

CASE STUDY

Business Value Analysis of mySAP CRM on BlackBerry at SAP America

Sponsored by: SAP and Research in Motion Limited (RIM)

Stephen D. Drake

Randy Perry

January 2007

IDC OPINION

As organizations across the globe leverage mobile solutions to extend beyond their initial use for mobile email, significant opportunities for strategic differentiation begin to materialize along with tremendous quantitative and qualitative benefits. Such benefits bring exceptional value not only to the intended mobile user base but also to a larger set of workers across the organization in the form of streamlined workflow and improved business processes. SAP America created and deployed an extension of its mySAP Customer Relationship Management (mySAP CRM) application to its mobile sales force on their BlackBerry devices. This undertaking yielded the following results:

- ☒ An initial deployment of a Web-based portal provided the necessary gateway between desktop and the mobile application for many users. The visibility and usage of the portal allowed for a better overall understanding of business processes and ultimately contributed to increased adoption of the subsequent mobile application.
- ☒ The plan to use the SAP xApp Mobile Sales composite application on BlackBerry sought to present a "My Opportunities" view and enable updating of customer and company contact information, viewing and modifying of in-process opportunities, changing status and close date, adding members to a virtual account team, viewing an opportunity's internal order number, and providing revenue modification at the line-item level.
- ☒ The SAP team completed a rapid deployment and delivery cycle that brought mobile CRM to nearly 100% adoption in six months. An initial phase of deployment had yielded little adoption by the sales force due to slow performance and unwieldy security policies. Additional enhancements, such as single sign-on features and improved ease of use, significantly increased user adoption.
- ☒ Key hurdles to overcome included heavy reliance upon support staff, combined with inefficient communication and workflow mechanisms among account executives, managers, and virtual account teams.
- ☒ Qualitative benefits included operational and quality improvements, significant increases in sales productivity, numerous efficiency improvements, and cost reductions.

- ☒ Overall, increasing sales executive efficiency accounts for the majority of the quantitative benefits (80%) through 2010 driven by the increased percentage of calls resulting in a sale. Following that is sales executive productivity (10%), administrative staff costs savings (5%), telecom savings related to the portal (4%), and telecom savings related to calls to administrators (1%).
- ☒ The financial impact of SAP America's deployment of SAP xApp Mobile Sales on BlackBerry can be summarized as follows: a net present value of US\$1.84 million, an ROI of 454%, and payback in 8.6 months.

IN THIS STUDY

Introduction

SAP AG, headquartered in Walldorf, Germany, is the world's leading provider of business software. More than 36,200 customers in more than 120 countries run SAP applications — from distinct solutions addressing the needs of small and midsize enterprises to suite offerings for global organizations. SAP solution portfolios support the unique business processes of more than 25 industries, including high tech, retail, financial services, healthcare, and the public sector. With subsidiaries in more than 50 countries, the company is listed on several exchanges, including the Frankfurt Stock Exchange and the New York Stock Exchange. SAP America Inc., a subsidiary of SAP AG, is headquartered in Newtown Square, Pennsylvania and has 8,000 employees.

In early 2005, SAP America management decided that account executives should have an optimized communication system while leveraging existing solutions. The company was currently deploying BlackBerry for mobile email and a single instance of mySAP CRM globally in a connected environment. The ability to integrate the two solutions was a logical next step and something many organizations the size of SAP were undertaking. The Research in Motion (RIM) BlackBerry infrastructure is used because the infrastructure was already in place as a wireless application platform for more than 80,000 enterprise sites globally today. CRM is the most mature application category beyond email on BlackBerry, and mySAP CRM was a natural extension.

SAP America wanted to examine the processes to understand flow of communication between workers to realize significant productivity improvements and streamline these processes for customers.

SAP identified several key requirements for account executives including:

- ☒ Instantaneous opportunity updates at the point of interaction
- ☒ Ability to accept hot leads using the BlackBerry while traveling
- ☒ Ability to receive account updates as they occur throughout the day
- ☒ Improved information exchange and approval flow between manager and account executive, pushing critical information to management much faster to facilitate timely decisions on issues impacting the sales cycle

In addition, the company expected a number of benefits beyond functionality (e.g., shortened sales cycle, increased volume of tracked opportunities) including higher close rates, increasing number of deals, and increasing revenue amount of each deal.

The Challenge

Like many large organizations, SAP America had made the move to deploy mobile email to a core set of mobile employees: the account executives. Recent survey data from IDC's Mobile Advisory Council validates this growing trend within the marketplace, with just over 70% of all respondents claiming to have mobilized at least one application within its organization. As account executives continue to display a strong affinity for mobile email, typical across many organizations is a yearning for access to additional applications that leverage the mobile infrastructure. Many RIM customers, having used mobile email on their BlackBerry devices and bought into the BlackBerry infrastructure as a strategic offering, seek additional uses beyond email. Such growth has spawned the expansion of enterprise applications.

SAP America faced a number of challenges related to keeping CRM information up to date for account executives in the field. At the time, use of BlackBerry devices by account executives was limited to email and messaging; CRM input was done in the field using a laptop or later on a desktop. The challenge for SAP was to make these account executives more productive by bringing some of that core CRM data and functionality down to the BlackBerry device. How could SAP improve communication between account executives and customers? The answer was to bring sales professionals closer to the customer by providing more and better data around the relationship between SAP America and the individual customer. Improving the ability to capture information at the point of the interaction, when the event occurred, was at the heart of the challenge. The ability to capture relationship data during the transaction would bring tremendous efficiency gains, with improvement in both accuracy and volume of information gathered and the opportunity to distribute information to a broader set of colleagues and managers.

Beyond the sales force itself, key personnel within the sale process faced a number of additional challenges that were heavily affected by the lack of a mobile solution. Because they were offline most of the time, account executives relied heavily on the CRM support of "super users" (people who use the solution every day and act as first-level support) and office-based administrators, as they were offline most of the time. This dependency was inefficient for the account executives who needed speedy access to information and unproductive for employees whose time could be better spent on activities that provided more value for the customer. In addition, there were inefficient communication and workflow mechanisms among account executives, managers, and virtual account teams and no real-time or near-real-time system in place to provide actionable updates in a reasonable and timely fashion. Lastly, allocation of resources across various virtual account teams by sales executives was a considerable challenge with limited visibility into updated opportunity information.

SAP America also had a number of project goals set for this deployment, highlighted as follows:

- Make available the most valuable elements of the sales process to a mobile device
- Leverage the installed base of BlackBerry devices used by SAP employees and mobile data services of the BlackBerry Enterprise Server
- Bring new levels of efficiency to account and opportunity management
 - Optimize communications between the sales force and its supporting functions
 - Streamline all communications associated with a specific account or opportunity and facilitate it for account managers and executives
 - Provide account executives with flexible options for updating CRM information
 - Provide convenient and simplified methods for updating CRM information at the point of information discovery
 - Improve the timeliness of management reports
- Allow senior vice presidents access to the most up-to-date information so they can make decisions for allocating sales and virtual resources across multiple opportunities
- Allow marketing resources to better focus on tasks that add value to the sales process by eliminating process cycles between sales and marketing groups
- Maintain a pragmatic approach to the solution; make sure the investment, time, and resources add value to the process
- Leverage SAP and RIM out-of-the-box functionality as much as possible

Addressing these challenges speaks to the criticality of a mobile solution and its effect across an entire organization. Although improving the processes for account executives was the major focus for mobilization, the broader impact of such a mobile solution stretches across an entire organization enhancing the productivity of team members, marketing, managers, and senior-level personnel as well as back-office administrators. Team members are better equipped with up-to-date information on accounts and can better communicate interactions. Marketing members can focus more on adding value to the sales process. Managers and executives receive updated information to make informed decisions and better allocate resources. Administrative employees, with less of a need to support the mobile workforce, may be redeployed on more value-added projects. Successful mobile solutions enhance business processes and improve workflow within business units and across the entire enterprise.

The following quote from key deployment personnel at SAP America capture the crucial challenges and ultimate goals of this project:

"The goal was not to save money, but to improve the accuracy and timeliness of data regarding opportunities."

— Chris Everhart, Senior Consultant, BI Center of Excellence,
SAP IT

Chris Everhart's statement is a propos. Savvy businesses today are now recognizing that cost is no longer the driving force behind a mobile project. Industry trends and recent IDC research demonstrate that organizations believe that although costs and ROI are important, key benefits such as improved organizational efficiency, increased employee productivity, and improvements in the accuracy and timeliness of data are all more important. Such focus validates SAP's sophistication in recognizing the value of a mobile solution.

The Solution

The SAP team completed a rapid deployment and delivery cycle that brought mobile CRM to nearly 100% adoption in six months. The following timeline shows the implementation cycle for SAP America:

- ☒ **In 2002:** Rolled out mySAP CRM application to account executives
- ☒ **April 2005:** Launched CRM portal
- ☒ **June 2005:** Rolled out online version of SAP xApp Mobile Sales on BlackBerry (read-only capabilities)
- ☒ **August 2005:** Added single sign-on capabilities (eliminated significant adoption barrier)
- ☒ **November 2005:** Integrated opportunity and sales-cycle management capabilities (update capabilities added)

A key component of the mobile solution was the initial deployment of the CRM portal. The portal acted as an important bridge to move users from the desktop-based mySAP CRM solution to SAP xApp Mobile Sales. Portal usage, understanding, and functionality actually led to a broader adoption of the sales application on the BlackBerry devices.

The BlackBerry device and SAP xApp Mobile Sales enable account and opportunity management processes including:

- ☒ Update customer and company contact information
- ☒ View and modify in-process opportunities
- ☒ Change status and close date
- ☒ See a "My Opportunities" view

- ☒ View and add members to virtual account team
- ☒ View an opportunity's internal order number
- ☒ Modify revenue by separate line item
- ☒ Use mobile email and voice communication

"Improving the accuracy and frequency of our customer information has been a constant goal. BlackBerry is one of the tools that helps us."

— Brian Greenberg, Senior Manager, SAP Global Marketing

Training played an important role as part of the solution. When the portal was deployed, classes were implemented that addressed both the portal and the mobile application simultaneously. The training courses lasted 4 hours, with 3 hours and 15 minutes dedicated to the portal and just 30–45 minutes for the BlackBerry application. Training began in April 2005 for 3 months in 7 different locations for a total of 15–20 days of training (broken into 4-hour sessions).

Implementation Challenges

Implementing the online version of SAP xApp Mobile Sales presented a number of unique challenges. First, maintaining a strategic and pragmatic approach to the solution was important so that the implementation resisted "technology for technology's sake" by mobilizing only elements of account and opportunity management that bring value to the selling process and are appropriate on a mobile device. With extensive options for functionality, the company placed limits on what to deploy to be sure to address the core goals early on.

Secondly, adoption was a challenge to the account executives for several reasons:

- ☒ Since existing processes still worked well, account executives needed training before they recognized the value of the solution.
- ☒ Because account executives focus on sales, any disruption to their existing processes can meet with resistance. Demonstrating how such a mobile solution could improve efficiencies and enhance productivity had to resonate for an account executive to consider adoption, and it was critical to a successful deployment.
- ☒ Since account executives already used BlackBerry devices for mobile email that certainly went a long way toward influencing adoption of the new sales application. However, old habits were not easy to break, such as calling super users and administrators for CRM information.

Perhaps one of the largest obstacles faced during the implementation of the mobile sales application was the single sign-on requirement. The initial rollout of SAP xApp Mobile Sales on BlackBerry in June 2005 required account executives to use multiple passwords to access the application. Besides impeding adoption, this process also slowed down application performance. In subsequent phases adoption improved considerably following the rollout of single sign-on. Such functionality provided tremendous ease-of-use enhancements, getting the account executive into the application much faster.

With SAP focused on simple yet vital features, the company succeeded in nearly 100% adoption of the application. Successful deployments of mobile applications will always require a keen sense of the end users' true business needs and the ability to isolate and enable processes that add value. Recognizing this early in the deployment stage is a necessity for accomplishing goals.

Benefits

Qualitative Benefits

With the implementation of SAP xApp Mobile Sales on BlackBerry, SAP America recognized a number of qualitative benefits, including increased user productivity and improvements to sales efficiency and effectiveness, along with significant cost reductions.

As discussed earlier, IDC points out that successful mobile deployments today recognize qualitative benefits as the key driver. In all deployments, total cost of ownership and return on investment are certainly important. But organizations seeking expansion of back-end systems to an ever-growing mobile workforce look for improved efficiencies and enhanced productivity enterprisewide as a critical measurement of success.

Operational and Quality Improvements

Overall workflow and quality improvements were beneficial to account executives, their teams, and their executive management. With SAP xApp Mobile Sales on BlackBerry, status of accounts and opportunities are updated more quickly and more frequently from the field — without requiring account executives to log in. Account information can be updated immediately and at the point of doing business, improving its accuracy and potential for making it into the system. Such entries also lessen the burden on support staff.

Management reports are more likely to contain the most up-to-date account and opportunity information, providing more actionable data. Up-to-date CRM data allows senior vice presidents to better evaluate open opportunities and make decisions sooner on how to allocate resources across the various virtual account teams.

"The sooner sales directors and VPs know the status of opportunities in the system, the better able they are to make decisions and the faster they can turn around business."

— Chris Everhart, Senior Consultant, BI Center of Excellence, SAP IT

The use of SAP xApp Mobile Sales in the sales process has also been an effective demo for SAP's mobile CRM offering. Account executives' use of their own mobile CRM solution makes a positive impression on potential customers. Leading by example instills a level of confidence to the customer that the company has embraced its own technology first.

Sales Productivity Increases

The use of a mobile solution allowed tasks associated with accounts, opportunities, and performance to be performed on a timelier basis and with more frequency. Account executives are better equipped to check their status for a particular period, what is being worked on, what is closing this quarter versus next quarter, and so forth.

The increased flexibility in updating information through mobile or "tethered" access options affords the method most efficient for the situation. Also, account executives rely less on super users while in the field, allowing super users to focus on higher-value activities.

User productivity gains were also recognized by the sheer nature of the mobile account executive's job. The majority of an account executive's time is spent away from an office environment — out visiting customers. While leveraging the mobile application provides tremendous improvements to both the accuracy and volume of data collected, account executives also find additional timesavings in entering it at the point of business. Without a mobile application, account executives would often be required to enter data at another time and another place, often off-hours. This application now gives back time previously lost to the account executive. Such work/life balance improvements should not be discounted as part of the overall increase in productivity.

"Sales force productivity is realized by an optimized sales process and timely information coupled with enabling technology. The SAP xApp Mobile Sales composite application on BlackBerry device enabled us to extend the back-office support and business intelligence cost-efficiently out into the field — where the customer value creation occurs."

— Marina Shabin, Vice President, Applications & Information Strategy, SAP Americas

Cost Reduction and Improved Efficiencies

Mobile access to mySAP CRM allows account executives to be more self-reliant and reduces interactions with the following office-based workers.

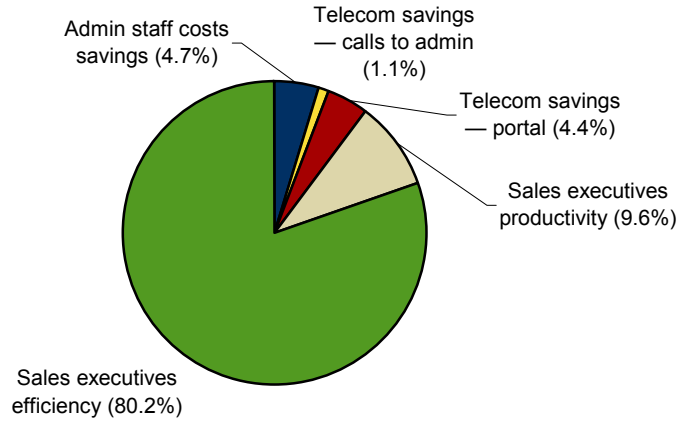
- Super users
 - Reduces calls for opportunity status checks, as this is a core feature of the application on BlackBerry devices
 - Eliminates "thank you letter" responsibility, since the mobile application automatically generates an "e-letter" from the BlackBerry device
- Marketing
 - Promotes faster handoff to sales through mobile lead acceptance
 - Results in fewer demos scheduled for mobile CRM, as this can be performed by the account executive leveraging his or her own device
 - Keeps marketing resources focused on activities that add value
- Sales executives
 - Makes informed resource allocation decisions based on the most up-to-date information
 - Leverages workflow capabilities to ensure follow-through on all account activity

Quantitative Benefits

In addition to the qualitative benefits discussed above, SAP America's implementation of SAP xApp Mobile Sales on BlackBerry delivered a number of measurable benefits, including improved account executive efficiency, reduced support costs, and improved account executive productivity. Overall, increasing sales executive efficiency accounts for the majority of the benefits (80%) through 2010, driven by the increased percentage of calls resulting in a sale. Following that is sales executive productivity (10%), administrative staff costs savings (5%), telecom savings related to the portal (4%), and telecom savings related to calls to administrators (1%). (See Figure 1.)

FIGURE 1

Benefits of SAP xApp Mobile Sales on BlackBerry at SAP America



Source: IDC, 2007

Improving Account Executive Efficiency

The largest driver of improved account executive efficiency stemmed from the +19.8% increase in calls directly resulting in a sale (see Table 1).

TABLE 1

Benefits: Improving Account Executive Efficiency

	Change (%)
Number of calls resulting in a sale	19.80
Number of calls required to close a sale	-4.50
Number of cross-sell/up-sell opportunities (per month)	9.30
Increased sales executive efficiency	2.70

Source: IDC, 2007

The number of cross-sell and up-sell opportunities increased by 9.3%. In addition, calls required for closing a sale decreased by 4.5%. In all, SAP saw sales executive efficiency increase by 2.7% following the deployment of the mobile application on the BlackBerry device — tangible results that account executives have realized. When such quantitative statistics demonstrate true productivity increases and additional sales opportunities, it's clear that organizations and end users experience real improvements in their daily activities.

Reducing Support Costs

Support costs also dropped after the deployment of SAP xApp Mobile Sales on BlackBerry. There were 36.6% fewer calls to administrators per month and productivity loss decreased by \$13.15 per user per month (see Table 2).

TABLE 2

Benefits: Reducing Support Costs

	Before	After	Change
Calls to administrator (per month)	4.1	2.6	-36.6%
Productivity loss per user/month (avg. 20-minute call and avg. hourly salary of \$26.60)	\$36.25	\$23.10	\$13.15
Telecom savings — calls to administrators	\$8.18	\$5.19	\$2.99
Use mySAP CRM through portal	12.7	10.6	-16.5%
Telecom savings — portal	\$75.99	\$63.62	\$12.37

Note: All dollar amounts in this study refer to U.S. dollars.

Source: IDC, 2007

Use of the mobile sales application on BlackBerry by SAP account executives also generated tangible cost savings in the form of reduced administrative support and lower telecom costs. SAP observed a reduction in calls to administrators and a drop in portal usage as users began to leverage their BlackBerry devices to enter and otherwise access CRM information.

Improving Sales Productivity

Overall SAP America experienced significant productivity increases related to work hours and portal usage. The productivity of SAP account executives increased with use of the mobile application. SAP xApp Mobile Sales on BlackBerry proved more efficient than previous methods of access, resulting in a significant drop in downtime by 30.8% (see Table 3). Additionally, account executives saved time by using the portal less and entering information directly at the point of the interaction.

TABLE 3**Benefits: Improving Account Executive Productivity**

	Before	After	Change
Number of hours per month unable to work	12.0	8.3	-30.8%
Use of mySAP CRM through portal (hours per month)	12.7	10.6	-16.5%
Productivity increase — work hours	\$639.58	\$438.60	\$200.98
Productivity increase — portal time	\$673.68	\$564.02	\$109.66

Source: IDC, 2007

ROI

IDC calculated return on investment factoring in SAP America's implementation with the mobile CRM solution on top of an existing BlackBerry deployment (i.e., the actual scenario as deployed by SAP America) and the ROI received from an investment in both infrastructures — mobile CRM and RIM BlackBerry devices, servers, and carrier services.

In SAP America's case, the net present value is \$1.84 million with an ROI of 454% and payback in 8.6 months, with an internal rate of return (IRR) of 503%. This analysis assumed a 12% discount factor (see Table 4).

TABLE 4**ROI Analysis — CRM (2005–2010)**

Net present value	\$1.84M
ROI = NPV/investment	454%
Payback	8.6 months
IRR	503%

Note: Using a 12% Discount Factor

Source: IDC, 2007

For those companies that are not already leveraging a BlackBerry solution, the net present value is \$1.2 million with an ROI of 115% with payback in 9.5 months and an IRR of 394%. This analysis also assumed a 12% discount factor (see Table 5).

TABLE 5

ROI Analysis – RIM and CRM (2005–2010)

Net present value	\$1.2M
ROI = NPV/investment	115%
Payback	9.5 months
IRR	394%

Note: Using a 12% Discount Factor

Source: IDC, 2007

Lessons Learned

SAP America's deployment of SAP xApp Mobile Sales on BlackBerry produced a number of lessons learned including:

- The ability to modify and update fields is critical for user acceptance. The initial read-only phase, while a step up, did not bring significant adoption to the mobile application.
- Deliver value back to every user level in the system. This is critical, as the mobile application goes well beyond just the focused user. Understanding workflow and business processes provides additional benefits to the entire sales team, support staff, and executives.
- Maintain multiple tools and methods for updating information in mySAP CRM to promote usage in a variety of working scenarios. SAP America's deployment of the portal provided an important intermediate step and learning curve to drive usage of the mobile application.
- Engage users early and understand which functionality is critical to various user roles. Unsuccessful mobile deployments occur when mobile workers and their processes are overlooked.
- Value is realized only through user adoption. Easing usage issues is essential. In this case, single sign-on was that obstacle. Adoption significantly increased once single sign-on became available.
- Focus on the customer-facing process. If the customer benefits, the sales process will benefit.

"We rolled it out to sales when we believed we could deliver significant value. Because if you don't get their attention the first time, it's tough to get it again."

– Brian Greenberg, Senior Manager, SAP Global Marketing

Future Plans

Building on the lessons learned from this deployment, SAP America looks to the next steps in advancing the functionality and the reach of the mobile application to deliver additional value across a broader worker set:

- Facilitate communication and information exchange between account executives and the contracts group.
- Extend the application by mobilizing the workflow of the global contract approval form
- Deliver sales team's performance statistics to the sales VPs.
- Provide enhanced functionality on a mobile device by delivering all that is now available through the portal.

"The wish list is enormous, so we need to look through the lens of reason and practicality. Whatever we pick from the wish list has to add real value to SAP and our customers."

— Marina Shabin, Vice President, Applications and Information Strategy, SAP Americas

Copyright Notice

External Publication of IDC Information and Data — Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

Copyright 2007 IDC. Reproduction without written permission is completely forbidden.