

# SAP CRM Integration Scenarios - A High Level Approach



## Applies to:

SAP CRM, Microsoft CRM, SAP Business Suite, Netweaver

## Summary

In this document we will evaluate the leading **Customer Relationship Management (CRM)** options from SAP and Microsoft available for customers. Specifically we will evaluate the key differentiators and utilize the **Accelerated SAP (ASAP)** implementation method to go through the proven process for an SAP CRM implementation. Once complete we compare the strategic benefits of an SAP CRM implementation with the potential benefits of a Microsoft CRM Implementation. This will highlight the key differences and will help you in your decision making process.

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A certification for the Aris Toolset by IDS Scheer in Switzerland complete his system independent perspective on processes and modern business engineering. In Europe his work with NIEFERT GmbH has lead to multiple project solutions including quality control systems with SAP integration. These systems are live today with 24x7 operations worldwide. As part of high-availability projects he acquired certifications in Hewlett-Packard Cluster Design. Wolfgang provided training for cluster systems with Oracle Failsafe in Europe and the US. Wolfgang is the managing director of NIEFERT Certified Solutions (NCS, LLC) in San Diego, CA. NCS LLC is an SAP Channel Partner and recognized SSP - Software Solutions Partner for SAP. He designed the N2ONE Portal Solution (<http://blog.N2ONEPortal.com>) that integrates with SAP Systems in Real-Time. The N2ONE Portal solution is a hosted eCommerce platform that that works with SAP Business ONE, SAP Business Suite and SAP ByDesign. NCS LLC is also a Microsoft Certified Gold Partner and publishes the Momentum Reporter and Forecast Manager (SAP Edition). This solution manages SAP data for KPI reporting and web based dashboard publishing.

## Table of Contents

SAP and CRM Integration .....	3
What is CRM?.....	3
CRM popularity .....	4
SAP CRM versions and framework .....	7
In a nutshell - SAP terms.....	7
CRM T-Codes you should know .....	8
General T Codes for the SAP system.....	8
T Codes specific to SAP CRM .....	8
CRM technology evaluation – a toolset .....	9
Investment budget required .....	9
Short term viability / App character / Stand-alone functionality .....	9
Long-term ERP value (Cross departmental value) .....	9
Vendor reliability.....	9
ISO 9001 readiness and business metrics .....	10
Skills required (Internal/External) / Skill availability .....	10
Implementation methodology.....	10
End-User experience .....	10
SAP CRM best practices walk-through .....	11
Evaluation .....	11
Scoping .....	12
Prepare for implementation.....	16
Implement scenarios.....	16
Test scenarios with BPDs .....	17
Case study .....	17
SAP and Microsoft product portfolio .....	17
SAP product portfolio –Virtual Discussion “He Said/She Said” .....	17
Investment budget .....	18
Short term (App character) / Standalone .....	18
Long term strategic ERP value .....	18
Vendor reliability .....	19
ISO certification business metrics .....	19
Skills required .....	19
Methodology .....	19
End-User experience .....	19
The solution – CRM and Web Services orchestrated by NetWeaver and Microsoft .Net assemblies .....	20
Summary.....	22
Related Content.....	23
Copyright.....	24

## SAP and CRM Integration

The Megalith in Newrange is a prehistoric monument in Ireland that was built 3000 BC. It has a 20 meter long pathway that leads to a central room. Only once a year at the morning of the shortest day the sunlight reaches the room and floods it with sunlight for minutes. It's a spectacular event that is broadcasted live over the internet. The remainder of the time the room is dark. What does the Megalith in Newrange have to do with SAP and Microsoft CRM? Today customers demand information in **Real-Time**. You can only serve their needs with accurate and complete information that is served right when it is needed. Therefore just like the aligning of the sun with the winter solstice in Newrange leads to a spectacular event with sunlight reaching the central room, you need to align your CRM to be in tune with the requirements and buying cycles of your target customer groups.

In this document we will evaluate the leading **Customer Relationship Management (CRM)** options from SAP and Microsoft available for customers. Specifically we will evaluate the key differentiators and utilize the **Accelerated SAP (ASAP)** implementation method to go through the proven process for an SAP CRM implementation. Once complete we compare the strategic benefits of an SAP CRM implementation with the potential benefits of a Microsoft CRM Implementation. This will highlight the key differences and will help you in your decision making process.

Prior to the detailed review of the SAP CRM ASAP methodology, we will lay the foundation by taking a closer look at the following:

- CRM popularity
- CRM definition
- CRM software version
- SAP Terms in a Nutshell
- Decision Factors for CRM Evaluations
- SAP CRM ASAP Methodology
- Case-Study Starting Point

## What is CRM?

Traditionally CRM includes **Marketing, Sales, Customer Service** and **Analysis**. The Marketing category includes functionalities such as **Contact Management and Campaign Management**. The Sales category includes **Account Management**, Opportunity and **Pipeline Management**. This section has many connection points with traditional **Enterprise Resource Planning (ERP)** systems. Furthermore the Customer Service category links features such as service and complaints that are related to interactions between the company and the customer. Consequently the CRM functionality is highly cross-departmental ranging from Marketing to Account Management with ERP connection and the Service department. Finally the Analysis of the cross departmental features is a key aspect of CRM.

The cross departmental character is only one key aspect of CRM. In addition, new technologies that help you reach out to the customer are constantly added. For example Newsletter platforms, eCommerce, e-Service, mobile commerce, mobile marketing, Social Network Marketing are adding new opportunities to target customers and allow your organization to learn more by collecting additional data.

Consequently with all the technologies and cross-departmental requirements, a strategic approach is due when evaluating CRM solutions. A proper CRM strategy therefore must define the integration points with your existing legacy ERP and new emerging technologies. Determining the level of integration is key when developing the strategy. The level of integration can range from Real-Time integration for specific CRM processes that work with the backend ERP, to batch pricing for external applications that extend the ERP system. For example new emerging technologies like Social Networking Sites, Mobile Apps and similar can be added to your CRM processes. Those applications may run standalone and exchange data via batch processing.

In order to implement a quality control and quality improvement system that helps your organization monitor and improve your CRM processes, the **ISO 9001** quality standard is often adopted. This will define and document procedures that will collect data and document defined performance indicators. Collecting data

regularly and measuring the results to fine-tune the way you interact with customers as part of the CRM processes is considered to be the main success factor for many companies.

For example, the continuous quality control will measure the performance of your company against the feedback received from customers. The key question that will be answered: Does the customer perceive the value that was received from a service/product measure up with the value your company intended to deliver?

If there is a mismatch, the process must be adjusted and changes are due. In summary, it can be said that CRM has the following characteristics:

- Comprises Marketing, Sales, Service
- Highly Cross Departmental
- Integrates emerging technologies to extend the reach to the customer
- Requires Strategic Direction
- Benefits from ISO 9001 standard integration

## CRM popularity

Oftentimes you find vendor rankings and market share reports for various CRM products on the market. However I would like to add a different perspective and utilize the **Google Search Word Analysis** and **Google Trend** tools. By using these tools we focus on the user needs, identify what users are looking for and how popular their requirements are. The Google Keyword Tool can be found here: <https://adwords.google.com>. The Google Trend Tool can be found at <http://www.google.com/trends>.

On the screenshot below you can see that about 110,000 global searches and 22,000 local searches (Based in San Diego) were initiated by users for "SAP CRM" on Google. If you directly compare with 201,000 global and 49,500 local searches for "Microsoft CRM" you get an impression about the size of the market. You may also note that about 2,400 global and 720 local searches were initiated for "Microsoft CRM Integration".

Keyword	Competition	Global Monthly Searches	Local Monthly Searches
sap crm		110,000	22,200
sap crm training		2,900	880
sap crm certification		1,300	320
sap crm 7.0		6,600	1,300
sap crm jobs		2,900	480
sap crm tutorial		1,000	260
sap crm interview questions		1,300	260
sap crm software		480	140
sap crm books		320	91
what is sap crm		1,000	320
sap crm tables		720	210
sap crm consultant		1,300	260

Keyword	Competition	Global Monthly Searches	Local Monthly Searches
microsoft crm		201,000	49,500
microsoft crm software		2,900	1,000
microsoft crm training		2,900	1,300
microsoft crm pricing		1,000	720
microsoft crm online		3,600	1,300
hosted microsoft crm		1,300	590
microsoft crm hosting		590	390
microsoft crm demo		1,900	480
microsoft crm 3.0		3,600	1,000
microsoft crm dynamics		74,000	14,800
microsoft crm review		720	390
microsoft crm 4.0		22,200	4,400
microsoft crm consulting		390	260
microsoft crm certification		880	320
what is microsoft crm		880	390
microsoft crm integration		2,400	720

With the following screenshot you can also see that **Salesforce** has about 12,000 global and 4,400 local searches, which positions SAP and Microsoft as the two leaders when evaluating based on the Google tools to achieve a user centric perspective.

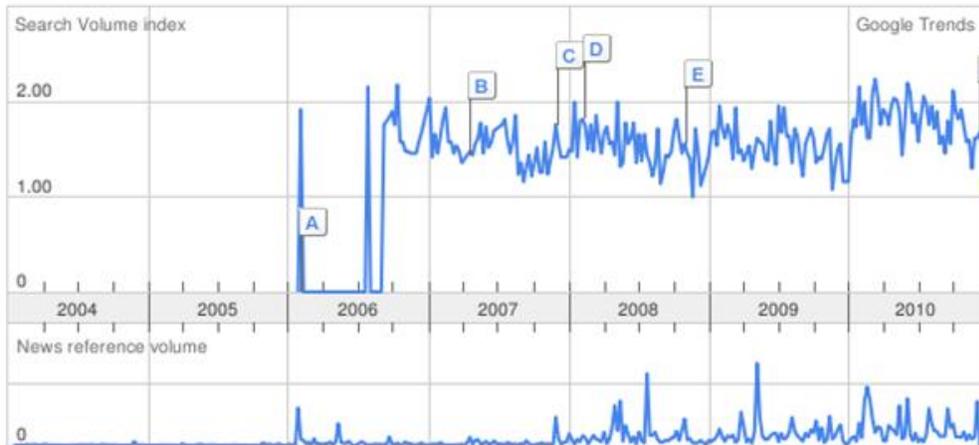
Keyword	Competition	Global Monthly Searches	Local Monthly Searches
salesforce crm		12,100	4,400
salesforce crm software		390	210
salesforce crm review		140	73
what is salesforce crm		170	73
salesforce crm tutorial		73	28
salesforce crm pricing		58	28
salesforce crm training		91	36
salesforce crm integration		73	36

When evaluating the Google Trend tool we can further identify that the market for CRM was largely established and picked up a major user base in 2006. While SAP maintained a large volume, the Microsoft graph shows a steady but slow decline.

Searches [Websites](#)

Scale is based on the average traffic of [sap crm](#) from United States in all years. [Learn more](#)

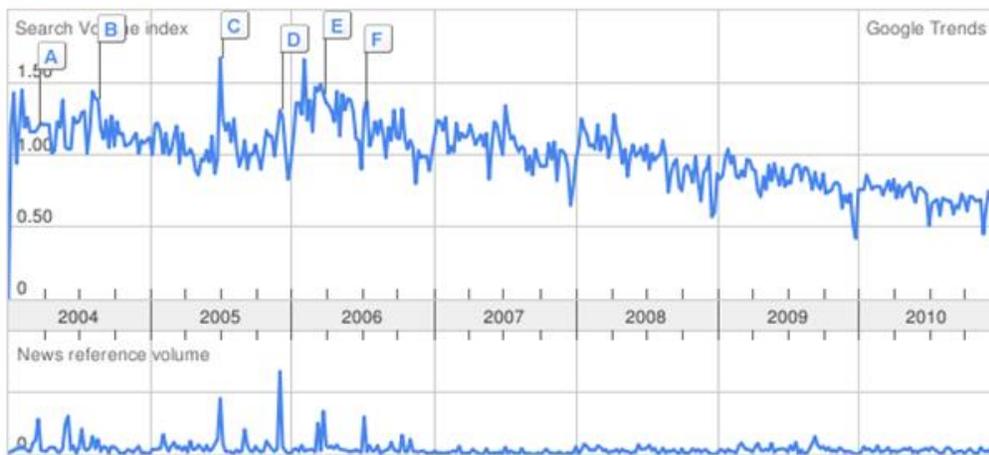
[sap crm](#) 1.00



Rank by [sap crm](#)



[microsoft crm](#) 1.00



Rank by [microsoft crm](#)

In conclusion it can be said that the Google Analysis provides a good source of information to position the popularity of the main CRM contenders from a user perspective.

## SAP CRM versions and framework

As seen in the previous section the main aspects of CRM are not the features, but the strategic direction that your company chooses. Therefore the actual version of CRM and its feature set are not the main issues. Nevertheless I believe it is essential that you are aware of the current versions available from SAP as of now.

- CRM - V1.2007 (previous version)
- CRM - V2.70 (current version)

The SAP CRM solution can be installed as a standalone solution or comes integrated with the main SAP product called **SAP All-In-One**. The SAP All-In-One product comes pre-configured for specific industries. The industry settings are based on the so-called “Industry Best Practices”, which basically documents features that are unique and specific to certain industries.

Historically SAP is known for its ERP integration suite called **SAP R/3**. This solution used to be an enterprise “app”, because many companies had separate applications that would manage their business. SAP R/3 integrated all those departmental features into one set of modules ranging from **Finance (FI)**, **Controlling (CO)**, **Material Management (MM)** to **Sales and Distribution (SD)** and more.

Today those modules are comprised in the product called **ECC (ERP Central Components.)** New market needs such as CRM are covered as separate business applications that can be integrated with the ECC system via the SAP NetWeaver platform. **NetWeaver** is a solution that can connect different systems with their own data using **Connectors**.

While NetWeaver may be one of the lesser known products from SAP it is one of the most important and strategic elements of the whole SAP portfolio as it orchestrates web services from different sources and connects them to create an integrated user experience.

SAP recently also added **SAP Business ONE** and **SAP ByDesign** to their portfolio. The true power of B1 and ByD will be leveraged when used in concert with NetWeaver when connected to a legacy All-In-One platform.

## In a nutshell - SAP terms

The main concept of the SAP product line is based on the idea that leading industries utilize proven processes to do their business. Therefore an integrated system can be used to map those processes into table based data where the update of certain table data triggers events in other tables. This **Event based Table System** can utilize “Parameters” that are set in admin tables to “Drive” the data in the user tables. Please note that I put parameters and drive in double quotes to highlight the fact that the parameters you set in the admin section will determine how the system works from the user perspective. We can therefore say that the parameters drive the system.

In SAP there is an admin section called the **IMG (Implementation Guide)**. This guide lists all the SAP modules and allows the implementation consultant to specify values and parameters that will configure the system for the end-user to use.

There is the “**Reference IMG**” which comes with the system. In order to make changes the consultant has to first create a copy of the reference IMG. This copy is called the “**Enterprise IMG**”. This is identical to the reference IMG. The actual IMG that is relevant for your company will be the “**Project IMG**”, which is a selected sub-set of the enterprise IMG.

The Implementation Guide is very comprehensive because the underlying functionality in SAP is broad. That’s why the usage of this section is usually handled by specialized teams that manage the implementation.

In order to limit the complexity of the SAP implementation and building on the core idea of industry specific processes, the concept of “Best Practices” is used to limit the functionality and also pre-configure processes based on industry “Best Practices”. For example, SAP offers “Best Practices” for industries such as Oil & Gas, Distribution etc. and also “Cross Industry”. The SAP CRM Best Practices are part of the “Cross Industry Best Practices”. We will delve into these best practices later on in the document.

When working with SAP, users and consultants use “Transaction Codes” to quickly access menus and forms. Therefore, instead of navigating to a hard to find form, the user enters the **T-Code**.

An example T Code is TC OSS1. This directly connects your system to the 24x7 SAP Online Support System where you can request support.

**Note:** When using the T Code your menu is jumping to a sub-menu to access the requested T Code menu. When in a sub-menu you may find that the T Code is not recognized, because only relevant T Codes in the sub-menu can be used. In order to use a T Code that would jump to another menu you have to specify a parameter. For example you can enter "TC /N SM30" or "TC /O SM31". The "/N" parameter takes you to the top menu and then opens the requested form. The "/O" parameter opens a new session altogether before opening the form related to the transaction code.

### CRM T-Codes you should know

You may want to organize a set of T-Codes that is specific to your work environment. The T Codes relevant for SAP CRM are therefore organized by department and/or functionality.

#### General T Codes for the SAP system

- OSS1 – SAP Online Service System
- SE61 – R/3 Documentation
- SE64 – Terminology
- SPRO - Configuration related settings
- SA38 – Execute a program

#### T Codes specific to SAP CRM

There is a large number of available T Codes and the selection below is a very small subset. You should consult the T Codes above with links to documentation to gain further insight.

- PPOSA\_CRM                      Display Organizational Model
- CR CRMD\_BUS2000108            Maintain Leads
- CRMD\_BUS2000111            Maintain Opportunities
- CRMD\_BUS2000112            Maintain Service Contracts
- CRMD\_BUS2000113            Process Purchase Contracts
- CRMD\_BUS2000114            Maintain Sales Contracts
- CRMD\_BUS2000115            Maintain Sales Transactions
- CRMD\_BUS2000116            Edit Service Processes
- CRMD\_BUS2000117            Process Service Confirmations
- CRMD\_BUS2000120            Process Complaints
- CRMD\_BUS2000121            Maintain Sales Contracts
- CRMD\_BUS2000126            Maintain Activities
- MD\_BUS2000108                      Maintain Leads
- CRMD\_BUS2000111            Maintain Opportunities
- CRMD\_BUS2000112            Maintain Service Contracts
- CRMD\_BUS2000113            Process Purchase Contracts
- CRMD\_BUS2000114            Maintain Sales Contracts
- CRMD\_BUS2000115            Maintain Sales Transactions
- CRMD\_BUS2000116            Edit Service Processes

- CRMD\_BUS2000117 Process Service Confirmations
- CRMD\_BUS2000120 Process Complaints
- CRMD\_BUS2000121 Maintain Sales Contracts
- CRMD\_BUS2000126 Maintain Activities
- 
- CRMD\_LEAD\_MONITOR Lead Monitor – Organizational View
- CRMD\_ORDER Creating marketing sales and service transactions
- CRMD\_ORDER CRM Transaction (Create/View/Modify)
- CICO Customer Interaction Centre
- CRMD\_CALL\_LIST Create/ Maintain Call list
- COMMPR01 Maintain Products

If you have access to an SAP system you can try these T Codes to discover the system. Start with the T Codes listed on top to learn about the system, and then move downward to review more specific processes. Armed with the right information to explore your SAP system we will now move on to the next section where we will learn about the technologies used to evaluate CRM systems. You can use those tools for your own project and decide how to integrate your CRM system be it SAP CRM or Microsoft CRM.

## CRM technology evaluation – a toolset

At this point you know the elements of a CRM solution and understand it's cross departmental character. You also learned about the current versions for SAP CRM and the other main SAP solution components that integrate with SAP CRM. If you have an actual SAP system available for testing then you may have already tried out the T Codes and found that you can access required functionality directly.

However the purpose of this document is to evaluate CRM and provide you with a toolset that you can use to compare SAP CRM with Microsoft CRM or other related solutions. We will continue now to explain the tools provided by SAP. These tools can be used to evaluate other vendors too.

### Investment budget required

First and foremost the required budget must be evaluated. This is an obvious criterion. When evaluating the cost you must also evaluate the cost savings/cost benefits (eg. increased sales) when implementing a solution. For example, if you implement a stand-alone solution that will deliver results quickly but does not integrate with your business backend, you may only run into high integration and synchronization cost later.

### Short term viability / App character / Stand-alone functionality

When implementing your CRM you expect to see results from day one. This requirement has become an industry standard with the advent of what we call “apps”. A user can download an app and solve a specific problem immediately. With CRM a user has the same expectations. The crucial factor is how a solution that can deliver “app” type functionality can cross the line and also deliver from a strategic perspective.

### Long-term ERP value (Cross departmental value)

The strategic perspective can be evaluated by measuring the level of integration with traditional ERP backend systems. For example SAP CRM integrates with ERP Central Components (ECC) modules, Service etc. It is a crucial aspect during an evaluation phase to prove the value of CRM integration as the cross functional character of CRM is a dominant factor.

### Vendor reliability

In this book we are focusing on SAP and Microsoft and therefore you are dealing with vendors that have an obvious track record. However, even SAP and Microsoft have been showing problems getting ready for new market requirements such as **SaaS – Software as a Service** solutions. It appears that offers in these areas were mostly geared towards strengthening their main legacy products. For example, SAP had announced

SaaS solutions year ago. However the vendor seems almost paralyzed by its existing All-In-One portfolio. We will take a closer look when evaluating the SAP during the case-study.

Emerging vendors may often not provide historical reliability like SAP or Microsoft, but can possibly realize fast results with competitive features that you would have to wait for when implementing SAP or Microsoft.

### ISO 9001 readiness and business metrics

When establishing a toolset for the evaluation of technologies it is often overlooked that the evaluation actually continuously takes place once the technology is implemented. For our CRM toolset I have chosen the ISO-9001 quality control standard. This element serves as the “Continuous Improvement” element in our toolset.

As part of the ISO 9001 process, companies establish a documented procedure that will establish control points where data is collected and used to improve the process in an iterative cycle. For example you may utilize web based surveys to get feedback from customers who dealt with your Service Department and use this information to improve the way service calls are handled.

While the ISO 9001 process is sometimes considered to be a burden by smaller companies, it should be noted that it is a competitive advantage to collect the right data and make informed decisions.

The ISO 9001 process can go hand in hand with the definition of metrics that help you make informed decisions. Hereby I suggest that you start collecting information on a monthly basis and define ways to analyze the data. As the data is collected and your analysis process gets automated, you can then collect more targeted data on a weekly, and finally on a daily, and sometimes even on an hourly basis to drive business decisions.

### Skills required (Internal/External) / Skill availability

The skills available via third party or independent consultants are crucial. Is it hard to manage the solution internally? Can you easily find external resources that don't break the budget?

Most mainstream CRM technologies have plenty of resources. However, the more complex the integration gets, the more costly the relevant resource are. For example, it is not easy to find skilled SAP CRM consultants with knowledge of other SAP modules. However this skillset is required to maximize the benefits or the integrated CRM system that SAP has to offer.

### Implementation methodology

As mentioned before, the evaluation and also the implementation methodology are iterative processes that should have their own quality control points. With this said you should identify how well the implementation methodology of a solution is documented. Only with proper procedures will you be able to establish a solid “Change Management Process”. This will guarantee that your system gets installed with quick results, while the long term perspective is not forgotten. In fact the CRM implementation should be divided into multiple pieces with short term results that are all moving in the same strategic direction.

### End-User experience

With a well-documented implementation methodology the end-user will be informed about their involvement and the expected changes and benefits. This way you can reduce unnecessary resistance against any changing environment.

Essentially the success of your CRM system will be driven by how your users will be using it. If they don't like the solution then you will not be able to reap the benefits of your investment.

Later in subsequent publications we will be using the above described toolset elements to develop a scorecard for your CRM evaluation and implementation. In the next section we will be reviewing the SAP Best Practices concept for SAP CRM.

## SAP CRM best practices walk-through

The **SAP Best Practices** for CRM are a set of tools that walk the potential user for CRM related functionalities from a high level evaluation to the detailed implementation. In this section we will be reviewing the steps involved in this process.

The process involves the following steps:

- Evaluation
- Scoping
- Prepare for Implementation
- Implement Scenarios
- Test Scenarios

Following is a walk-through covering all the above steps and key documents involved with the SAP CRM Best Practices implementation methodology.

### Evaluation

During the evaluation phase, SAP provides “**Solution Maps**” that allow a high-level selection of desired functionality. In addition, while using the solution maps you get an impression of where the relevant functionality is positioned in the overall module architecture of SAP. This is important to note, because it may have licensing implications as to which features you select. The CRM functionality is categorized in the three main functional module groups that CRM systems provide; namely Marketing, Sales and Services.

Marketing	Web Channel Interaction Center Partner Channel Management	Marketing Resource Management	Segmentation & List Management	Campaign Management	Real-Time Offer Management	Lead Management	Loyalty Management	Trade Promotion Management Business Communication Management			
Sales		Sales Planning & Forecasting	Sales Performance Management	Territory Management	Accounts & Contacts	Opportunity Management	Quotation & Order Management		Pricing & Contracts	Incentive & Commission Management	Time & Travel
Service		Service Sales & Marketing	Service Contracts & Agreements	Installations & Maintenance	Customer Service & Support	Field Service Management	Returns & Depot Repair		Warranty & Claims Management	Service Logistics & Finance	Service Collaboration, Analytics, Optimization

A common way to document high level requirements is accomplished with business process modeling tools such as ARIS. ARIS used to be the only tool that fully documented the SAP R/3 system. Today during all phases of the evaluation and implementation of your project you can find documents that will address the information needs of affected departments and the relevant project managers. For example as part of an SAP Project Implementation commonly a functional project manager is assigned per SAP module. The functional project manager or consultant takes care of the settings in a particular module ranging from FI/CO, MM, SD to PP and PS.

The **functional project manager** for Material Management (MM) has specific information needs with regards to the CRM implementation. Those information needs are addressed in pre-designed documents that come with the Accelerated SAP system. This may range from organizational charts and solution maps to event driven process charts etc. All those representations that help you communicate requirements are covered by ARIS. You may review more information about this solution by referring to the following websites:

ARIS Community and example charts:

<http://www.ariscommunity.com/aris-express/bpmn-2-free-process-modeling-tool>

ARIS Express Free download:

<http://www.ariscommunity.com/aris-express/download>

The first step from “evaluating” the process towards “scoping” is that you select the relevant areas that you want to implement. Then you use those selected areas to drill-down to the relevant details. In the solution map this is done by clicking on a section that you want to further explore. For example, if you click on “**Service Sales & Marketing**” you will see the detailed “Building Blocks”.

## Scoping

By understanding the building blocks and drilling down to the business scenario scope, you will be able to assess the solution and compare with your initial requirements.

In the following section I list the functional building blocks for the SAP CRM sections Marketing, Sales and Service.

The marketing building blocks range from segmentation and list building, to campaign and lead management. Basically marketing is considered to comprise of the task of creating contact lists from various sources and preparing targeted groups of lists that can be worked on based on campaigns. The next step in the SAP CRM marketing process is to manage the leads that were obtained during those campaigns. Finally, the following task in the process would be the sales related workflows.

**Note:** There is certainly more to marketing than list management. This is just the way it is categorized in the SAP system.

Segmentation & List Management	Campaign Management	Real-Time Offer Management	Lead Management
<ul style="list-style-type: none"> <li>● Multiple Data Source Access</li> <li>● High Speed Data Search</li> <li>● Preview Lists</li> <li>● Pre-Filtered/Personalized Attribute Lists</li> <li>● Sampling and Splitting</li> <li>● Embedded Predictive Modeling</li> <li>● Personalized Filters</li> <li>● Quick Counts</li> <li>● Segment Deduplication</li> <li>● Suppression Filters</li> <li>● Target Group Optimization</li> <li>● Clustering</li> <li>● Data Mining</li> <li>● Decision Trees</li> <li>● List Management - List Format Mapping</li> </ul>	<ul style="list-style-type: none"> <li>● Campaign Planning</li> <li>● Marketing Calendar</li> <li>● Multichannel Campaign Execution</li> <li>● Personalized (E)Mails</li> <li>● Call Lists</li> <li>● Campaign Analysis</li> </ul>		<ul style="list-style-type: none"> <li>● Multiple Interaction Channels</li> <li>● Automated Qualification</li> <li>● Rule-based Distribution</li> <li>● Mass Generation</li> <li>● Automatic Generation of Follow-Up Activities</li> <li>● Lead Surveys</li> <li>● Lead Analysis</li> </ul>

The Sales building blocks include the processes required to close a sale. Please review the building blocks in the screenshot below and note that "Quotation & Order Mgmt." has "ERP" in brackets added to it. This information points to the fact that the SAP CRM solution runs by itself in "**Standalone**" mode, but also can be integrated with the backend SAP ERP, which is the **SAP ECC – Enterprise Core Components**.

Sales Performance Management	Territory Management	Accounts & Contacts	Opportunity Management	Quotation & Order Mgmt. (ERP)	Pricing & Contracts
● Pipeline Performance Management	● Market Segmentation	● Visit Planning	● Team Selling	● Quotations	● Basic Pricing for Opportunity
	● Territory Assignment & Scheduling	● Fact Sheet	● Competitive Information	● Order Capture	
	● Territory/Organizational Mapping	● Interaction History	● Account-specific Sales Processes	● Automatic Business Partner Assignment	● Complete Pricing for ERP documents
	● Sales Analysis by Territory	● Activity Management	● Automatic Business Partner Assignment	● Order Status Tracking	
		● Email Integration	● Pricing	● Pricing	
		● Relationship Management	● Activities	● Order Validation Check	
		● Marketing Attributes	● Follow-Up Transactions	● Availability Check	
		● Customer Analysis	● Anticipated Revenue	● Quotation and Order Analysis	
		● Account Classification	● Buying Center	● Cross-/Upselling	
			● Sales Process & Selling Methodologies		
			● Opportunity Analysis		

Finally, the service building blocks organize the relevant processes for Customer Support including **Service Contracts, Maintenance, Customer Support, Warranty Management, Service Logistics and Service Forecasting and Analysis**. It should be noted that the service forecasting feature highlights the strategic character of the SAP CRM Service approach. It also integrates the reiterative quality assessment process that should be an integral part of CRM. By connecting your ERP with CRM you can analyze customer warranty and maintenance trends and forecast the expected service volume based on Knowledge Base information for items that are sold in large volumes.

Service Contracts & Agreements	Installations & Maintenance	Customer Service & Support	Field Service Management	Returns & Depot Repair	Warranty & Claims Management	Service Logistics & Finance	Service Collaboration, Analytics, Optimization
<ul style="list-style-type: none"> <li>● Service Agreement Management</li> <li>● Service Contract Management</li> <li>● Service Level Management</li> </ul>	<ul style="list-style-type: none"> <li>● Installed Base &amp; Objects Management</li> <li>● Installation &amp; Configuration</li> </ul>	<ul style="list-style-type: none"> <li>● Service Requests Processing               <ul style="list-style-type: none"> <li>- Service Order Quotation</li> <li>- Service Order Processes</li> <li>- Service Employee Resource Planning</li> <li>- Service Confirmation Processing</li> <li>- Logistics Integration Processes</li> <li>- Service Order Analytics</li> <li>- Service Resource Planning</li> <li>- Resource Master Data</li> <li>- Assignment Management</li> <li>- Absences/Attendances Maintenance</li> </ul> </li> <li>● Knowledge Management</li> <li>● Complaints Processing               <ul style="list-style-type: none"> <li>- Returns Processing</li> <li>- Follow-Up Processes</li> <li>- Logistics Integration</li> <li>- Complaints and Returns Analytics</li> </ul> </li> </ul>			<ul style="list-style-type: none"> <li>● Warranty Management</li> </ul>	<ul style="list-style-type: none"> <li>● Billing</li> </ul>	<ul style="list-style-type: none"> <li>● Multichannel Integration</li> <li>● Service Forecasting, Planning, Analysis</li> </ul>

The next step in the evaluation and scoping process is to move towards a more detailed review of the processes. This is done by using the **"Scoping Document"** and the **"Feature Matrix"**. In the scoping document you find the processes listed in bullet point format alongside a verbal explanation of the process. The content is organized as follows:

- Process Building Block (e.g. "Integrated ERP Order and Quotation Management")
- Purpose: Describes the purpose of the process in one paragraph
- Process Flow: Describes the core process feature in one sentence per process
- Key Points: Describe the input and output of each process (What is done)

You may argue that these documents are rather simple and obvious in content. However, being "simple and obvious" is really their true value, because without them the functionality that is very broad in nature can be confusing. That's why the main work during an SAP implementation phase is to document the requirements and align them with the actual functionality available in SAP. Using the process maps and the scoping document, you can get started quickly.

Take a look at a sample screenshot from the SAP scoping document:

## 2.2.4 Integrated ERP Order and Quotation Management (R)

### Purpose

The *Integrated ERP Order and Quotation Management* scenario enables the creation and processing of ERP sales orders and quotations without leaving the CRM WebClient UI. The sales document is saved directly in SAP ERP and also only exists in SAP ERP.]

### Process Flow

- Create an ERP quotation without reference or based on an ERP opportunity
- Create an ERP sales order without reference or based on an ERP quotation
- Evaluate ERP sales documents

### Key Points

- Processing of ERP standard orders and quotations in CRM WebClient UI
- Standard ERP sales functionality is available to a great extent
- Flexible business processes are configured across systems:  
Follow-up transactions after an opportunity can be configured with any type of ERP quotation and sales order
- CRM sales tools are integrated in the ERP quotation and sales order business flow:  
CRM product proposal, cross-selling, up-selling

The Excel feature matrix shows the available building blocks in a matrix format. The matrix has links from each building block to the relevant process.

CRM Building Blocks per Scenario				MKT		Sales				Service								
Area	Scenarios (Click on scenario name for details)			C39 Lean Campaign Management	C30 Lead Management	C81 Interaction Center Marketing	C62 Activity Management	C66 Account and Contact Management	C63 Opportunity Management	C67 Pipeline Performance Management	C79 Territory Management	C82 Interaction Center Sales (with ERP Sales Order)	C69 Service Order Management	C38 Complaints and Returns Management	C80 Interaction Center Service	C75 E-Service: Solution Assistance	C76 E-Service: Service Request Management	C77 E-Service: Complaints and Returns Management
	ID	Seq.	Name															
CRM General	C00	0	<a href="#">SAP Best Practices Installation</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	B01	1	<a href="#">CRM Generation</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	C71	2	<a href="#">CRM Connectivity</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	C04	3	<a href="#">CRM WebClient User Interface</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	B09	4	<a href="#">CRM Customizing Replication</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	C01	5	<a href="#">CRM Organizational Model</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	C03	6	<a href="#">CRM Master Data Replication</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	C10	7	<a href="#">CRM Central Master Data</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	B08	8	<a href="#">CRM Cross-Topic Functions</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Marketing	C11	9	<a href="#">CRM Marketing Master Data</a>	X	X	X												
	C22	10	<a href="#">CRM Lean Campaign Management</a>	X														
	C37	10	<a href="#">CRM Lead Management</a>		X	X												
Sales	C23	9	<a href="#">CRM Basic Sales</a>				X	X	X	X	X	X						
	C31	10	<a href="#">CRM Activity Management</a>				X	X	X									
	C36	11	<a href="#">CRM Account and Contact Management</a>					X										
	C32	11	<a href="#">CRM Opportunity Management</a>						X	X	X							
	C34	11	<a href="#">CRM Integrated ERP Order and Quotation Management</a>						X									
Service	C06	12	<a href="#">CRM Territory Management</a>								X							
	C13	9	<a href="#">CRM Service Master Data</a>										X	X	X	X	X	X
	C26	10	<a href="#">CRM Service</a>										X	X	X	X	X	X
Interaction Center	C28	11	<a href="#">CRM Complaints</a>										X					X
	C78	11	<a href="#">CRM Interaction Center</a>			X						X						
Web Channel	C33	12	<a href="#">CRM Teleservice</a>											X				
Web Channel	C74	12	<a href="#">CRM E-Service</a>													X	X	X
Interactive Reporting	C41	13	<a href="#">CRM Interactive Reporting</a>	X	X		X	X	X		X				X			
BW Analytics	I15	13	<a href="#">BW Analytics Installation Guide</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	B84	14	<a href="#">BW Connectivity</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	B03	15	<a href="#">General Settings for SAP BW Integration</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	B54	16	<a href="#">Basic Configuration - CRM Analytics</a>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	B72	17	<a href="#">CRM Marketing Analysis</a>	X	X	X												
	B73	17	<a href="#">CRM Sales Analysis</a>				X	X	X	X	X	X						
	B91	17	<a href="#">CRM Service Analysis</a>										X	X	X	X	X	X
	B74	17	<a href="#">CRM Customer Interaction Center Analysis</a>										X		X			
	B53	17	<a href="#">Basic Configuration - Sales Analytics</a>						X	X	X							
	SAA	18	<a href="#">Sales Analysis (ERP)</a>						X	X	X							

Armed with this broad information that purposely is simplified on a high level, you can decide which building blocks are relevant for your CRM functionality and select them for implementation.

### Prepare for implementation

During this phase you will connect your “Building Block” selection efforts with the actual SAP system using a T Code. Enter the T Code /n/smb/bbia in your SAP system. At this point the main learning point is that the previous efforts to scope the functionality can be leveraged and lead to a pre-selection process in your actual SAP system. Basically the relevant modules and features will be activated and made available for further configuration. This is done by entering the **SAP Solution builder** and entering the T Code described above. You would then select the “**Solution Scope File**” and the “**Solution XML**” (Standalone or ERP).

Basically you select an XML file that can be interpreted by the SAP system, which will then determine the modules that are relevant to your project. Based on your selection you can also utilize sample data that is available using your SAP portal access. This way you can test and verify processes in the system, which will lead us to the next section – “Implement Scenarios”.

### Implement scenarios

As mentioned above, the “Solution Builder” will assist in a “wizard” style manner with the implementation steps (Automated Activation). However, you can also opt to implement “manually”. In order to activate selected scenarios and solution blocks you can click on “Implementation” in the solution builder.

## Test scenarios with BPDs

If you remember, we used the links in the Excel CRM Building Block matrix to jump to the relevant process scenario. However, on the same page there is a link to the **Business Process Documentation (BPD)** for each process. These business process documentations are referred to as BPDs. Therefore your first step in testing the processes is to obtain the relevant BPDs for the scenarios you selected. The BPDs contain a detailed description of each process.

In conclusion it can be said that the SAP Best Practices for CRM is a solid basis for an implementation methodology that can be the foundation of your CRM implementation. Ranging from easy to understand, high level scoping documents (**Scenario Maps/Scoping Doc/Feature Matrix**), to BPDs, you have all the information you need to reduce the broad feature scope of SAP to match your company's requirements and focus on the task at hand. In addition, the Solution Manager helps you quickly implement the selected features and test the processes using the readily available BPDs.

## Case study

This case study is an attempt to put the technologies to the test and relate the previous content to actual business problems. In our example we envision a business owner who needs to expand into a new market based on a national organization that already has a significant investment in SAP and Microsoft technologies. We will continuously add challenges to the business scenario of our case study during the course of each subsequent publications. At this point we are faced with the challenge that a new sales organization needs to be ramped up quickly with localized sales units that target all major hubs on the US and Mexico. The company called "**Vindicore Inc.**" has a single headquarter in the US where **SAP R/3 4.6** is installed, but an upgrade to **ECC 6** is scheduled and in progress.

### SAP and Microsoft product portfolio

With all the value of integration that comes with an integrated SAP Solution including SAP ECC and SAP CRM, there is a high burden. Even though the SAP Best Practices are a good way to reduce complexity and get started with your implementation quickly, it is mostly a way for SAP customers to expand their functionality towards CRM. How can you decide for or against SAP CRM and in favor of Microsoft CRM or other product?

Microsoft has its own ERP solution portfolio ranging from **Microsoft GP (Great Plains)**, **Microsoft Navision (NAV)** to **Microsoft Axapta (AX)**. These products can be used with solutions like Microsoft CRM, SharePoint and Reporting Services. Obviously the integration with Microsoft Operating System services including Active Directory for security and Exchange for E-Mail and Calendar collaboration is an option.

Both companies expand towards the mobile market. SAP just recently acquired Sybase. Sybase interestingly is the company that initially developed SQL Server many years ago. Today they have a strong portfolio in the mobile market. Microsoft is continuously expanding in their operating system footprint by offering smart phone systems that can utilize Microsoft Office products as services.

### SAP product portfolio –Virtual Discussion “He Said/She Said”

Vindicore Inc uses SAP R/3 4.6 as their ERP system, but within the next months the upgrade to ECC 6.0 is scheduled to be complete. In addition Microsoft solutions are used for E-Mail and Calendaring based on Exchange alongside SharePoint and Office. However the potential of SharePoint is not fully leveraged and a project is scheduled that should assess the actual benefits.

The business owner is struggling with the decision to implement Microsoft CRM or SAP CRM. Both options seem the natural next step based on the current Microsoft and SAP investments. It would be logical to implement Microsoft CRM and build on the existing E-Mail and Calendaring features in Exchange. It would also make sense to implement SAP CRM and leverage the existing Data in SAP ECC.

The company Vindicore Inc. is selling products via an “Online Only” concept and has multiple websites that target specific markets. The new CRM solution is geared to increase local demand and potentially open up retail stores in areas where the local demand is the greatest. This should be achieved by establishing local outbound calling for lead generation and also service management for incoming service calls.

Instead of completing a scorecard based on the evaluation toolkit, I would like to establish a “He Said / She Said” approach to assess the situation. However I will use the “Consultant Said / Vendor Said / CEO Said / Project Manager Said” analogy.

The project scorecard will be further developed in a later publication when we evaluate the options for Microsoft SharePoint and SAP Netweaver.

### Investment budget

Owner (CEO): "I need quick results and also make sure that the long-term growth plan is feasible with the solution we use. I don't care if we use SAP or Microsoft as long as the goals are reached while the investment can be made in portions that help us reach our goal in steps."

Project Manager: "We can leverage our Microsoft expertise and implement Microsoft CRM. This could be implemented as a service and rolled out based on demand. Microsoft CRM also integrates with our Exchange infrastructure. The SAP integration is out of our hands. We need external consultants to implement. However we are seeing that most of our competitors seem to implement SAP CRM."

Vendor (Microsoft): "Microsoft CRM will give you quick results and can be integrated with SAP using SAP Netweaver, but that is done with SAP help and you may need additional SAP licenses."

Vendor (SAP): "You can run CRM in concert with SAP ECC and also integrate your Exchange server using Netweaver. The advantage of integration will satisfy your long-term strategic goals."

Consultant: "We recommend that you prepare a detailed requirement analysis and prepare a scorecard for your business. The End-User wants an easy solution that works like Outlook. Customers like it when customer service has access to immediate information. This way they call only one number and there is no need to contact multiple departments. Based on recent customer feedback we found that there is great value in having all the required information about customers. This way the customers don't have to call multiple numbers."

### Short term (App character) / Standalone

Owner (CEO): "I don't need all the bells and whistles. We just want to expand quickly. However I need to make sure we leverage our investment and bring the highest service quality to our customers."

Project Manager: "Microsoft CRM can be quickly implemented. SAP CRM seems to run "Standalone", but running standalone seems to defeat the purpose of our SAP system. I suggest if we go with SAP CRM we integrate with our ECC backend."

Vendor (Microsoft): "CRM can run your standalone requirement and be integrated with SAP as you grow."

Vendor (SAP): "We offer comprehensive CRM and ERP including Call-Center Interaction Center for outbound and inbound service calls. We even work with Microsoft CRM and integrate as we consider Microsoft CRM just one element in your system landscape."

Consultant: "SAP products are about strategic vision and are embedded in a comprehensive catalog of Best Practices. SAP Products therefore are built top down from the application level to accounting towards the data level. Microsoft products are built from bottom up from the operating system integration to Exchange and Office. Even if we install "Standalone" we still need to figure out how to integrate with the data. If you pay for the implementation you may consider integrating as early as possible, because we may end up with a complex migration project in case we establish multiple standalone systems."

### Long term strategic ERP value

Owner (CEO): "Our investors need to see immediate returns and prove that the long term competitive market position is strengthened."

Project Manager: "Our competitors are moving towards SaaS models and both Microsoft and SAP seem to have problems with adequate offerings. In the past we found that any SAP product seems so huge that even our most skilled technicians could not handle it by themselves. We certainly need consultants to assist."

Vendor (Microsoft): "SAP has a confusing product strategy with B1, ByDesign, All-In-One and Netweaver. Their whole strategy is focused on All-In-One while the other products are serving only one purpose and that is to sell more All-In-One sooner or later."

Vendor (SAP): “We are the only solution provider focused on ERP and business solutions. Microsoft is really an operating system and office company. Our solution comes in a SaaS format too. Microsoft is struggling with Vista and other products that are really causing problems for many businesses.”

Consultant: “The strategic value has nothing to do with the products you use. The key is “Process Intelligence” and points to the fact that it is more important “How we do things” versus the tools we use. It is essential to understand that the software packages used are only providing features and Best Practice processes. Therefore the software is only the vehicle that transports and transforms information. But as a business you need to determine if the information you transport and process is really what brings your business value and contributes to additional business in the most efficient manner.”

I recommend using ARIS toolset for process analysis. The SAP solution SAP CRM is built to work with All-In-One. However All-In-One is dinosaur software that requires huge amounts of resources.”

### Vendor reliability

Vendor (Microsoft): “Most SAP implementations also use Microsoft technologies.”

Vendor (SAP): “Microsoft is using SAP to run their business.”

Consultant: “Each vendor is reliable, but the market is shifting. Today we see more offerings from companies that have been specializing in SaaS. They can better address our need for “Apps” that can solve a specific problem quickly. We just have to make sure our “Master Data” is on a solid platform. The additional functionality will be “connected” using web services that allow SaaS applications to process our data. In case we need to switch the provider, it will be only a matter of hooking the web services up to the new provider.”

### ISO certification business metrics

Project Manager: “We can utilize the ISO 9001 standards and move towards a “World Class” service company.”

Consultant: “ISO 9001 seems to be a tedious project, but we have seen that most customers benefit almost immediately when a quality process is in place. In addition, business metrics are everything today. We can collect data from all web activities and improve the way we work with customers. That’s all done with metrics we collect as part of our ISO 9001 documentation process.”

### Skills required

Project Manager: “We don’t have internal SAP consulting expertise.”

Consultant: “We can provide SAP consulting expertise. However, SAP CRM knowledge is highly in demand currently.”

### Methodology

Project Manager: “SAP has a Best Practices system. It works well as our requirements are not unusual and we would like to align our CRM procedures with proven industry best practices.”

Consultant: “The methodology needs to be adjusted to reflect your needs. We can utilize the ARIS toolset to document your requirements and establish a documentation system with a repository that stores your processes. On a per department level your teams can then work on the process documentations and store them in the repository.”

### End-User experience

Owner (CEO): “We need to establish the highest quality of service and continue to be the industry leader in quality and price.”

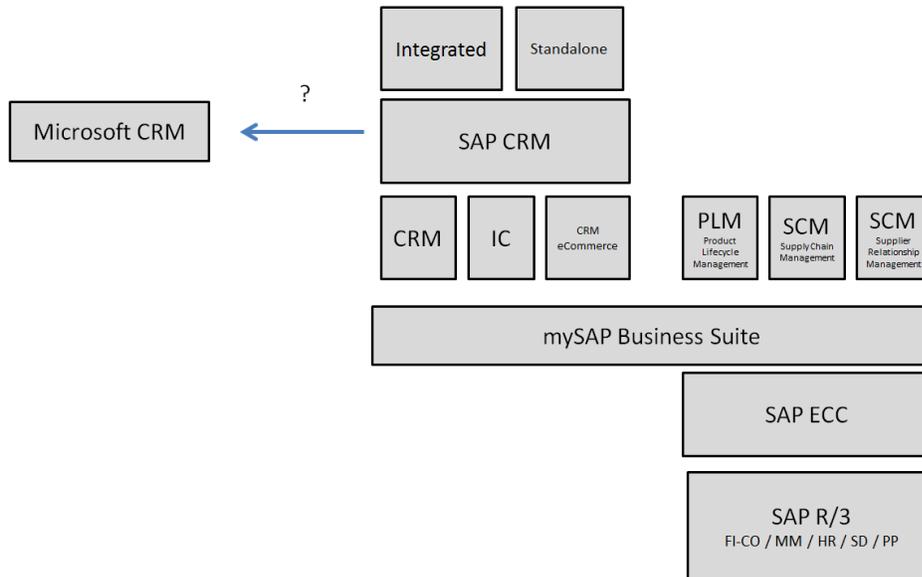
Vendor (Microsoft): “We are rated as the leading CRM vendor.”

Vendor (SAP): “Our product is designed based on industry best practices.”

## The solution – CRM and Web Services orchestrated by NetWeaver and Microsoft .Net assemblies

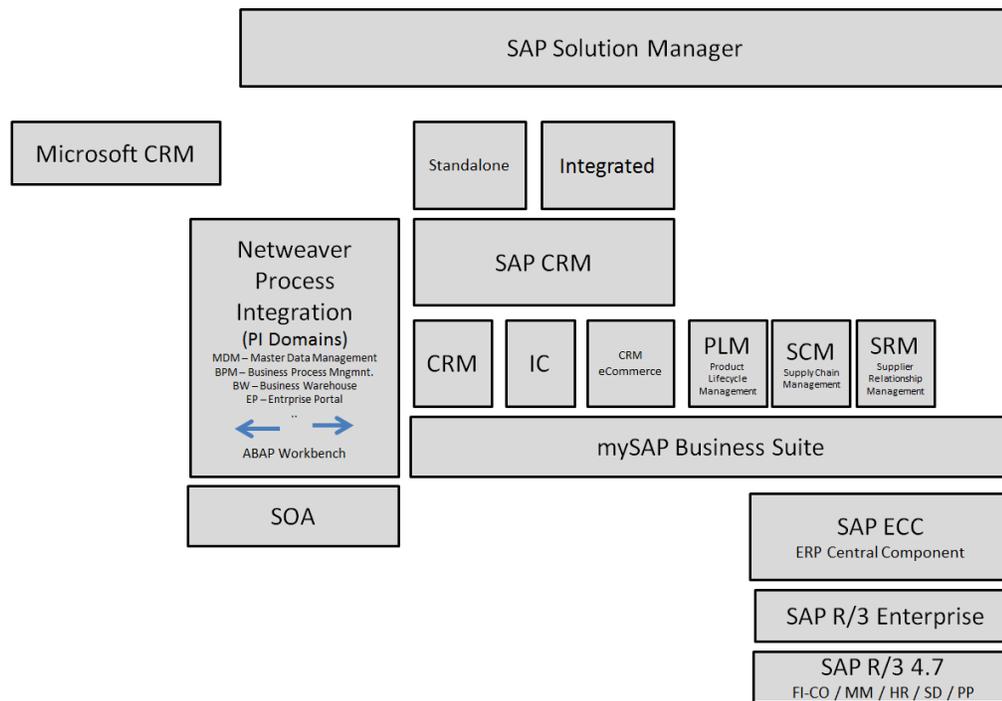
As you can see, the situation is complex even though a simple task seems to be at hand. The virtual discussion format presented the most common statements made by each stakeholder during meetings.

In order to help communicate the real challenge at hand I have prepared a graphical representation of the involved components from SAP and Microsoft. You can see the relevant components on the presentation graphic.

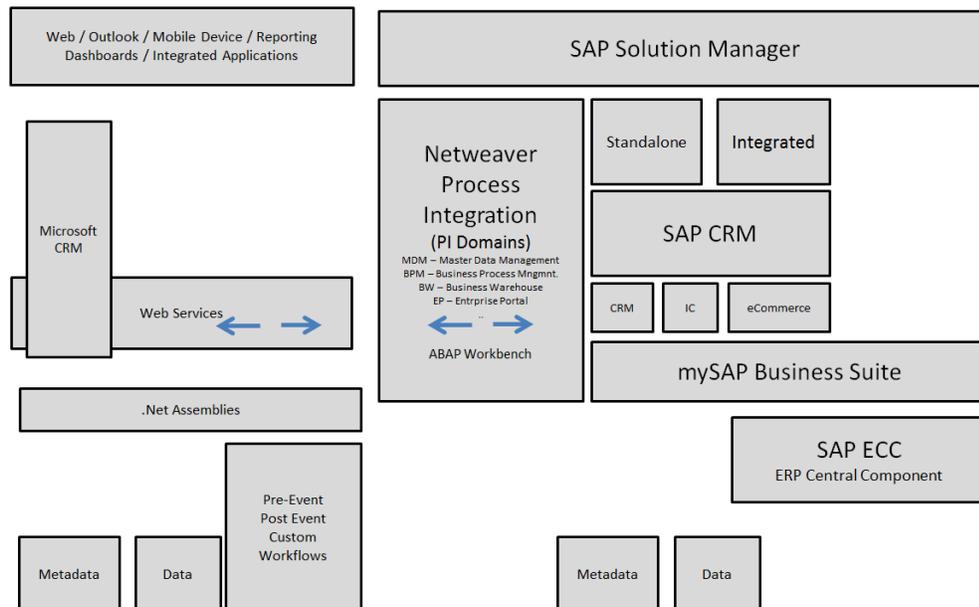


As outlined above, the SAP product stack seems significant, because SAP CRM not only includes **Interaction Center (IC)** for call center functionality and eCommerce for online business, but also integrates with other SAP modules. For example, customer information and sales data can be obtained from the SAP ERP Central Components. I will provide a quick overview of all the important SAP products in the next section. This will allow us to understand the options we have when integrating a product like Microsoft CRM with SAP CRM/ECC. The SAP product stack shows the key products SAP offers and relates them as building blocks of a complete solution portfolio. SAP is well known for their product **SAP R/3**, which has reached the final evolution with release 4.7 before it was renamed to **SAP ECC – Enterprise Central Components**. These ECC modules comprise the main functional modules such as **Financials/Controlling - FI/CO, Materials Management - MM, Human Resources - HR, Sales & Distribution - SD, Production Planning – PP, and Project System - PS**. This combination of modules has proven to be a solid **Enterprise Resource Planning (ERP)** platform. However, as each industry has individual requirements such as CRM, Product Lifecycle Management, and Supplier Relationship Management, additional modules were added. The concept of combining the traditional ERP modules with new added functionalities is called **mySAP Business Suite**. Due to the increased requirement to integrate not only new modules from SAP, but also modules/applications from other vendors, a separate solution was developed. The purpose of this solution is to integrate SAP data with various other systems using web services. Therefore, as shown in the graphic, the integration between SAP CRM/ECC and Microsoft CRM or any other solution will be handled using NetWeaver. NetWeaver is designed to utilize “adapters”. Those adapters are pre-designed connections for specific applications. For example, you could find an adapter that connects SAP Master Data with an external eCommerce solution. Therefore you can see that the challenge we face with integration is handled by NetWeaver as follows:

- Define the data that needs to be exchanged
- Design web services that expose the relevant data
- Design web services that consume the relevant data where needed
- Save the configuration as “adapters” so that it can be used by others or be modified based on changing requirements.



The requirement to integrate an application has become increasingly important. That's why not only SAP is using this method, but web services have become an industry standard for applications. That's why Microsoft too has established web services architecture for CRM. The integration model for Microsoft CRM was added to the graphic to highlight the Microsoft concept as it relates to SAP.



Microsoft CRM exposes Metadata, data and workflow specific events via web services. Essentially the CRM functionality is available without a user interface via web services for use by other applications that would consume the data in the web service and present the information in their own interface. Consequently it becomes irrelevant for the user what application and user interface they work with. After all the data could be processed by Microsoft CRM or SAP CRM or any other application that provides (Expose) web services for the application in the background. Consequently it can be held that even with the most significant product complexity a simple integration amongst various applications can be achieved via web services. In the Microsoft and SAP world this is done using NetWeaver and the Microsoft .Net Assemblies that allow access to application data and logic.

## Summary

In this document we started out by testing the popularity of CRM using Google Trends Analyzer and defined CRM as a cross functional module that utilizes information and data from other modules. We identified the most important CRM versions available from SAP and continued to review SAP in a nutshell to make sure you have a sufficient SAP background. This is especially important since CRM is a cross functional module. We continued to list the key T Codes that are relevant to CRM and summarized the aspects you need to consider when evaluating CRM. The result was presented as a toolset that you can use for your own CRM implementation. We then completed a full ASAP Best Practices Walk-Through including the feature matrix. Finally a virtual discussion presented the most important statements made when CRM projects are discussed. The document ends with the presentation of the enterprise integration framework that shows all the relevant SAP products and their integration path with Microsoft.

In a future contribution we will be integrating Microsoft SharePoint with SAP NetWeaver and will further develop the Microsoft/SAP Enterprise Integration Framework. Using our case study we will add examples and a scorecard that will help you develop your own requirements and move your integration project forward. We will also review key .NET assemblies and a simple programming example.

## Related Content

Web-Channel, E-Commerce, E-Marketing, E-Service

<http://wiki.sdn.sap.com/wiki/display/CRM/Web-Channel%2C++E-Commerce%2C+E-Marketing%2C+E-Service>

Customer Relationship Management Wiki

<http://wiki.sdn.sap.com/wiki/display/CRM/Customer+Relationship+Management>

SAP and Customer Relationship Management (CRM) on SDN

<http://www.sdn.sap.com/irj/bpx/crm?language=en>

N2ONE Portal for SAP systems

<http://blog.N2ONEPortal.com>

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