

Getting SaaS In Pharma

How SaaS CRM Technology
Offers a Lifeline to Today's Beleaguered
Pharmaceutical Companies



Abstract

“SaaS has proven itself cost-effective while delivering against industry requirements in many sectors...this gives pharma companies more choices, which is always a good thing,” says Dale Hagemeyer, vice president, Gartner Group

The pharmaceutical industry is at the apex of major changes – from new government regulations to heightened consumerism and market saturation. Consequently, the entire industry is experiencing a strategic shift in all forms of operations including product development, marketing, sales management, and technology. One of the biggest shifts is in how companies are selling their products and the technologies used to support these sales processes. Outdated client/server systems still dominate the market but they are proving inadequate, expensive, and inflexible – sometimes serving more as a hindrance than a help. Pharmaceutical companies need sales management technology that is better, faster, and cheaper in order to pull out from their revenue slumps. Software as a Service (SaaS) is the answer. It's a new way of delivering advanced sales-centric applications like the most popular type, customer relationship management (CRM) software. Because it is built on a multitenant architecture, SaaS technology allows software vendors to provide applications that are flexible, fast, specialized, and much less expensive to deploy and maintain. It's the lifeline that today's drowning pharmaceutical companies need. The following paper discusses the inherent problems facing the industry, defines SaaS in detail, and shows how this new technology can help pharmaceutical companies increase revenue and market share.

Introduction

High-volume, blockbuster drugs have fueled the pharmaceutical industry's growth over the past 15 years. But, with increasing uncertainty about the ROI of primary care drug development under today's turbulent market and regulatory conditions, big pharma is looking for additional avenues of growth. Add to this the fact that the “arms race” is officially over, and executives are finding it harder than ever to increase revenue. Hiring more sales reps no longer translates into higher sales. Worse still are the evaporating budgets – many slashed 10, 20, even 30% or more. Clearly, pharmaceutical companies need to replace the inefficient processes, structures, and technologies that have them anchored in waters filled with sleek, fast-moving predators and hungry bottom feeders.

Pharmaceutical companies – particularly the medium and large-sized organizations – can see the writing on the wall. They know that it's paramount to restructure their businesses so they are no longer reliant on a mainstream best-seller product whose success can be quickly undermined by patent expiration and lower-cost generics. Instead, they require new strategies such as investing in the development of specialty drugs – products that are difficult to replicate and more likely to sell at a premium. Think Shire Pharmaceuticals and its Attention Deficit Hyperactivity Disorder (ADHD) product line. Shire's well-prescribed ADDERALL XR® reached record sales in 2006 and helped the company capture over 28% of the ADHD market. The company's 2006 revenues topped \$1.79 billion.¹

In addition to investing in specialty drug sales, pharmaceutical companies need to refocus on other ancillary commercial groups within their organizations such as managed markets and key opinion leader (KOL) management teams to help stimulate revenue growth. Each of these commercial “subgroups” – defined as all of the pharmaceutical groups that do not sell to primary care physicians (specialty



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sales, managed markets, and KOL managers) – have had increasingly larger roles in generating revenues as of late. Indeed, executives are starting to see the incredible potential that these previously overlooked commercial channels offer.

Resurrecting Overlooked Commercial Channels

Until recently, these subgroups have remained relatively unnoticed and received relatively little in terms of technology support. This is especially true in the area of customer relationship management (CRM), according to a Gartner Group research report and many life science industry analysts.

“Even though there has been a significant rise in specialty care sales forces and other smaller sales teams outside the primary care area over the last five years, technology hasn’t caught up yet,” says Accenture’s Life Sciences Partner, Shawn Roman.

So while the primary care sales force has enjoyed the latest and greatest CRM technology to help them efficiently target primary care physicians, specialty care reps, for example, have been stuck using tools that are designed to support the one-to-one selling model of the primary care sales team. These client/server CRM systems do not offer the unique features and functionality required by, say, a managed market account executive or a KOL manager. As an example, formulary position management is not a function available in most traditional CRM systems but it’s vital for managed market AEs who are on the front lines vying for a better formulary position. Specialty care reps need reimbursement information readily available but this data is not easily accessible through most existing CRM systems. KOL managers need to fully understand each physician’s sphere of influence. Generalist CRM systems simply don’t offer these types of unique features that empower smaller commercial teams to succeed. So, they’re stuck – it’s the classic square peg in a round hole problem.

And because the expensive client/server application already installed is not useful to smaller commercial channels, the system does not get used. Instead, teams waste time with grossly inefficient sales methods. For example, hospital reps may target physicians by “walking around” – literally. They walk to the operating room in a hospital and look at the names on the board. They walk to the emergency department and look at the names on the board. They walk up to the hospital pharmacist and ask who is ordering the most of Drug A or Drug B. They walk outside for a break...etc. To remedy the problem, some pharmaceutical IT departments have custom-developed expensive systems to accommodate these subgroups’ unique needs, but home-grown systems have only solved some of the problems and are pricey to build and maintain. Still other companies expect their reps to work with spreadsheets, printed reports, and Filofaxes. Not only are these tools little more than data repositories, but they also do not allow for the best practice sharing that’s so important in today’s marketplace.

The reason so many commercial channel subgroups are denied proper technology comes down to money. Prevailing technology makes it extremely expensive to build an application that meets the highly specialized needs of such relatively small groups. Depending on the size of the company, a channel like managed markets could range in size anywhere from only 10 to 200 employees – typically a very



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small percentage of the overall organization. Specialty care and KOL teams are equally minuscule by comparison. With such a low number of users, technology vendors have not been willing to make the necessary investment in research and development to design specialized applications. It simply has not been profitable.

“It made financial sense to tackle the larger primary care market first, but a lot has changed – both in terms of the industry and in terms of the technology now available. It has always been too expensive to develop a specialized product for a small group of users,” says Accenture’s Roman.

In addition to not being profitable to vendors, deploying specialty applications hasn’t been cost-effective for the pharmaceutical companies themselves. That’s because the applications would have to be built using expensive client/server technology...and round and round it goes. It’s a vicious circle – given the client/server technology, vendors are not going to build these specialized applications. Worse yet, if they built them, the pharmaceutical companies couldn’t implement them cost-effectively anyway. It’s a technology logjam.

Pharmaceutical companies have had few solid alternatives. Choice A is to keep their existing client/server technology but custom-build new functionality into the system to satisfy the needs of specialty sales groups. This requires a pricey, time-consuming upgrade to the entire system for some companies. For others, it would just require a new release of the software, but this still has to get distributed to all the remote users which can be expensive. Either way, every time a change is made for a smaller sales team, the same change must be made to the entire user network, costing the company thousands of dollars. Choice B is to provide the subgroups with an altogether different software application that’s custom-designed just for their needs but that doesn’t integrate with the rest of the system (i.e., openQ or SteepRock for KOL management or Excel spreadsheets to manage formulary data). Clearly there are huge disadvantages to creating islands of information with little-to-no interaction with the rest of the organization.

Today, there’s a better choice – Software as a Service or SaaS.

SaaS is the miracle drug to remedy pharma’s ailing sales performance and shrinking commercial budgets. SaaS technology enables the development of CRM applications that can scale up or down depending on the number of users and that are flexible enough to be customized for small groups of specialized salespeople such as specialty care reps, managed markets account executives, and key opinion leader managers. Simply put, SaaS makes the development of highly specialized products affordable to the mass market – something never before possible. SaaS technology has fundamentally changed the economics of deploying a powerful yet tailored application to smaller groups. It allows companies to cut their budgets, streamline many sales management processes, and provide users with flexible, customizable, usable software. Simply put, SaaS is better, faster, and cheaper.

SaaS Defined

SaaS is a software application delivery model where the software vendor develops a web-native software application, and hosts and operates (either independently or



Tenants on a multitenant system can operate as though they have an instance of the software entirely to themselves which is completely secure and insulated from the impact by other tenants.

through a third party) the application for use by its customers over the Internet. Customers pay not for owning the software itself but for using it – an important distinction. The term SaaS has become the industry preferred term, generally replacing the earlier terms Application Service Provider (ASP), utility computing, and on-demand computing.

SaaS applications are generally priced on a per-user basis, sometimes with a relatively small minimum number of users, and often with additional fees for extra bandwidth and storage. SaaS revenue streams to the vendor are therefore lower initially than traditional software license fees, but are also recurring and therefore viewed as more predictable – much like maintenance fees for licensed software.

For true SaaS capabilities, the software code must be written using “multitenancy” principles – enabling multiple users across multiple organizations to interact with a single system installation. In addition, to provide all of SaaS’s potential for ease of customization and use, the code should be written to separate the underlying infrastructure from the “metadata” with which users tailor the system to their own needs. In this fashion, the system can support many different user interfaces and system interfaces, and the underlying code can be updated or revised without affecting any one user.

The term “SaaS” is often abused by vendors who frequently use it to refer to any application that can be accessed over an Internet connection. In actuality, this is only a hosted solution because it is not built according to multitenant principles. SaaS has a distinct meaning that’s essential to understanding its role in an application portfolio. With SaaS, there’s just one code base for the software, used by all customers, hence, a multitenant architecture. To illustrate the difference between SaaS’s multitenant architecture and a client/server or hosted architecture, think of a neighborhood of individual houses versus an apartment complex. In the neighborhood, each homeowner has his own yard to mow, his own plumbing to maintain, his own electrical system to operate, and his own walkway to clear. This is a typical client/server infrastructure where each customer has its own dedicated server that runs the application.

On the other hand, an apartment complex’s lawn, plumbing, electrical system, and walkway are shared by all of the apartment’s multiple tenants. This is multitenancy, and is the reason that SaaS is so extremely cost-efficient to deploy and maintain. The customer has no hardware to purchase, install, or maintain. As such, SaaS applications are built on a shared infrastructure, where all servers, networks, and functionality are managed from a central location. The application is then accessible through any Web browser – think Google™ for business. The host handles all maintenance and upgrades to the system while SaaS applications are delivered to the customer as a reliable service over the Internet.

There are many important advantages of multitenancy, impacting different groups in different ways.

For the SaaS software vendor, multitenancy provides the ability to run multiple customers on a single software instance installed on multiple servers. Operations can be performed at the level of instance, tenants, and users within a tenant. This is done to increase resource utilization by allowing load balancing among tenants, and to reduce operational complexity and cost in managing the software to deliver the service. For example, a patch can be easily rolled out to all tenants by patching



the single instance instead of many. Everyone's data can be backed up in one operation by backing up the single instance. The operations costs are much lower, therefore, due to economies of scale and increased opportunities for automation.

For the SaaS customer (a tenant), multitenancy is transparent. The customer seems to have an instance of the software entirely to himself. Most importantly, the customer's data is secure relative to other customers' data and customization can be employed to the degree the application supports it without regard to what other tenants are doing. The tangible manifestations of multitenancy are lower costs for the service, and better service levels because it's easier for the service provider to deliver those levels of service. The tenant also has the ability to manage the system from his perspective (for example to manage security access among users).

For the SaaS user (one seat on the tenant's account), multitenancy is also transparent. Users just see the application as a user of any application would, but has the advantage of being able to change fields or functionality quickly and inexpensively.

SaaS – Pharma's Lifeline in Turbulent Waters

Right now, SaaS seems to be everywhere. The CRM blogs, trade publications, conference round tables – pundits from all walks of life are conjecturing over SaaS and its possibilities. One can easily see why. According to a Gartner Group research study, applications delivered via the SaaS model will grow to over 25% by 2011. The most well-known SaaS application company, Salesforce.com, has caused the CRM category to have the highest rate of SaaS adoption with 12% of all CRM deployments in 2006 delivered via SaaS technology. Research investment firm, TripleTree, estimates that over 50% of CRM revenue will be SaaS-based by 2011.² Right now, technology companies are the largest users of SaaS CRM applications followed closely by financial services organizations.³ But, there's another industry nipping at its heels.

The pharmaceutical industry – the first to arm its sales teams with automation software in the 1980s – is next up for widespread adoption of SaaS CRM technology. The industry is floundering and looking for a fast, inexpensive way out...a technology that will help them realign their organizations to succeed. SaaS delivers it all – the technology makes it possible for vendors to finally develop specialized applications that are also flexible, easy to maintain, and cost effective. Here's a look at some of the ways a well-designed SaaS CRM application can be the lifeline the pharmaceutical industry is searching for in today's turbulent market.

Unbeatable Application Customization

SaaS applications are, by design, extremely flexible. Customizing applications to accommodate the various, unique needs of all of the pharmaceutical sales teams – primary care, specialty care, managed markets, and KOL managers – is easy and, therefore, inexpensive. Technically speaking, this is made possible because the metadata layer allows for customization yet the program is shared over the Web with the whole group so any changes can be shared with all the appropriate users in a matter of minutes. Customers can create new workflow policies, change validation rules, refine user interfaces, add users, change territory definitions,

Industry analysts estimate that over 50% of CRM revenue will be SaaS-based by at least 2011.



SaaS users can create new workflow policies, change validation rules, refine user interfaces, add users, change territory definitions, change hierarchies, extend the database with new tables and fields, and more in minutes rather than weeks.

change hierarchies, and extend the database with new tables and fields with ease. Compare this to a traditional client/server or hosted CRM application that requires at least five to ten steps and three or more months to accomplish the same types of changes. The cost differential is also staggering.

Scalability for 1 to 1,000,000

The misconception that SaaS is better suited for the needs of smaller companies is based on one simple fact: SaaS applications are the first and only applications affordable to a smaller group of users. But, the argument stops there. SaaS applications are equally as useful to a large user base. In fact, because true SaaS technology is, by definition, built on a shared infrastructure, it can support thousands upon thousands of users and no one customer will impact the performance of another.

Pharmaceutical companies get the best of both worlds. As companies work to restructure their sales processes to cluster smaller commercial sales channels together, a SaaS CRM tool allows the company to affordably accommodate the unique needs of each group, including the large primary care sales force, plus integrate with the rest of the sales and marketing organization.

A New Standard in Business Flexibility

The SaaS combination of easy customization and extreme scalability affords pharmaceutical companies unique business flexibility, especially when experimenting with today's advanced sales and marketing initiatives such as video detailing, eDetailing, alternative sampling programs, and closed-loop marketing (CLM). Due to the inflexibility of their current client/server systems, companies have been forced to trial these new strategies in a vacuum, casting doubt on their effectiveness and making it impossible to truly measure their impact. The industry simply cannot create the 'rep of the future' while creating multiple information silos. With SaaS, it is fast and easy to add new groups of users to the overall system so these experiments can be carried out in realistic settings. Plus, the deployment of an integrated new group does not affect all the users already on the SaaS CRM system.

These capabilities are as liberating as they are strategically important to business operations.

Overall, the flexibility of SaaS can be measured two ways: 1) in what it empowers a company to do, and 2) in what it precludes a company from **having** to do. SaaS customers don't ever have to buy or upgrade servers. They never have to do any system monitoring or tuning. And they never have to make laborious upgrades when the users need to change the functionality. The net gain of such flexibility is a better use of valuable time and resources.

Highest Usability Ratings

SaaS technology enables software developers to design applications for smaller, highly targeted user groups at a fraction of the cost of a client/server application. This is largely because the same flexibility afforded SaaS customers is available to SaaS vendors. The ability to change the application "on the fly" leads to dramatically faster and more iterative product development cycles, making it cost-effective to develop specific functionality for smaller groups of users. This is key because it makes the software **relevant** to the user (something it was not necessarily before).



Verticals onDemand, for example, has designed an entire suite of SaaS CRM applications for each commercial channel within the pharmaceutical company. Each product edition has been finely tuned to the needs of each type of seller. Rather than overwhelm users with hundreds of features they don't need and overly complicating the program, Verticals onDemand analyzed precisely what each rep needed to compete effectively and included just those features in its application. Any extra features can be quickly added to the system at any time and deployed to one, a few, or all of the users.

Another reason why SaaS is considered such a highly usable technology is its Web services model of interacting with data sources. In the case of Verticals onDemand, its VBioPharma® suite has pre-built interfaces to data partners including Health Market Science (King of Prussia, PA) for healthcare-provider data, MediMedia Information Technologies (Yardley, PA) for formulary information, and The TerrAlign Group (Ashburn, VA) for geographic territory-planning data. Each of these data streams is critical to pharmaceutical sales effectiveness.

As Reliable & Secure as the Web

SaaS applications are highly reliable. With a shared infrastructure, the redundancy is often better than any one customer could provide on its own. The overall system reliability ultimately comes down to the reliability of the vendor just as with any software package – SaaS or otherwise. The Verticals onDemand SaaS Pharma CRM application is 100% redundant and annual downtime is measured in hours – not days or weeks. Again, because this is a multitenant system, tenants can operate as though they have an instance of the software entirely to themselves that is completely secure and insulated from all other tenants.

The same is true when it comes to security, which is critical with any application delivered over the Web. Whether you are a hosted provider, client/server vendor, or a SaaS vendor...security comes down to the integrity of the vendor's people and processes. Verticals onDemand leverages the security features of Force.com® from Salesforce.com – a company that has made major investments into security.

Cheaper Both Up-Front & Over Time

SaaS applications are priced on a per user, per month basis with zero up-front costs. There is no software or hardware to purchase. There are no maintenance fees or charges for upgrades. (Compare that to the experience of one large pharmaceutical company that recently spent \$6 million over 18 months on an upgrade of their legacy client/server system). It's a predictable, recurring cost depending solely on the number of users.

The savings in up-front costs for SaaS applications are well-documented and widely accepted. But it's the ongoing savings that make SaaS the only viable alternative for many pharmaceutical organizations today. Here's why.

The leading SaaS CRM applications have been built with usability and flexibility in mind for every type of user, including administrators. This means that it requires less people to do more when maintaining a SaaS CRM system. In fact, it is not unusual to need just one full-time employee maintaining a SaaS CRM system for hundreds of users. Whether adding a field, changing field-level visibility, adding new users, or deploying new functionality, the cost differential versus traditional client/server is significant.

SaaS customers don't ever have to buy or upgrade servers. They never have to do any system monitoring or tuning. And they never have to make laborious upgrades when the users need to change the functionality.



The net result of operating a SaaS CRM application over a hosted CRM or traditional client/server CRM application comes down to increased sales effectiveness & decreased IT financial drain – both initially and over time.

The net result of operating a SaaS CRM application over a hosted CRM solution or traditional client/server CRM application comes down to vastly increased effectiveness of the sales force with vastly decreased IT financial drain – both up-front and over time. Based on combined ROI analyses from Gartner, Forrester, Yankee Group, and Verticals onDemand, a traditional client/server CRM application can cost a pharmaceutical company with 1,000 users \$5,800,000 in the first year versus only \$2,075,000 for a SaaS application. Ongoing, the SaaS application will also be much less costly to maintain and upgrade than the client/server application. See Figure 1 for a cost analysis breakdown.

Figure 1: Cost of Traditional Client/Server CRM vs. SaaS CRM (1,000 users)

Cost Component	Traditional Client/Server Pharma CRM		Software-as-a-Service Pharma CRM	
	Year 1 Cost	Ongoing Cost	Year 1 Cost	Ongoing Cost
Software Licenses/Subs	\$2,000,000	\$400,000	\$1,500,000	\$1,500,000
Server Hardware (planning, benchmarking, purchase, maintenance, upgrade for development, test, validation, and production environments)	\$1,000,000	\$250,000	Included	Included
System/Server Software (database middleware, OS purchase, upgrades and maintenance)	\$250,000	\$100,000	Included	Included
Software Upgrades/Patches	\$100,000	\$150,000	Included	Included
24/7 System Monitoring and Disaster Recovery	\$300,000	\$300,000	Included	Included
Proactive Performance Tuning	\$100,000	\$100,000	Included	Included
Application Configuration	\$500,000	\$150,000	\$250,000	\$50,000
End User Training	\$1,000,000	\$200,000	\$250,000	\$50,000
System Administration	\$450,000	\$450,000	\$75,000	\$75,000
Totals	\$5,800,000	\$2,100,000	\$2,075,000	\$1,675,000
Five Year Totals (Year 1 plus 4 Ongoing Years)	\$14,200,000		\$8,775,000	

Conclusion

No pharmaceutical commercial sales channel has to suffer the consequences of inadequate technology that doesn't fit the job any more. No more walking around hospitals, no more wasting hours searching for co-pay information, no more reinventing the wheel for every new account, and no more missed opportunities. SaaS technology is the tonic to heal the industry's sales wounds. And it couldn't have come at a better time for the pharmaceutical industry when everything is getting smaller (budgets, margins, and sales forces) and more specialized (products, treatments, and doctors). Pharmaceutical companies sinking under the weight of increased regulation, consumerism, specialization, and generics can

finally lighten their load and rise again. Unlike any technology before, SaaS enables the development of applications with incredible customizability, scalability, usability, and flexibility. And, it's much less expensive than alternatives.

Deliverance? Maybe. At the very least, it's one possible lifeline.

It would be wise to grab hold, like so many have done already.

Resources

¹ Annual Report and Accounts for the Year Ended December 31, 2006, Shire Pharmaceuticals, PLC.
http://www.shire.com/shire/uploads/reports/Shire_2006_annual_report_IFRS.pdf

² Spotlight Report entitled, "Sales, Marketing, and Service Convergence: How SaaS Ecosystems and Collaboration Tools are Redefining CRM," Prepared by TripleTree LLC – a research-based investment bank serving growth companies, sophisticated investors, and global acquirers. www.tripletree.com

³ CIO.com, "The Truth About Software as a Service," by Galen Gruman, May 21, 2007. <http://www.cio.com/article/print/109706>

About the author...

Verticals onDemand leverages the Salesforce platform to deliver onDemand customer relationship management (CRM) solutions for specific industry segments.

Founded by software industry veterans, the company combines deep industry domain expertise, CRM deployment experience, and Software as a Service (SaaS) operations savvy with the Force.com platform, the world's first multitenant, on-demand platform. With an initial focus on the life sciences industry, Verticals onDemand customers will achieve the fastest time to value through the deployment of fully functional CRM applications that are simple to deploy, inexpensive to operate, and provide a superior user experience.

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