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A Total Cost of Ownership Analysis of SAP's Business Communications Management Solution:

Cost Savings Opportunity for SAP Customers

A Frost & Sullivan White Paper

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ABSTRACT

Businesses with contact center operations are confronted by the need to transform those operations and deliver better customer service at lower costs. This transformation is driven by an overriding operational imperative: to deliver a lower Total Cost of Ownership (TCO) for contact center communication solutions.

Where contact center administrators are seeking efficient, cost-effective communication solutions, the benefits of an all-Internet Protocol (IP)-based communications and management platform are attractive. The challenge, however, is in identifying ways to optimize customer contact and marketing strategies while keeping operational costs in check. IP-based technologies can aid in achieving this goal by lowering call costs, reducing hardware needs and improving operational performance. This issue becomes even more complex when multiple centers, communication channels and legacy technologies are added to the equation. The major challenges then facing call centers are to identify:

- Major cost factors
- Cost containment opportunities
- The business value of operational improvement

The SAP Business Communications Management (SAP BCM) is an all-IP, multi-channel contact center suite that includes inbound and outbound customer contact, monitoring and reporting, interactive voice response (IVR), and presence functionality—all in one package. This paper will explore the benefits of SAP BCM, specifically its total cost of ownership (TCO) versus other similar solutions, as well as review four use case scenarios. Not only can a TCO model gauge the purchase price of an asset, but it can also gauge ongoing operational costs. Development of the model through estimation of direct and indirect costs associated with the implementation and management of a communications platform—though it involves making assumptions—will ultimately enable better decision-making in the solution vendor selection process.

THE CONTACT CENTER ENVIRONMENT

The environment of a contact center is driven by concerns over cost efficiencies. Among the many concerns are the costs of human and technology resources and the cost of facility and technical management. When examining a new customer communications solution, costs of implementation and ongoing maintenance are also important considerations.

The challenge for management is to identify cost drivers and cost containment opportunities, and to improve business value through better operations. In a traditional contact center environment with aged software systems and legacy equipment, the cost to manage calls, multi-channel contact methods, retain agents and manage service levels can be very expensive. Companies are seeking ways to limit these costs, and IP provides a path for them while enabling multi-channel communications via voice, IVR, chat, e-mail, Web self service, and other contact channels. Operational tools such as quality monitoring, workforce management, business intelligence and analytics provide the means by which to measure and constantly improve agent performance and, ultimately, customer satisfaction.

Step one in considering a move to a new cost-effective communications platform is to evaluate the cost drivers active in the contact center environment. Key factors of consideration include the platform's ability to reduce call handle times, assist with skills-based routing to increase first contact resolutions, enable Web self service options for customers, or drive reduced per-agent, per-call contact costs.

Step two is to identify containment opportunities. Is the infrastructure sufficient to handle the workloads demanded by the solution or is it oversized? Oversizing infrastructure can generate unwanted operating expenses. Can the new solution integrate easily with legacy systems, hardware and third-party applications? If not, and if computer-telephone integration is still required, additional costs may be required that a contact center would not want to absorb. To lower costs, many organizations have also implemented IVR systems to reduce the call load on live agents and use skill-based routing to shorten the call route to the proper person.

The third step is to note the operational improvements achieved in moving to a new communications solution. IP-based service enables real-time communications services, including IP telephony, presence, call control, instant messaging, and collaboration. Each of these functions can help prove the business value of the solution move by increasing agent and enterprise productivity. Integration with a customer relationship management (CRM) platform allows customers access to a variety of products and services and entices them with personalized promotions, resulting in increased sales, all while permitting the customer to feel empowered and in charge of the business relationship.

The challenges of this environment, however, create an opportunity for customer service decision-makers. They must understand and advocate the utility and cost-effectiveness of adapting IP technologies to their specific business requirements. For instance, that an integrated IP communications solution can speed up and improve customer service by enabling fast access to customer data for one-call resolutions of customer inquiries. In today's competitive environment, this speed is a competitive advantage and, thus, there is an urgency to move quickly, transform business models and improve operations while focusing on lowering TCO.

SAP BCM VS. NON-SAP CONTACT CENTER SYSTEM TCO MODELS

This section will begin the exploration into the TCO via four use case scenarios and will examine the benefits of an all-IP contact center suite with CRM integration. The analysis will begin with a simple, one-site deployment and continue with larger, more complex multi-site deployments, and will consider implementation and maintenance costs.

The scenario common to each use case will be to compare a SAP BCM implementation to a generic non-SAP solution. While a generic vendor comparison is used for presentation purposes, the non-SAP competitors considered in this assessment include the likes of Aastra, Aspect, Avaya, Cisco, Genesys, Interactive Intelligence, and Siemens Enterprise Communications. Frost & Sullivan has developed averaged street cost elements for similar features/functionality from these contact center solution vendors as part of this analysis.

In developing the TCO model, the following assumptions were made regarding product licensing, maintenance and upgrades, and implementation costs. Primary assumptions are listed below, and a summary view of costing information used in the calculation of the TCO values is presented in Appendix 1.

Product Licensing Assumptions

Key assumptions on product licensing include:

- Prices reflect average end-user level pricing for SAP and competitor solutions
- All costs are estimated in local currency
- Underlying personal and business telephony systems remain in use and are not included in the TCO
- Networking costs are assumed to be static and not included in the TCO
- Phone end-points are assumed for soft phones for SAP and non-SAP vendors
- SAP CRM remains in use for all scenarios, with ongoing costs not factored into the TCO

Maintenance and Upgrades Assumptions

Key assumptions for maintenance and upgrades include:

- SAP BCM maintenance fees are assumed to be 22 percent of product license costs
- Non-SAP vendor market average maintenance fees are assumed to be 18 percent of product license costs

- Fully-loaded labor rates for internal IT staff are included and scaled through each scenario as maintenance requirements increase

Implementation Assumptions

Key assumptions for implementation costs include:

- Basic implementation services (installation, configuration, SAP CRM integration, test and support)
- Custom professional services support to assist with application development and integration with quality monitoring, workforce management, customized reporting and additional applications
- Fully-loaded labor rates for internal IT staff are included and scaled through each scenario as maintenance requirements increase

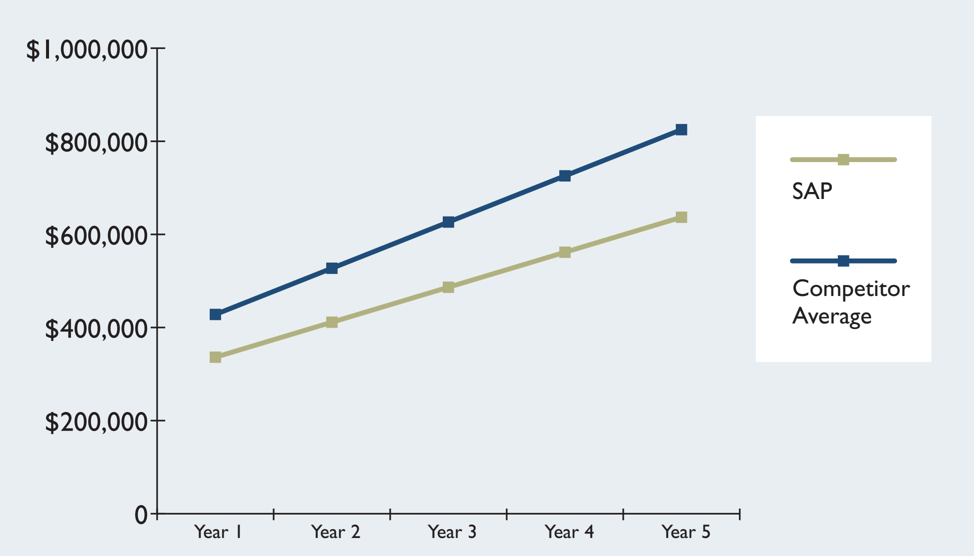
Use Case Scenario One (100 Seats, Australia)	
Country	Australia
Seats	100
Current CRM System	SAP CRM
Current Contact Center Solution	Nortel private branch exchange (PBX) with basic automatic call distribution (ACD) queues and reports (Nortel PBX also used in office telephony)
New Contact Center Platform	SAP BCM and competitors' contact center solutions evaluated, including those of Aspect, Avaya, Cisco, Genesys, and Interactive Intelligence.
Functionality	Inbound calls and e-mails, skill-based routing, agent soft phone, supervisor tools/soft phone, agent presence services, IVR, online monitoring and reporting, phone plus e-mail channel integration with SAP CRM and ability to test on site.

The TCO for SAP versus the competitive average for comparable communications platforms is discussed below.

- Total first-year costs for the SAP BCM are AU$336,200 versus AU$428,000 for the non-SAP solution, representing a savings of 21 percent to SAP's favor. This favorable position extends to the three- and five-year TCO savings as well, with a 22 percent savings at the three-year mark and 24 percent savings in the latter period.
- The total five-year TCO for SAP BCM is AU$636,776, while the non-SAP solution comes in at AU$824,960.

- SAP BCM comes in as more cost-effective both in the initial implementation phase, as well as the ongoing costs associated with maintenance and upgrades.
- Cost savings with SAP BCM increase over time, from year one through year five.

Use Case 1: 100 Seats, Australia
SAP BCM versus Competitor Average N-Year TCO

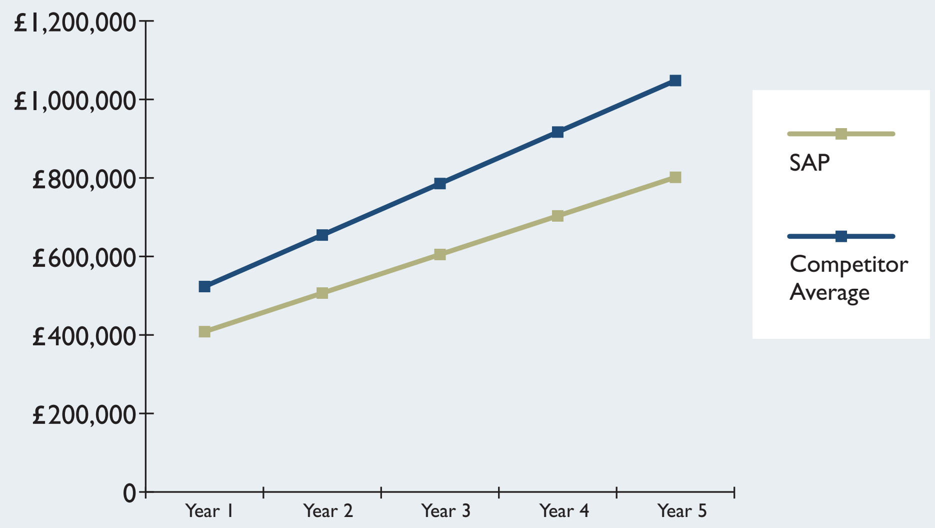


Use Case Scenario Two (200 Seats, U.K. and South Africa)	
Country	United Kingdom (U.K.) and South Africa
Seats	200 (70 U.K. and 130 South Africa)
Current CRM System	SAP CRM
Current Contact Center Solution	Two Siemens PBX's (one per site) with basic ACD queues and reports
New Contact Center Platform	SAP BCM and competitors' contact center solutions evaluated, including those from Aastra, Avaya, Cisco, Genesys, Interactive Intelligence, and Siemens.
Functionality	Inbound calls and e-mails, skill-based routing, agent soft phone, supervisor tools/soft phone, IVR, agent presence services, online monitoring and reporting, phone and e-mail channel integration with SAP CRM. Virtual contact center environment: two physical locations and home/remote agents connected via asymmetric digital subscriber line (ADSL) connection to the U.K. office and an ability to test on site.

The TCO for a two-location, 200-seat distributed contact center is outlined below.

- First-year costs for SAP BCM are £408,378 versus £523,333 for the non-SAP solution, representing a savings of 22 percent in SAP's favor. Cost savings with SAP BCM extend to the three- and five-year TCO as well, with 23 percent savings in year three and 24 percent in year five.
- The total five-year TCO for SAP is £801,578, while that of the non-SAP solution is £1,048,101.
- SAP BCM comes in as more cost-effective both in the initial implementation phase, as well as the ongoing costs associated with maintenance and upgrades.
- Cost savings with SAP BCM increase over time, from year one through year five.

Use Case 2: 200 Seats, UK and South Africa
SAP BCM versus Competitor Average N-Year TCO

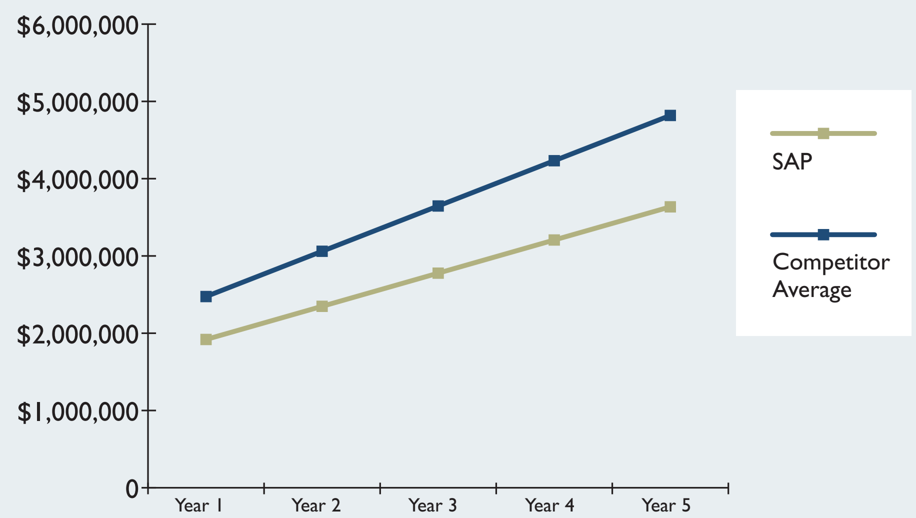


Use Case Scenario Three (500 Seats across Five Locations, USA)	
Country	USA
Seats	500 seats across five locations
Current CRM System	SAP CRM
Current Contact Center Solution	Cisco IP Contact Center or IPCC (Cisco Call Manager for office telephony)
New Contact Center Platform	SAP BCM and competitors' contact center solutions evaluated, including solutions from Aspect, Avaya, Cisco, Genesys, Interactive Intelligence, and Siemens. • Inbound calls, e-mails, Web forms and chat channels • Outbound call campaigns • Skill-based routing and e-mail response management • CRM activities/workflow routing • Agent soft phone and supervisor tools/soft phone • Call recording • IVR • Voicemail • Online monitoring and reporting • Phone and e-mail channel integration with SAP CRM
Functionality	Virtual contact center environment: five physical locations need to be centrally managed, monitored and reported. Contact center sites are connected with a multi-protocol label switched (MPLS) data network with an ability to test on site.

The TCO for a 500-seat, U.S.-based, distributed contact center with five domestic locations is shown below.

- Total first-year costs for SAP BCM are $1,919,000 versus $2,474,550 for the non-SAP solution, yielding a first-year savings of 22 percent for SAP BCM. This savings extends to the three- and five-year TCO periods as well, with 24 percent and 25 percent savings, respectively.
- The total five-year TCO for SAP BCM is $3,635,400, while the non-SAP solution comes in at $4,818,306.
- SAP BCM comes in as more cost-effective both in the initial implementation phase, as well as the ongoing costs associated with maintenance and upgrades.
- The initial implementation cost savings with SAP BCM are as high as 42 percent, driven by the ease of implementation and pre-built integration with SAP CRM. Standard maintenance fees for SAP BCM are higher than the competitive average, but overall costs favor SAP due to the reduced need for internal IT staff to support the SAP BCM product.
- Cost savings with SAP BCM increase over time, from year one through year five.

Use Case 3: 500 Seats across 5 locations, USA
SAP versus Competitor Average N-Year TCO



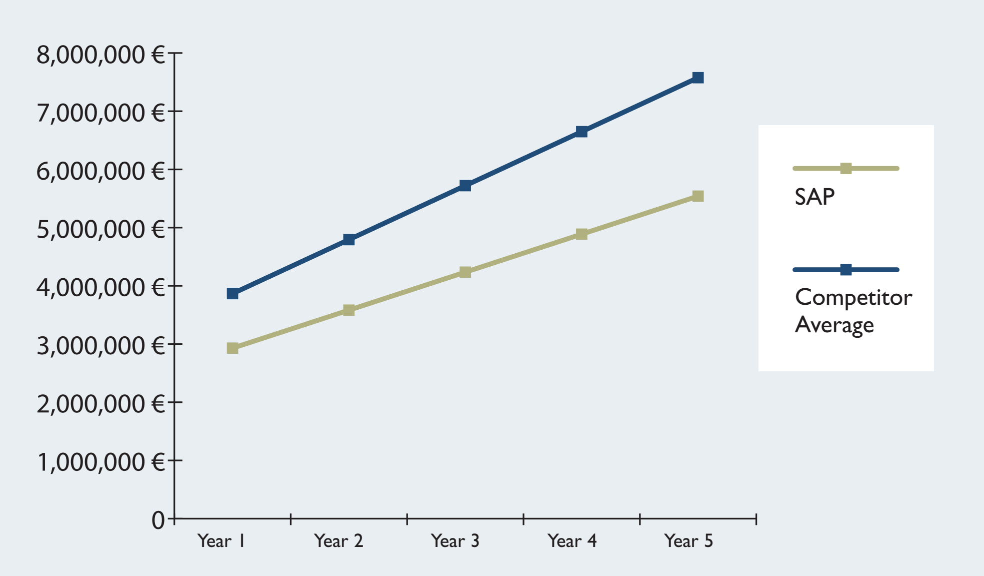
Use Case Scenario Four (1,000 Seats across Six Locations, Europe)

Country	Europe
Seats	1,000 seats across six locations in Europe
Current CRM System	SAP CRM
Current Contact Center Solution	Cisco IPCC
New Contact Center Platform	SAP BCM and competitors' contact center solutions evaluated Key competitors: Aspect, Avaya, Cisco, Genesys, Interactive Intelligence, Siemens. • Inbound calls, e-mails, Web forms and chat channels • Outbound call campaigns • Skill-based routing and e-mail response management • CRM activities/workflow routing • Agent soft phone and supervisor tools/soft phone • Call recording • IVR • Voicemail • Online monitoring and reporting • Phone and e-mail channel integration with SAP CRM
Functionality	Virtual contact center environment: two physical locations need to be centrally managed, monitored and reported. Fully redundant contact center architecture: contact center solution deployed in two physically separated locations, backing up each other. Contact center sites are connected with MPLS data network, with an ability to test on site.

Below, the TCO is shown for a six-country, 1,000-seat contact center with a virtual architecture.

- Total first-year costs for SAP BCM are €2,929,000 versus €3,866,000 for the Non-SAP solution yielding a first-year savings of 24 percent for the SAP BCM solution. Cost savings extend to the three- and five-year TCO savings as well, with 26 percent and 27 percent savings, respectively.
- The total five-year TCO for SAP BCM is €5,540,920, while the Non-SAP solution comes in at €7,575,920.
- SAP BCM comes in as more cost-effective both in the initial implementation phase, as well as the ongoing costs associated with maintenance and upgrades.
- The initial implementation cost savings with SAP BCM are as high as 43 percent, driven by the ease of implementation and native integration with SAP CRM. Standard maintenance fees for SAP BCM are higher than the competitive average, but overall costs favor SAP due to the reduced need for internal IT staff to support the SAP BCM product.
- Cost savings with SAP BCM increase over time, from year one through year five.

Use Case 4: 1000 Seats across 6 locations in Europe
SAP versus Competitor Average N-Year TCO



SAP BCM ADVANTAGE

The SAP BCM advantage over competitive offerings successfully addresses the main challenges faced by contact centers seeking to lower the TCO of their contact handling technology. The SAP BCM enables contact centers to counteract cost drivers, contain cost creep, and deliver business value to the enterprise and its customers.

SAP BCM customers utilizing SAP CRM can save, on average, 25-30 percent in costs over three to five years compared to other competing solutions, with greater savings seen in larger and more distributed contact centers. Product license costs are roughly comparable for smaller centers but are priced more competitively for larger, more complex configurations.

For larger implementations, economies of scale can be extracted by integrating SAP CRM to a SAP contact center platform pre-build to accept the interface. This feature also enables the implementations to be executed much faster than competitive vendors. SAP BCM implementations costs, therefore, are significantly lower (35 to 40 percent) than competing solutions. Additional savings are generated from internal IT staff requirements to maintain and upgrade a solution that is simpler to use and interfaces seamlessly to the SAP CRM system.

A second SAP BCM advantage is found in the cost containment opportunities it presents. In an all-IP environment, there is no need to buy additional proprietary hardware, as may be required with other non-SAP solutions. In very large centers, this is a significant savings. SAP enables a soft phone for each agent as part of the implementation, eliminating the need for a desk phone at each station. Though not part of the overall TCO, the IP soft phone will generate call expense savings as well by routing calls between contact center locations across IP trunks at little cost. In a distributed virtual environment with home-base agents, for instance, this can save significant corporate expense.

Third, the standard interfaces of the SAP BCM allow internal IT staff to quickly add third-party functions if programming skills are up to the task, and thus may derive additional savings over hiring professional systems integrators.

The SAP BCM advantage is also evident in the business value the platform lends to the contact center employing this solution. Customer satisfaction can be increased through skill-based routing rules that ensure a qualified agent is found to resolve a customer's issue with their first call. Screen pops on incoming calls help agents identify customers faster, reducing wait times and call handle times, thus improving agent productivity. The real-time monitoring and reporting capabilities provide supervisors and management with performance feedback data to constantly drive service improvements. The analytics functionality in the SAP BCM combines with the analytics module of the SAP CRM module to provide a more complete view of the customer and how best to meet their needs.

A number of these advantages are explored further in the following two case studies of actual SAP BCM customers.

SAP CASE STUDIES

Sysco: Improving Cost Structure and Agent Productivity

Sysco is a sales, marketing and distribution leader in the delivery of food products to restaurant, healthcare and education facilities. The company generated $37 billion in revenues for the fiscal year 2010. The company maintains 180 operating locations in North America and Europe, and employs more than 45,000 employees.

An example of a typical organization looking to advance its IT infrastructure to meet the growing demands of its business, Sysco's existing communications platform was growing increasingly expensive to maintain. The company was also looking at ways to improve agent productivity as a means to reduce average agent costs. In 2009, Sysco's IT planners and SAP met to discuss how the SAP BCM platform could aid Sysco and support its cost containment and productivity goals.

Sysco was also evaluating competing solutions from Aspect and Avaya. After multiple meetings with representatives from each company, they eventually sat down with SAP staff and devised a SAP BCM implementation plan that would consolidate inventories of 100 Sysco warehouses into a platform accessible by 200 call agents in the service of customers. The biggest issue for Sysco in selecting SAP was its ability to provide measurable business benefits, namely:

- Sysco was able to support the communications platform itself, reducing the need for external IT support, generating savings on maintenance and upgrade costs.
- Native integration to the existing CRM platform saved a potential CRM upgrade or replacement costs.
- The ability to use off-the-shelf IP phones and headsets saved 40 percent over a competing vendor's bid, which required use of their custom branded equipment.
- Call handle times improved by more than 10 seconds per call, as intelligent skill-based routing sends the right call to the proper agent with no need for a cold transfer, thus increasing agent productivity.
- Detailed and comprehensive performance reporting aided agent feedback training and service quality.

Competence Call Center: Improving Agent Productivity, Costs and Quality

A large European call center needed to improve its operating performance while continuing a focus on service quality to its customers. The company wanted to make operational improvements across 10 locations, supporting 3,000 agents and an annual call volume of about 1 million.

In business since 1998, outsourced contact center Competence Call Center (CCC) supports multiple industries with inbound call capture, outgoing call campaigns, e-mail communication and call center training, and provides multi-lingual support in seven countries. The focus of their business is on call quality, fast answer times and one-call resolution. But CCC had legacy telephone systems in place and agents spread across Europe, many of them home-based.

The company examined one non-SAP communications solution, but its implementation timeframe of more than a year was not practical for CCC. It needed its business upgraded as quickly as possible, and the SAP BCM was the solution to meet this one critical variable.

- The implementation timeframe of four months met CCC's expectation and business need.
- SAP's platform was easy to integrate with third-party applications.
- Call routing between locations on IP trunks created a cost savings of approximately €2000 per month.
- IP soft phones eliminated the need for agent stations, saving, on average, €500 per station.
- Intelligent IVR improves call answer times by up to 20 seconds.
- Screen pops with incoming automatic number identification (ANI) supported by CRM improved customer recognition time by up to 30 seconds, greatly improving customer service quality.
- CCC is able to manage the SAP BCM with internal staff without the need for external support.
- CCC considers the five nines reliability of the SAP BCM hard to beat, as they must be online all the time.
- As a quality-based call center, agent monitoring and reporting was a key attribute of the SAP BCM for continued agent training and skill development.

CONCLUSION

Adopting a new contact center solution starts with a thorough examination of the strategy and goals a company considering the change is looking to achieve. Second, it involves selecting the right business partner. Choosing that partner requires an investigation of not just their product, but what else the partner brings to the table in terms of support and how their product can or cannot aid the achievement of the customer's strategic goals.

SAP and its SAP BCM communications platform, when integrated with the SAP CRM system, provide substantial functionality and business advantage to a purchasing client. When challenged with the need to deliver a lower TCO, organizations choosing SAP BCM can feel confident about their choice. The reduction in need to invest in additional hardware and the platform's flexibility to integrate with other SAP and non-SAP applications provide significant cost advantages over the long term. With the SAP CRM system appended to SAP BCM, its business value accentuates improved customer satisfaction and increased performance of the sales, service, and marketing functions. This ease of integration also provides a cost benefit when considering the reduced IT overheads, and therefore cost involved in maintenance and support.

In this TCO analysis, the largest cost differential results from the higher costs associated with implementing and integrating SAP's competitors' contact center systems with SAP CRM, as well as their higher ongoing maintenance and support overheads. The varying cost structure of these elements drives the TCO variance between SAP BCM and competitors' solutions.

APPENDIX 1: TCO YEAR-BY-YEAR SUMMARY DATA

TCO comparison - Use Case 1	Year 1		Year 2		Year 3		Year 4		Year 5	
100 seats, Australia (all costs in AUD)	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average
Product license costs	$205,200	$218,000								
Implementation costs	$131,000	$210,000								
Maintenance and Upgrades			$75,144	$99,240	$75,144	$99,240	$75,144	$99,240	$75,144	$99,240
Total Cost	$336,200	$428,000	$75,144	$99,240	$75,144	$99,240	$75,144	$99,240	$75,144	$99,240
N-year TCO	$336,200	$428,000	$411,344	$527,240	$486,488	$626,480	$561,632	$725,720	$636,776	$824,960
N-year % cost savings	21%				22%				23%	

TCO comparison - Use Case 2	Year 1		Year 2		Year 3		Year 4		Year 5	
200 seats, UK + South Africa (all costs in GBP)	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average
Product license costs	£265,000	£284,400								
Implementation costs	£143,378	£238,933								
Maintenance and Upgrades			£98,300	£131,192	£98,300	£131,192	£98,300	£131,192	£98,300	£131,192
Total Cost	£408,378	£523,333	£98,300	£131,192	£98,300	£131,192	£98,300	£131,192	£98,300	£131,192
N-year TCO	£408,378	£523,333	£506,678	£654,525	£604,978	£785,717	£703,278	£916,909	£801,578	£1,048,101
N-year % cost savings	22%				23%				24%	

TCO comparison - Use Case 3	Year 1		Year 2		Year 3		Year 4		Year 5	
500 seats across 5 locations, USA (all costs in USD)	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average
Product license costs	$1,405,000	$1,588,550								
Implementation costs	$514,000	$886,000								
Maintenance and Upgrades			$429,100	$585,939	$429,100	$585,939	$429,100	$585,939	$429,100	$585,939
Total Cost	$1,919,000	$2,474,550	$429,100	$585,939	$429,100	$585,939	$429,100	$585,939	$429,100	$585,939
N-year TCO	$1,919,000	$2,474,550	$2,348,100	$3,060,489	$2,777,200	$3,646,428	$3,206,300	$4,232,367	$3,635,400	$4,818,306
N-year % cost savings	22%				24%				25%	

TCO comparison - Use Case 4	Year 1		Year 2		Year 3		Year 4		Year 5	
1000 seats across 6 locations, Europe (all costs in EUROS)	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average	SAP	Competitor Average
Product license costs	€ 2,149,000	€ 2,486,000								
Implementation costs	€ 780,000	€ 1,380,000								
Maintenance and Upgrades			€ 652,780	€ 927,480	€ 652,780	€ 927,480	€ 652,780	€ 927,480	€ 652,780	€ 927,480
Total Cost	€ 2,929,000	€ 3,866,000	€ 652,780	€ 927,480	€ 652,780	€ 927,480	€ 652,780	€ 927,480	€ 652,780	€ 927,480
N-year TCO	€ 2,929,000	€ 3,866,000	€ 3,581,780	€ 4,793,480	€ 4,234,560	€ 5,720,960	€ 4,887,340	€ 6,648,440	€ 5,540,120	€ 7,575,920
N-year % cost savings	24%				26%				27%	

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