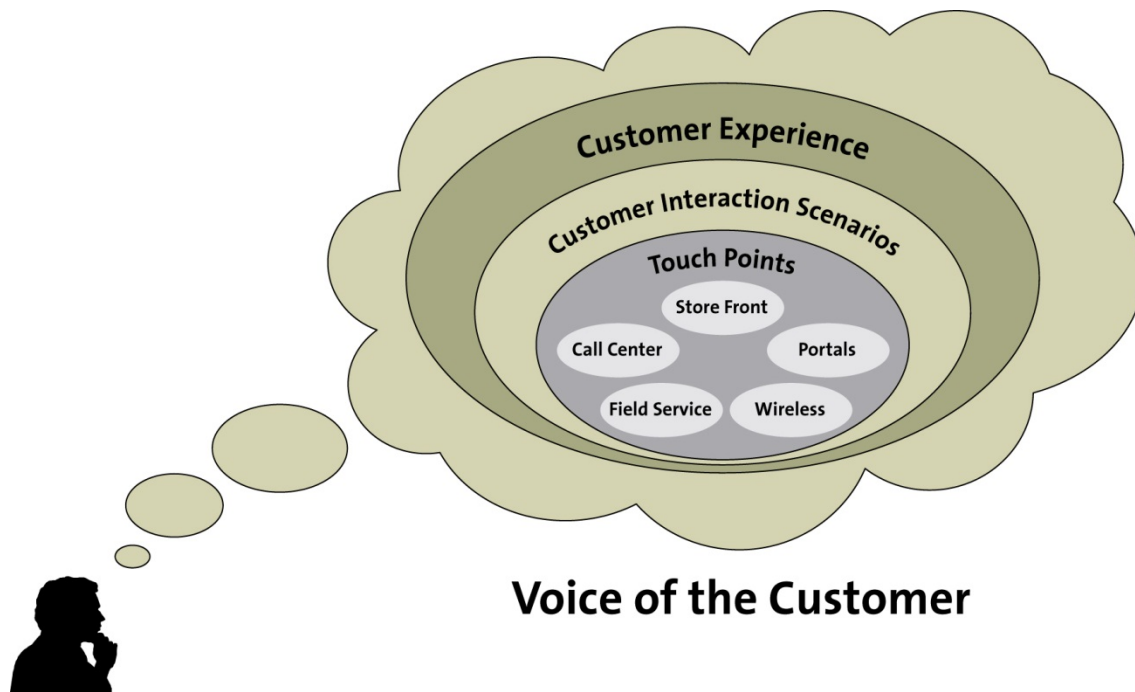
- Customer has demonstrated loyalty through ongoing purchases;
- Customer buys products and services that are more profitable;
- Customer responds to cross-selling and upselling offers;
- Customer, over time, requires diminishing pre-sales, or cost of sales, investment;
- Customer is a vocal "partner" in improving products and services;
- Customer is a good payer and credit risk;
- Customer is highly satisfied (however that is measured); and,
- Customer has strategic value (i.e. approved as purchasing authority for a foreign government).

Whatever the measurement, it is critical for you to determine who your ideal customers are, for it is these groups of VIPs that will help you design the framework of the PRM program. There are also other realities that will soon become apparent:

- Financial and time constraints will force you to pick your most valuable customers to implement PRM.
- Depending on the relative diversity of your customer base, you will have to phase your relationship planning and implementation. Prioritizing your ideal customers will help you decide whom to tackle first.

## Documenting the Desired Customer Experiences

This is a most difficult but critical step because it is the driver for determining the requirements of the PRM program and system that will be implemented. At this stage of planning you must have knowledge of what is desired by personalization, what the ideal customer constituency will be, and, most important, how the customer will manifest the PRM vision, i.e. the tangible benefits of the PRM system.



*Figure 4: The customer's experience is delivered through touch points, channels that must hear the voice of the customer.*

Because this effort may be difficult, it should be executed through the use of workshops with the core group and representative users. The team's challenge is to describe in as much detail as possible just what a desired experience is. It is not necessary to detail the actual interaction of the customer with the PRM system (this is defined in a later exercise, Customer Touch Point Interaction Scenarios). Rather, it is desirable to describe in narrative form what a customer should experience when making contact—any contact that fits the PRM scope—with your company. Examples:

*"I wish my customers to be presented with accessory products when they are evaluating a given product."*

*"I wish my customer to be offered the right level of warranty coverage based on past purchasing behavior and warranty claims."*

*"I want my customer to experience a delay of no more than one business day for a written quote after submitting a request, and I wish the quote to be highly tailored to his preferences."*

*"I want my customer to have a completely integrated service experience, whether contacting our call center or accessing our enterprise information portal."*

Once customer experiences are described they can be prioritized and assigned relative values to one another with the same brainstorming and affinity diagramming process used in the visioning workshops.

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## Identifying Customer Touch Points

Touch Points are your tangible assets that the customer can access for service, *service* here being used in the broadest sense. These include but are not limited to:

- Store fronts;
- Call centers;
- Field service calls;
- Static web pages;
- Mail-in order forms;
- Internet portals (enterprise information portals, application portals, information management portals);
- Kiosks;
- Store within a store;
- Imbedded application portals (troubleshooters, problem reporting, etc.);
- Captive Interactive applications (in hotels, airplanes and other outlets);
- Point of Sale locations;
- Personal communication devices (cell phones, pagers, etc.);
- Personal digital assistants (PDAs); and,
- Interactive Voice Recognition systems (IVRs) and Computer Telephony Interfaces (CTIs).

It is important to define and categorize the present and future-state touch points (derived from visioning) so they can be analyzed and prioritized to see if they can deliver value to the customer and help fulfill the desired customer experiences. Use of a *Touch Point Value Scorecard* can help summarize this effort.

## Blueprinting the Customer Touch Point Interaction Scenarios

How touch points are used in the desired PRM system (supporting the PRM visions, PRM program objectives and desired customer experiences) must be defined as interaction scenarios—actual customer experiences documented in detail using bi-directional event triggers. This is a difficult exercise because it demands that each customer experience be analyzed in detail. Relationship planning will later confirm if touch point scenarios can be realized. Moreover, this is an iterative process and this exercise may be repeated several times as more is learned about customer experiences, customer content, knowledge fulfillment and value delivery (described later).

As each touch point interaction scenario is documented, careful attention should be paid to what customer content (input, selections, queries, searches, field values—even omissions) is presented and captured. This transient knowledge contributes to delivering value to the customer and also supports two PRM best practices: zero leakage and zero learning.

It is helpful at this stage of planning to identify what contact information (past and present) can be collected or leveraged during each interaction with a touch point based on the desired customer experience. This may include:

- Past Contacts:
  - call center contacts
  - warranty claims
  - trouble tickets
  - purchases
  - product inquiries
  - demonstrations
  - trial offer requests
  - marketing promotions answered
  - unstructured data, such as written correspondence
- Present contact (during this touch point interaction)

The contact data that helps achieve the desired outcome, if known at this time, should be documented here.

To deliver value to the customer and fulfill his desired customer experience through one or more touch points may require the collaboration of members of your value chain: those strategic partners, trading partners, third-party fulfillment houses or other members that possess an asset or resource critical to fulfilling a customer touch point scenario. The following example illustrates why this may be important:

*A customer may use a portal touch point to submit a service request that a contracted third-party service firm will ultimately answer and fulfill. At the same time, preliminary inventory checks may also be warranted to see if likely replacement parts are in stock or must be ordered (high ticket items may be not be stocked at the service center). Because this customer is a “platinum member” he is entitled to a one-day service response and immediate notification (while in session at the portal) of what time of day to expect the service technician to call. Fulfilling this customer experience may necessitate making a real-time schedule request to the third-party service firm as well as an inventory inquiry to a key supplier.*

If partners are required to fulfill the customer’s experience, they should be identified and the interaction (per the scenarios) should be analyzed and documented.

## Defining Value Delivery

Once the touch point scenarios are completed, you have a blueprint for how the customer facing of your PRM program might look to the customer. But there is still a chasm between what the customer sees during his interaction with the touch point and from where the actual results of meaningful value are sourced. This is called *Value Delivery*, which was alluded to in the discussion regarding Relationship

Planning earlier.<sup>8</sup> In PRM, Value Delivery is defined as: *deriving and delivering the knowledge assets required to satisfy the customer touch point scenario and customer experience*. Sources of Value Delivery are:

- **Knowledge Artifacts** – Assets of data, either flat entities or derived (computed) entities existing in data warehouse or business applications that may be required to complete a each touch point scenario.
- **Knowledge Mining and Marting** – The process of executing predefined data mining cases and the definition of data mart scenarios that support the delivery of results to each customer touch point scenario.<sup>9</sup> The customer experience and the Customer Touch Point Interaction Scenario blueprints drive the design of your data mining and data mart applications.
- **Decision Support Systems and Business Intelligence Tools** – The applications that help you analyze operational data from the back end functions of your business.
- **Enterprise Applications** – Enterprise Resource Planning platforms and other operational systems are rich stores of tactical knowledge assets, such as inventory, costing, scheduling, logistics, shipping and resource allocation.

Figure 5 illustrates the critical role value delivery plays in producing the desired customer experience. This section surveys these sources and discusses several factors that may influence your Value Delivery plans.

### ***“About the Business” Knowledge Artifacts and Decision Support Systems***

All artifacts that contain knowledge about the general business—source or derived information that is useful to employees, suppliers and applications—should be cataloged for one reason: if it contributes to the fulfillment of a desired customer experience, then it needs to be analyzed and included in the design of the PRM system. “About the business” knowledge may include:

- Product sales
- Response to marketing campaigns
- Market penetration
- Churn rates
- Warranty costs
- Sales cycle times
- Cross-selling success rates
- Upselling success rates
- Costs
- Quality measurements

<sup>8</sup> A discussion of the types of enablers for Relationship Planning is discussed in the Executive Overview.

<sup>9</sup> Data warehouse, data mart and data mining technologies play a key role in delivering value from your knowledge artifacts. However, specific technical details are not discussed here. Database administrators and data modeling experts should be included on your core team (if only in the latter stages of planning) to assist with building and refining the knowledge artifacts required to satisfy customer touch point scenarios.

- Product complaints
- Nature of calls
- Nature of service

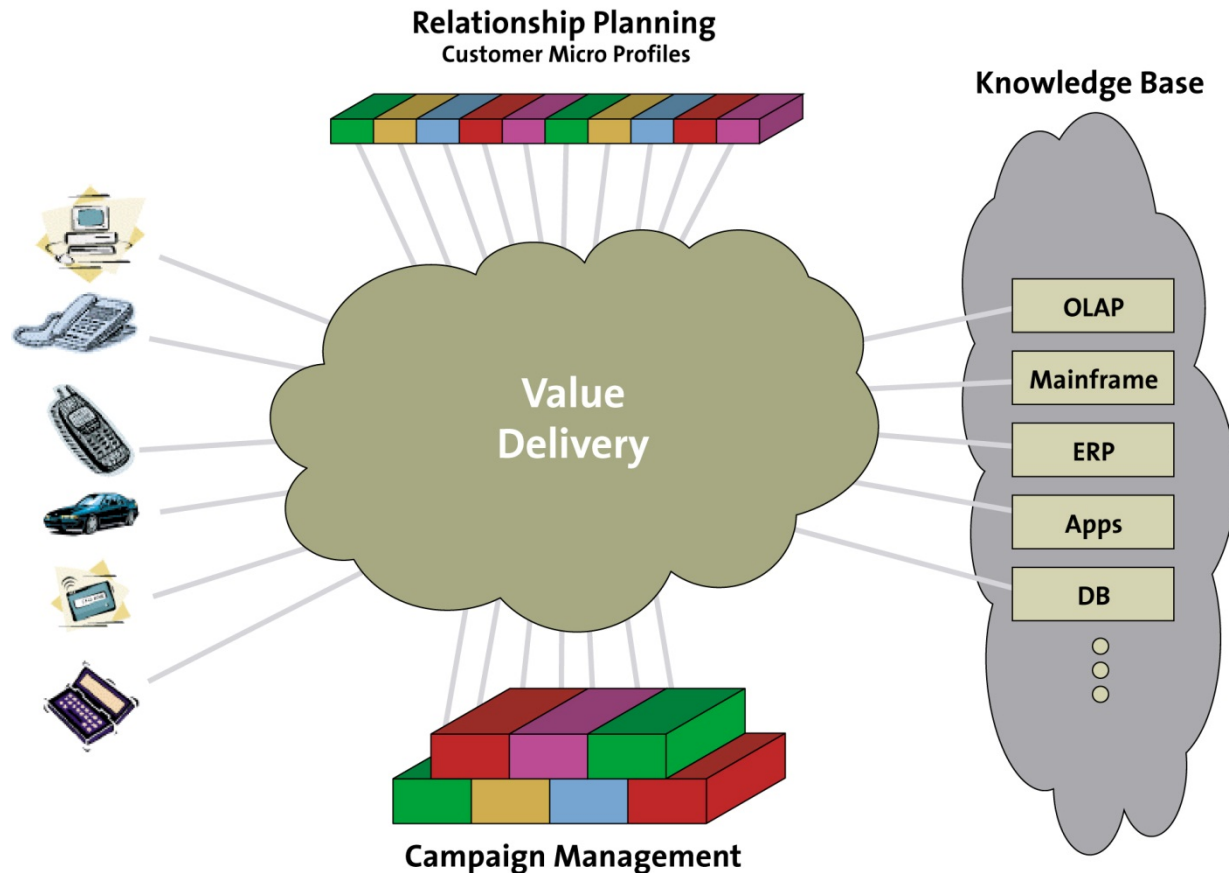


Figure 5: Value Delivery draws from touch point scenarios, customer profiles, the enterprise knowledge base and campaign management to deliver an integrated experience for the customer.

Once the desired About the Business Artifacts are known, the tools (e.g. decision support systems and applications) that contain, analyze or help deliver the information must be documented with the treatment that is required to deliver the information to each customer experience/touch point scenario. These can be documented in what may be defined as the *Knowledge Artifact Registry and Use Specification*.

### ***“About the Customer” Knowledge Artifacts and Decision Support Systems***

As with “About the Business” knowledge, the same equally applies to leveraging knowledge “about the customer,” acquired historical artifacts about customer specific behavior that may be archived in data warehouses or data marts. Types of “About the Customer” knowledge may be:

- Product categories purchased;

- Average connect time on web site;
- Usage (i.e. in telecommunications: calls made, number of minutes);
- Navigation and clickstream history;
- Drop-in rates of shopping carts (for business-to-customer applications), as well as commitment rates;
- Membership in marketing partner programs;
- Average sale amount;
- Touch points used;
- Credit and payment scoring;
- Sales cycle time;
- Length of service;
- Purchaser of value-added services/add-ons;
- Family buying (i.e. multiple customers at same address); and,
- Discount hunter/holiday shopper.

As with the “About the Business” knowledge, once the desired customer artifacts are known, the tools (i.e. decision support systems and applications) that contain, analyze or help deliver the information must be documented with the treatment that is required to deliver the information to each customer experience/touch point scenario. These can also be documented in the *Knowledge Artifact Registry and Use Specification*.

## Relationship Planning Revisited

As explained earlier, Relationship Planning supports the analytical elements of PRM. It is the only way to determine what system building blocks and solution framework will help you deliver PRM through your touch points. At this juncture in planning, your customer profiles should be analyzed once more to validate that each customer profile supports one of more customer experiences and that the Value Delivery capabilities support each touch point interaction scenario.

## Defining PRM Architecture

It may be highly likely that much of the IT infrastructure is already in place to implement a simple Personalized Relationship Management system, especially if you have already launched an internet touch point and have a call center. However, as you continue to evolve your understanding of PRM and work to deepen your relationships with valued customers, your IT investment will must keep pace. As was mentioned earlier, doing PRM right requires back office business intelligence, knowledge management and data warehouse integration—and the sophisticated technology to extend and enhance the customer experience. As your touch points expand and mature, so too will your IT infrastructure. This may necessitate increased expenditures in hardware (servers, network bandwidth),



software (groupware, middleware, applications, productivity tools), and headcount (help desk, internal IT support, subject matter experts for each touch point).

### ***Required Solution Sets and Future-State Technology Blueprint***

Once you complete the business planning phase of PRM (voice of the customer, customer experience, touch point scenarios, value delivery), your core team is well positioned to define what the solution set framework will be and the technology blueprint of your future-state PRM program. The required tools and service layers (i.e. middleware) should be known at this time.

### ***Required Portals***

Until now, portals have not been discussed because they are manifestations (i.e. end products) of fulfilling a desired customer experience. Also, there should be a clear distinction: a customer touch point (e.g. a call center) does not have to be a portal; a portal (e.g. employee credit information management portal) is not always a customer touch point. However, once the Touch Point Interaction Scenario blueprints are completed and your Relationship Planning model is drafted, the decision of implementing one or more portals (or enhancing existing ones) should be evident.

### **Scoring Business Processes**

Although business processes were surveyed in the assessment phase, little was known how each process would be impacted by the planning phase. As business process re-engineering is thought to be a reiterative process, so is PRM planning. Business processes (and best practices, if applicable) must be reevaluated at this point for one primary reason: You have defined your desired customer experiences through detailed touch point interaction scenarios, relationship planning models, and value delivery and are now in a position to understand how your existing business processes and best practices assist or impede delivering the customer experience. These are the raw materials for constructing a future-state business process blueprint.

But first, the business processes surveyed in the assessment phase should be scored against how valuable they are in the present state to helping fulfill each customer experience (represented by one or more touch point interaction scenarios). As with scoring exercises in the assessment phase, assigning values of importance (e.g.1 to 5) and affinity mapping are recommended. Once a scorecard is produced, this provides a foundation for determining the future-state business process blueprint and a set of action plans to re-design each process to meet the needs of the PRM program.

### **Measuring Success**

Launching an ambitious PRM program will have a considerable impact on your company's financial and manpower resources. It is unlikely that you will be able to implement enterprise-wide solutions over multiple touch points all at once. You may also discover that business processes, organizations, marketing activities, product support and logistics may all need tune-ups to support PRM. It can be a lot of work all at once.

It usually goes without saying, especially with large IT initiatives, that the best solution is to take smaller steps by planning and implementing PRM in stages. You can accomplish this in a variety of ways:

- **Prioritize Your Visions** – In the PRM visioning process you may have identified several or more visions for the future state of managing the relationships of your customers. Prioritize this list or pare it down so you are only focusing on one or two visions at a time.
- **Prioritize Your Customers** – In planning for PRM, you will determine who your ideal customers are either by naming them or by constructing a detailed customer profile (via Relationship Planning). Choose a small contingent of desirable customers and act on these first.
- **Prioritize Your Touch Points** – Once your touch points are identified for the future-state, prioritize these and select the ones that promise a quicker win in implementation. You can always go back and launch the other touch points later. This is especially helpful since one key technical challenge is integration of touch points and consistency of the customer experience.
- **Choose the Easy Ones** – Look for quick success opportunities without compromising your overall plan or clarity of purpose. Often it is extremely valuable and adds to company (and core team) morale if you can take a small project, perhaps a pilot, and see it to success.

Phasing your planning and implementation of PRM will offer a greater chance of success and will afford you a greater chance of continually evaluating your progress, documenting successes and failures along the way and seeking ways to optimize the program.

Measuring the success of the actual customer experience or touch points is not discussed here. These would be addressed in the business case and project plan.

### ***Building the Business Case/Value Proposition***

Despite the myriad planning activities that help you produce the components for implementing PRM, and though your strategy is formulated, there is no vehicle to put it into action. Hence, business cases and projects should be identified that will give your PRM implementation efforts structure and discipline. The role of the business case is to make a plausible *case-for-action*, one that identifies the opportunity and proposes the value of the opportunity to the enterprise. The business case should include transition strategy, budgetary investment requirements, expected benefits, return estimates, and resources required. More detailed business cases may address individual projects/initiatives, timelines, and task estimates.

Project alignment should fall along the same lines discussed above in Measuring Success: choose your visions, customers and touch points as boundaries for your project scope.

### **About the Author**

Dan Drislane is the founder of Frontier Strategies, Inc. in Livingston, Montana, an IT consulting firm begun in 1991 in Michigan. He has over 20 years of experience in business analysis, business process analysis and project management. Dan's work with clients focuses on two goals: transforming the IT organization's culture so it will be more agile and accountable to business; and integrating an organization's vision and supporting business processes with its enterprise business and system architecture.