

From Customer Relationship Management (CRM) to Supplier Relationship Management (SRM)

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Abstract

In today's extremely competitive environment, companies are investigating new means of increasing profit by implementing so called Customer Relationship Management Systems (CRMs). But the needs to continually cut costs and focus on core competencies has led companies to focus on how to improve the supply chain and leverage their supply base. Many have shift from a vertical integration model to outsourcing some or all of their production [13] to gain the necessary competitive edge, but this inevitably creates new needs as coordination costs increases dramatically. In addition, the recent craze on e-catalogues, auctioning and e-rfp has heavily contributed to question the need for long-term buyer/seller relationship.

The goal of this paper is therefore to investigate solutions companies could put in place to leverage their suppliers using, what is now called: Supplier Relationship Management Systems (SRMs). This will be achieved by illustrating the key functionalities such systems should offer. To avoid reinventing the wheel, we have based our work on the one performed in the CRM field starting from the assumption that both areas are investigating the same problem but in an opposite manner.

As SRM is only an emerging concept with limited implementations and nearly no theoretical nor practical experience, this paper is not willing to demonstrate or prove anything, it is more a visionary essay of what could be a SRM system and how it could combine with a CRM to create key synergies..

1. INTRODUCTION

In today's highly competitive environment finding competitive edge is a critical success factor not only to expand its business, but also to survive. Some companies tend to work on price, other on quality or service, but in the end they are all pursuing the same goal; increasing profit by acquiring, converting and retaining their most valuable asset: customers.

To help them achieve their objective, IT solutions called – Customer Relationship Management (CRM) – are currently spreading around the world. As we will see later on, they can be classified in different categories, but their goal is mainly to increase customer satisfaction with a better support and more targeted products and to reduce costs by linking marketing, sales, R&D and customer support services

To go a step further in the creation of added values, some companies are also taking in account their customer's customer expectations and try to offer services which can help them increase their end service or product delivery (Figure 1). Federal Express by allowing you to track the goods they are shipping is a good example. As a final customer, you can track your goods from your supplier's web site or directly from FedEx, but in both cases, you benefit from a service that your supplier hasn't developed. As confirmed by the Gartner Group [4], enterprises that depend on demand network partners for a substantial portion of their revenue have begun to recognize that proactive engagement and collaboration with partners is essential to enhance overall demand network capabilities, as well as end-customer value.

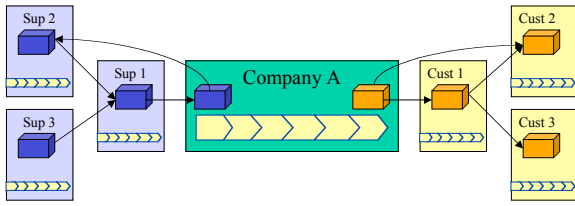


Figure 1: the company and its suppliers and customers

But satisfying customers is not the only factor to ensure a prosper and competitive company. As the Aberdeen Group recalls it [1], procurement represents the single largest expense at most organization. It is also the only place in a company where you have a 100% relationship between cost reduction and benefit increase: 1 US\$ spare in procurement represents 1 US\$ benefit. Developing relationship with the best suppliers is therefore a must that helps ensuring timely delivery, product quality and best prices.

To help reduce procurement costs different mechanisms can be put in place such as catalogs, auctioning and request for proposals. But as for the CRM, if the systems are not interconnected you will not be able to achieve the reduction costs you expects as not enough suppliers will respond, catalogs will not be completed of auctions will be systematically to high.

As a solution, you can either count on your suppliers CRM or take your fate in hand and develop what we call a Suppliers Relationship Management (SRM) system. As for the CRM, this will focus on enhancing the relationship by collecting data and providing new services (such as RFP/RFI management [2]) to the supplier or the supplier’s supplier.

Some will argue that developing the relationship with suppliers was one of the first concerns of IT with initiatives such as EDI or more recently e-procurements. These solutions have helped exchanging data, such as contract, order, delivery coupons between customers and suppliers, but they haven’t tackle the problem of managing the relationship with the suppliers, meaning understanding their needs, behavior or measuring their performance.

In this paper we will develop the functionalities of a Supplier Relationship Management solution based on a comparative analysis with existing CRM concepts. We start with a short definition of the CRM to have a better understanding of its goals and opportunities. We then introduce the concept of SRM. Based on these two definitions, we continue with the mapping of CRM to SRM functionalities to clearly illustrate what type of services could be available to users for what purpose. Before concluding we will briefly enumerate

what could help or in the contrary inhibit the implementation of a SRM initiative in a company.

2. Customer Relationship Management

CRM is not a product, not even a suite of products, but a business philosophy that touches upon many independent parts of the organization [3]. To speed customer acquisition, increase customer satisfaction and retention, and the company profit, it is necessary to develop a customer centric business model linking back and front office around the three pillars that are *Sales*, *Marketing* and *Services*. To be usable, a CRM solution needs to be technically integrated and therefore requires consistent shared customer repository to exchange data between all three areas and analytic capabilities to optimize customer value. CRM has mainly three goals:

1. Achieve higher revenues per customer by knowing and serving your customers better.
2. Increase customer satisfaction and retention by integrating information from multiple channels stored in disparate systems.
3. Lower costs to acquire and service customers by using technology to automate, manage, and analyze processes and data.

Some, as Peppers and Rogers, sees CRM as the same as one-to-one marketing as both “establish relationship with customers on an individual basis, and then use the information you gather to treat different customers differently” [20]. But as Lee [21] reminds it, “one to one marketing focuses on the definition of customer relationship while CRM focuses on the management of the customer relationship”.

Our believe is that CRM is larger than only the management of the relationship between the company and its customers. It encompasses the entire live-cycle (see Figure 2) from this relationship starting with the acquisition and selection of new customers, going through the sales process to end up with the customer support and filtering.

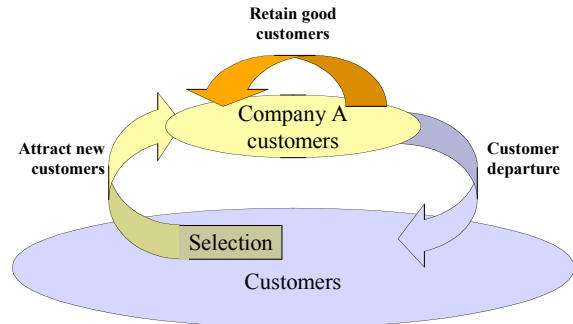


Figure 2: Company-Customer relationship lifecycle

3. Supplier Relationship Management

The Gartner Group gives the following definition of a SRM: “the practices needed to establish the business rules, and the understanding needed for interacting with suppliers of products and services of varied criticality to the profitability of the enterprise” [14]. Other summarizes SRM as the next generation of e-procurement [19] [17] or more specifically an integrated solution “that bridges product development, sourcing, supply planning, and procurement across the value chain” [18].

In our approach, identifying the internal components that needs to be linked is not our priority. We want to focus on services that have to be offered to the suppliers and the company employees. We will therefore use the same three pillars, adapted to a procurement perspective: *marketing, suppliers services* and *purchase*. In this case, marketing has to be understood as the mean to attract, filter suppliers, and promote the company needs.

As for the CRM, SRM needs to support the company-supplier relationship during its entire lifecycle, meaning:

- Attract new suppliers: in a knowledge economy where goods can be produced anywhere around the world, finding the “best” supplier is becoming a complex task;
- Acquire new suppliers by doing business with them;
- Suppliers retention and development: retaining the best suppliers is the best warranty to maintain a competitive edge;
- End of relationship by rejection or termination of contract: ending a contract with “bad” suppliers is a necessary safeguard for the company and understanding why “good” suppliers are leaving is valuable information.

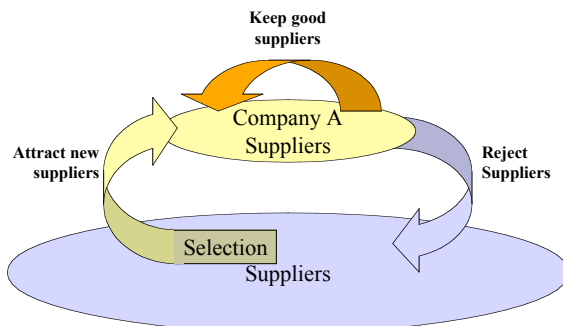


Figure 3: Supplier-Company relationship lifecycle

By opposition to CRM, SRM’s goal is to help the company to be a better purchaser by supporting and developing its understanding of suppliers. Some services can help the supplier directly or support its relationship with its own suppliers as shown in Figure

1. A SRM will therefore help the company gain the following competitive advantages:

1. Increase satisfaction of goods and services purchased and speed up product development by promoting a shared knowledge of suppliers and alternative technologies.
2. Increase supplier’s satisfaction to attract and retain the most competitive ones.
3. Lower prices for purchase and maintenance of goods and services by improving business processes across the supply chain.

As for CRM, technical integration is a key requirement. In fact, many software companies [17][18] suggest integrating the supplier’s CRM and the buyer’s SRM. This will certainly help to develop the relationship and speed information exchange, but before achieving such level of inter-activity, prior actions need to be taken. You first need to find the proper supplier, perform some check or investigation, discuss the product specifications... Therefore, a SRM solution, at its first stage, doesn’t need integration with the outside. To develop the “supplier equity” of the company, it needs to collect all internal sources – sales, marketing, product development, production and procurement...- before going external. This becomes especially true in a very competitive market where suppliers are often changed and information is difficult to keep updated.

4. From CRM to SRM

CRM solutions are popping like mushrooms after the rain and it is rather difficult to keep track of all products. But it is important for the definition of the SRM that we can identify the key functionalities of these solutions so that we can understand what they are addressing and trying to solve. This approach is motivated by the strong believe that SRM and CRM are addressing the same issues but from an opposite perspective, i.e. buyer vs. seller. In this section, we will therefore present a classification of CRM solutions [5][6][7][8] and their SRM counterpart following the three pillar presented earlier – marketing, sales, service. To avoid repeating some concepts such as workflow, knowledge management we have added a fourth category called technical enablers. It encompasses technologies that are not specific to any other categories and which have since long been used or implemented in companies.

If you try to place these four categories along the relationship lifecycle presented in Figure 2 you obtain the following chart.

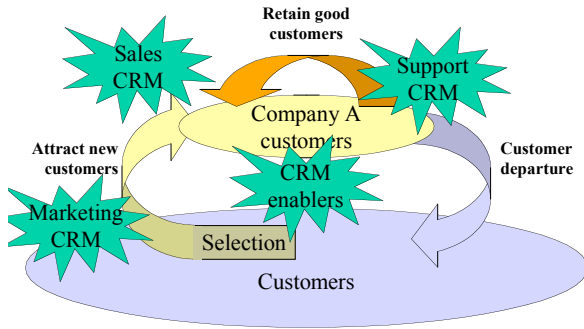


Figure 4: general overview of the CRM and the relationship lifecycle

Marketing and Sales CRM solutions are used to attract new customers and perform new or recurring sales. Support services help maintain the relationship and/or filter out the “bad” customers when technical

enablers provide the necessary services to store, exchange, filter and work with the information collected.

Comparison Chart

Technical enablers

All CRM solutions are relying on specific technologies to provide their services. They contribute and support the overall operation providing generic services to the users. The same tools can be used when dealing with suppliers, we therefore suggest reusing them for the SRM. A company being able to share experiences on parts, services purchased outside will be able to minimize risk when developing new products and selecting suppliers.

CRM	SRM
1. Data warehouse, data mart, analytical tools: they allow access to accurate and timely information through ad hoc queries, reporting and analysis tools based on consistent shared customer repository.	A common supplier repository is the basis of any SRM solution. Once put in place you can use it for reporting, analysis tools...
2. Content management and document management: these tools support the entire document life cycle: creation, modification, approval, publishing, storage.	Documents are not only limited to products and services, but can also cover the infrastructure – building, factory,...- and all goods that can be purchased or need maintenance.
3. Knowledge management: helps users to reuse the mix between information and experience developed by others. Knowledge is seen here as how information is used in real life situations.	The performance of a procurement officer comes mainly from its knowledge of the field he/she is working on. Sharing experience can significantly lower training time and impacts directly on the performance of the procurement.
4. ERP integration: links the existing ERP and legacy system with the CRM functionalities.	Integration is the key element for a proper SRM and CRM system (see Figure 7)
5. Mobile and PDAs: enables mobile workers to synchronize data and information with headquarter.	Mobile procurement officers are normally not extensively mobile, but in some cases PDA and mobile technology could be useful.

Table 1: Technical enablers comparison

Customer service and support

These CRM products are intended to support the company during its post-sale relation with its clients. Their goal is to help provide the best quality and most suited services at the lowest cost.

The SRM is pursuing the same objective, except that it is turned towards the inside (as developed in section 3) to collect and manage the information from all departments. For example, when a problem is identified on a product - worker on a production line,

customer, quality control...- the suppliers repository is updated by the *call management unit* and the incident is tracked. The procurement officer is automatically informed of the problem and contacts the supplier. The product line is adapted and the product design is perhaps modified to solve the problem. In the future, as the corporation has created a collective memory, this incident can have an impact on the adjudication when selecting a supplier.

CRM	SRM
<p>1. Call management: this is certainly the core functionality of customer service and support. It logs incoming telephone calls, transactions and manages transactions from initiation to closure. In addition, they can also help screen calls, dispatch them to someone qualified to handle them. They are mainly used by reservation centers, help desks, information lines, telemarketing, mail order catalog organization...</p>	<p>By opposition to the CRM, in the SRM call management is focused on calls made to the suppliers and not received from. When a call for information or maintenance is made, the system will ensure that the transaction is followed until its completion. It can be used by any company employee and is not only restricted to the purchase officers.</p>
<p>2. Field service and dispatch: once a call is received, some action can or must be taken, for instance exchanging a defect part. Their aim is to manage all aspects of a company distributed operation - service parts inventory and logistics, contract, warranty, preventive maintenance (forecasting), service planning, support scheduling and dispatch - as well as workforce and technicians.</p>	<p>When maintenance has to be made, you need to coordinate it internally with the production, the responsible users and all concerned employees and also access to specific information such as warranty, product specifications...</p>
<p>3. E-Service: last arrived on the market, they are supporting the Internet based relation with the clients. Customers, prospects and business partners access to dedicated information such as product catalog, content, pricing and solutions, but also to online service functions such as order entry and tracking requests</p>	<p>All above mentioned services can be accessed via the web and therefore need the appropriate support.</p>
<p>4. Customer profiling and evaluation: screening and dispatching calls are not the only aim of a call center. It can also help sorting out "good" customers from "bad" ones by measuring the number of request and especially the their type.</p>	<p>Reputation mechanisms can be easily put in place for suppliers [2]. Linked to the call center, you can collect information concerning the quality of products /services and evaluate the Total Cost of Ownership of a product to determine which supplier is the most adequate and which should be changed.</p>

Table 2: Customer service and support functionalities comparison

Sales vs. Purchase

The goal of this family of products is to automate the sales force or at least many of its tasks to improve their efficiency and reduce time and cost of sales.

Solutions to support the purchase of products or services are already common. Electronic catalogues, auctioning and electronic request for proposals (RFP) are only the last evolutions in a series of

improvement since the 70's. The SRM solution is the natural evolution of these as it integrates them with the rest of the procurement activities, especially product design and development. Imagine a system, which could automatically adjudicate purchases for common goods, help prioritize needs and select the adequate purchase method: auction, catalogue, RFP.

CRM	SRM
<p>1. Sales assistant to help manage quotes and generate proposals. Not specially</p>	<p>Purchase assistant to manage bids and assist in the creation of the Request for Proposal and requirement description.</p>
<p>2. Opportunity Management System (OMS): they assist the seller in generating, capturing and managing leads. To do so, it stores sales opportunities and related information, and sales can be tracked with formation such as source, type, status, and likelihood of closure... It can also automate other related tasks such as</p>	<p>Identifying needs is a key activity in a company. Needs can be simple product improvements taking advantage of new technologies or completely new products/services. To do so, you need to be able to track the needs from their identification to the actual purchase:</p>

<ul style="list-style-type: none"> a) Prioritizing sales calls and generating analysis to support marketing strategies. b) Tracking activity as suspects and prospects move through the sales cycle. c) Reporting activity, collaboration, forecasting d) Modeling steps in the selling process and including workflow capabilities to guide sales executives to the next steps needed to close deals and manage revenue-generating sales activities 	<ul style="list-style-type: none"> a) Prioritizing needs b) Tracking moves along the cycle c) Reporting activities d) Workflow management to automate the paper flow
<p>3. Sales configuration system (SCS): to configure products, pricing, promotions, services, financing options and marketing bundles to best suit customers expectations based on the sales, marketing and service feedback.</p>	<p>Purchase configuration system: once the product/service need is identified, you must design it, write down the specifications and description and manage a series of actions such as: securing the financing, defining the best combination of suppliers, estimating the price...</p>
<p>4. Partner relationship management (PRM): to enhance the company ability to work with and leverage demand-network partners to better market, sell and service end customers so that the company can extend itself. It helps in:</p> <ul style="list-style-type: none"> a) Focusing on managing how partners engage each other: this could be collaborative processes such as product design, as well as supplier relationship; b) Keeping track of relationship with resellers, alliance partners, indirect channels; c) Assisting partners with planning, recruiting, training, certification, lead management and channel marketing to improve their efficiency and service. 	<p>Most suppliers depend upon their own suppliers [9]. Understanding their relationships and providing a support can increase your supplier direct performance and therefore reduce your costs. It help in:</p> <ul style="list-style-type: none"> a) Creating and managing consortiums [9] between suppliers to allow smaller companies to group to offer joint products and services; b) Keeping track of relationships with suppliers and suppliers' suppliers to more clearly identify the origin of problems or improvements; c) Idem as for CRM
<p>5. Interactive selling systems: (ISS): allow consumers and businesses to "sell themselves" and conduct transactions without a sales person. There are three different types of ISS: face-to-face, web collaboration and e-commerce</p>	<p>Interactive purchasing systems: by defining standard acceptance criteria and dealing with standardized goods, you can automate the purchase decision using an auctioning process.</p>
<p>6. Incentive and compensation management: manage and administer all commissionable transactions for a sales organization. The goal here is to help paying people fairly for their skill. Different solutions exists:</p> <ul style="list-style-type: none"> a) base pay such as pay structure, pay ranges and how to give raises in conjunction with performance b) incentive pay based on factors such as time quality, quantity, budget 	<p>Traditionally purchase officers are not rewarded on their performance. Tracking their activity could allow developing an incentive system rewarding the best performers. Based on price but also quality and needs suitability on the users feedback.</p>

Table 3: Sales functionalities comparison

Marketing (Marketing automation)

Marketing is at the center of any sales strategy. CRM support to marketing was therefore inevitable. In the contrary, the best warranty for a successful purchase is, for many purchase officers [12], the number of suppliers in competition. By promoting its

needs using marketing techniques (single, multiple-channel campaigns) a company can attract as many suppliers as required. Company directories can also be used, but automated tools to search on the Internet for suppliers are now emerging [10][11].

CRM	SRM
<p>1. Campaign management system: they are used by marketers and sales to design and execute single-channel or multi-channel campaigns and track the effects of those campaigns by customer segment over time. They offer support for planning, executing, tracking and analyzing performance of multichannel campaigns with functionalities such as define groups, planning capabilities to define campaigns using historical performance, anticipate profitability, records selection, campaign tracking and analysis</p> <p>2. Telemarketing: supports all activities involving situations in which companies call</p>	<p>Promoting its needs is a key element to ensure competition among suppliers, as “waiting” for the suppliers to come is not sufficient anymore. Pro-active suppliers selection needs to attract as many good suppliers as possible using any communication channel available: electronic publication, newspaper, newsgroups, marketplaces... It therefore requires tracking what source is used at what cost to target what suppliers. In addition, knowing which source attracted the “best” suppliers can be an unbeatable advantage for a company diversifying its activities.</p> <p>Purchase officers after identifying potential suppliers do normally initiate direct contacts</p>

Summary

As for the CRM in Figure 4, SRM solutions can be placed along the company-supplier relationship lifecycle to obtain the following chart.

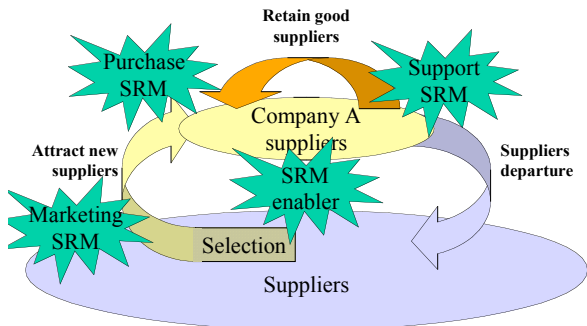


Figure 5: general overview of the CRM and the relationship lifecycle

<p>customers to sell their goods or services / or customers call companies to make purchase in response to mailing or other forms of advertising.</p>	<p>to collect additional information. This can lead to modification of the needs or even product/service reshaping. This system can help keep track of contacts and reuse information collected to share it among the company.</p>
<p>3. Web measurement tools: as e-services are developing, marketing tools have to adapt and covers now Internet</p>	<p>When putting in place a web based purchase system (auction, RFP...) you need to be able to measure activity to identify the gain and determine who is using what from where on the web site.</p>

Table 4: marketing functionalities comparison

All services are working the same way and try to achieve a comparable goal. We must however make a small distinction concerning the support solutions. In a CRM, they are primarily turn towards the outside of the company to respond to customer request. In a SRM, to collect information about your suppliers, you mainly search the information within the organization and not outside. SRM support tools are therefore communicating internally although it can also provide communication channel with the outside to respond to specific suppliers requests concerning warranties, contract negotiation, delivery conditions and any other related question.

5. SRM inablers and inhibitors

Implementing a SRM business philosophy in a company is not a simple matter especially as “enterprises are not in the habit of looking to their internal procurement managers as the key to

supporting customers” [15]. Forces in presence will have more or less effects depending on the presence or not of specific SRM accelerators or inhibitors.

The major inhibitor from implementing a SRM solution comes from the lack of willingness to challenge suppliers. This leads to a situation where procurement officers are favoring a limited set of suppliers without developing bidding practices, minimizing the price impact and putting in question the relationship itself. Introducing a SRM solution in such environment will inevitably create a cultural shock that could cause its rejection or slow its development. In contrary, when developed in a company where supply chain cost cutting, or collaborative commerce or global sourcing... are already at the center, SRM project will be extensively supported.

But even if all accelerators are present and inhibitors are low, a company can fail in developing a proper SRM if it fails to gain top management support and involvement. This is especially true in a world where the “strategy of using the supply base as a competitive weapon has not reached the radar scope of many CEOs” [15].

CONCLUSION

The idea of ‘how to better understand your customer’ is covered in numerous articles. ‘How to better understand your supplier’ is the underlying idea of this paper. The ‘mirrored’ point of view led us to the idea, that existing CRM functionalities may help us to quickly extrapolate the basic functionalities that could be expected from a SRM system. Such a system is meant to support companies to better understand their suppliers by collecting and aggregating information from various sources such as purchase officer, marketing, R&D, service and support, maintenance. This will in return allow identifying the best suppliers and therefore helping the company improving its overall performance.

In our approach, SRM is not about integrating suppliers and buyers information systems but about using internal sources to gather supplier relevant information. SRM is therefore mainly turned toward the company itself and less to the outside. Instead of seeing the buyer’s SRM as the complement to the seller’s CRM, SRM should be seen as a complement to the buyer’s CRM. Synergies between both systems could be created instead of antagonisms.

To demonstrate this, imagine a company B purchasing goods from suppliers (company S) and selling to customers (company C). Picture the information flow related to purchase and sale as a rectangle (see Initial State in Figure 6).

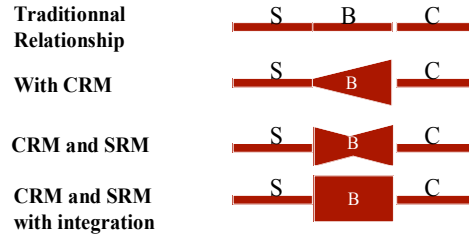


Figure 6: CRM-SRM re-evolution

When introducing a CRM solution in company B, it will gain a much broader understanding of the customer side (company C). But this creates a discrepancy with the purchasing side, which can be compensated by implementing a SRM solution to increase the depth of the relation with the suppliers (company S). To gain maximum profit, both sides (CRM and SRM) must communicate and need to be integrated (as shown in Figure 7).

This integration is motivated by the fact that customer’s and supplier’s data sources are sometimes the same. A ‘customer care’ collects information from customers, but also provides vital data about supplier’s product and service quality that needs to be taken in account. On the other hand, suppliers are also collecting customer information and performing customer satisfaction studies that can be used to complement the CRM. Integration will allow avoiding redundant information and ensuring that the widest range of information sources are covered. Technical aspects are certainly important, but they are not the key success factor. To be successful, SRM and CRM must be integrated in a wider view where the company entire information flow is taken in account (Figure 7).

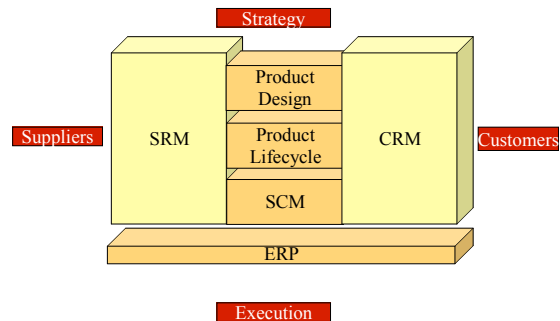


Figure 7: Enterprise Applications as for SupplyWorks and SAP[13][16]

This leads us to the final conclusion that SRM is the inevitable complement to any CRM system and that they both need to be integrated with the major company information systems (ERP, SCM...) to become successful management tools.

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