

# Leveraging Advanced BI to Increase SaaS Success

A White Paper

**WebFOCUS**



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# Introduction

The market for Software as a Service (SaaS)-based solutions continues to grow. A recent report published by Gartner predicts that the total enterprise software revenue for SaaS delivery will reach more than \$12 billion dollars this year – up more than 20 percent over 2010 – and hit approximately \$21 billion dollars by 2015.<sup>1</sup> Additionally, IDC studies demonstrate how much faster the use of cloud solutions is growing, as compared to on-premise ones. The analyst firm forecasts an annual growth rate of more than 26 percent through 2013 for cloud computing – more than six times the growth they expect from traditional IT solutions.<sup>2</sup>

This trend is being driven by the critical requirements of today's IT organizations, whose primary goals are to increase resources and capacity – and deliver new features to meet evolving end-user needs – without investing in new infrastructure, training new employees, or purchasing new software. These, and the many other benefits SaaS delivers, result in more companies continuing to replace their on-premise software with SaaS applications.

This continuous growth has led new SaaS providers to flood the industry at a rapid pace, seeking to tap into these new opportunities. Many traditional enterprise software companies have jumped on the SaaS bandwagon, launching cloud versions of their products.

As a result, the competitive landscape for SaaS vendors has changed dramatically. While they used to find themselves competing – and winning – against on-site solution providers on the basis of low start-up costs and ease of implementation and administration, they now find themselves pitted against one another. Achieving and sustaining an edge has become far more challenging.

Joel York, author of the SaaS blog *Chaotic Flow*, states that one of the more effective ways for SaaS vendors to differentiate themselves in an increasingly overcrowded market is to create perceived uniqueness among existing and potential customers. York explains that, “if low cost advantage is the cake of SaaS, then Internet differentiation is the icing.”<sup>3</sup>

By incorporating such advanced features as business intelligence (BI) and business analytics into their offerings, SaaS providers can foster the creation and delivery of better, more complete, and more strategic solutions for their customers. With expanded capabilities that offer immeasurable value, they can expand their footprint, win more business, and drive new revenue.

In this white paper, we will discuss the types of reporting and analysis functionality that users of SaaS applications are looking for, and the BI capabilities SaaS vendors must incorporate into their solutions to successfully satisfy those demands. Along with some real-world successes, we will also highlight the WebFOCUS BI platform, and why it is the ideal choice for SaaS vendors seeking to extend their offerings with advanced BI features.

<sup>1</sup> Eid, Tom; Eschinger, Chad; Mertz, Sharon A.; Pang, Chris; Wurster, Laurie F. “Forecast: Software as a Service, Worldwide, 2010-2015, 1H11 Update,” Gartner Inc., June 2011.

<sup>2</sup> Gens, Frank. “IDC's New IT Cloud Services Forecast: 2009-2013,” IDC, October, 2009.

<sup>3</sup> York, Joel. “SaaS Model Economics 101: Competitive Advantage in Software-as-a-Service,” Chaotic Flow, 2009.

# The Needs of SaaS Customers and Their Solution Providers

As more SaaS solutions become available, users are demanding broader – and better – capabilities. One of the greatest needs is for business intelligence and analytics. Clients want, and need, to do more than just process and store the critical business information within their SaaS applications. They need to transform it into the kind of insight that will translate to strategic advantage.

While some SaaS solutions do include basic reporting features, and perhaps even a portfolio of static reports, few offer the kind of cutting-edge analysis functionality required to address the varied and diverse needs of large SaaS user bases. As a result, clients are somewhat hindered in their ability to tap into the information collected by the application, and leverage it to improve operational efficiency, increase customer service, and boost profitability.

In response to these evolving market requirements, many SaaS companies are enhancing their solutions with such functionality. For example, vendors want to empower users with the ability to:

- Launch reports and forms from a common environment
- Perform deep analysis of application data, as well as other data in the enterprise, while preserving appropriate levels of data security
- Save their own reports and analyses in their own private domains

In a recent *Cloud Computing Journal* blog post, “Improving the Business Value of SaaS Applications,” the author cites the ability to provide user-defined and ad hoc reporting as a key differentiator among SaaS solutions today. He adds that, “Instead of custom developing ‘ad hoc reporting’ capabilities within your SaaS application, it is better to link it with another SaaS reporting solution.”<sup>4</sup>

Working with a third-party BI provider will not only save a SaaS vendor the time, cost, and effort associated with building the needed reporting functionality in-house, but also ensure the delivery of best-of breed BI capabilities to customers.

Although they are important, feature sets are not all a SaaS solution provider needs to consider when selecting a BI platform. They must also look for a partner that offers:

- **Support for multi-tenancy** – True SaaS companies need to deploy a single storage structure that allows them to securely separate customer assets
- **Scalability** – The BI solution must scale to hundreds of thousands of customers as SaaS models must support large numbers of users and high volumes of transactions
- **Total cost of ownership (TCO)** – Many solutions become cost-prohibitive when deployed in SaaS environments due to their inability to scale in an economical manner
- **Data access** – Users must be able to perform reporting and analysis not only against data collected by the SaaS application itself, but also for any information maintained in on-site systems, as well as information available via public domains
- **Quality management** – While the accessibility of data is important, it is also critical to leverage advanced tools that help ensure the completeness, timeliness, and accuracy of that information
- **Customer self-service reporting** – SaaS vendors need intuitive tools that allow them to quickly and easily satisfy their own unique and specific information requirements

<sup>4</sup> Rajan, Srinivasan Sundara. “Improving the Business Value of SaaS Applications,” *Cloud Computing Journal*, February 2011.

# Extending the Value of SaaS Applications With WebFOCUS

The WebFOCUS platform is the ideal choice when it comes to extending SaaS applications with BI capabilities. It is superior to other reporting tools on the market today, because it delivers:

## **A Comprehensive Feature Set**

The broadest range of innovative, fully integrated features for reporting, analysis, and performance management provide SaaS users with unlimited options for accessing and interacting with information. WebFOCUS offers a wide array of tools, including dashboards and scorecards, data visualization, geographic information systems, OLAP, support for mobile devices, enterprise search, and dynamic report distribution, to address virtually any information need.

Additionally, WebFOCUS goes beyond the standard and static reports included with most SaaS applications, offering unique guided ad hoc technologies that make it easy for business users to generate their own custom reports by simply selecting parameters from drop-down menus. Those reports can then be saved to a personal domain directly from any custom or third-party portal environment.

WebFOCUS also provides innovative Active Technologies, which allow SaaS companies to embed analytical capabilities directly into reports and dashboards. Advanced features, such as the ability to sort and filter, calculate, and pivot data, are built right into the report. Users can manipulate information in an unlimited number of ways, without consuming data and application server resources – even when they are disconnected from the network. This not only provides customers with intuitive, cutting-edge analytical functionality, it decreases the costs associated with delivering such capabilities for the SaaS vendor.

## **Full Support for Multi-Tenant Environments**

SaaS vendors can deploy a single, shared instance of WebFOCUS using common code and data definitions that can be used by multiple clients. Each client's reporting and analysis applications, as well as their developers and users, will exist in a secured instance, so any other organization's assets will be completely inaccessible.

## **Unmatched Scalability**

WebFOCUS can efficiently satisfy the information needs of even the highest volume of users. BI environments built on WebFOCUS can make data readily accessible to tens of thousands, or even hundreds of thousands of SaaS users. It can also support any type of reporting and analysis application, as well as the varied needs of different user types – from analysts and frontline workers, to line-of-business managers and executives.

Key features inherent in the WebFOCUS platform make it up to 1,000 times more scalable than competing BI solutions:

- **Non-persistence** – Many BI solutions require a persistent connection that wastes valuable server resources. WebFOCUS requires server power only when it is accessing or processing data, so less hardware is required
- **Server multi-threading** – Multiple users can share the same resources, eliminating the risk of server overload and allowing for greater concurrency

- **Native data adapters** – Most BI tools access data in a way that generates additional network traffic. Because it uses native data drivers, WebFOCUS delivers better speed and performance, and facilitates access to data sources unavailable to other BI solutions
- **Cutting-edge data manipulation** – Built-in data manipulation capability has been designed, enhanced, and tuned for more than 30 years, allowing WebFOCUS to generate reports in one or two passes of a database that may require 10 or more passes with another tool
- **Multi-tier configurations** – Web-based BI solutions must often be installed on a web server and can run only on NT. This can hinder scalability in bigger organizations that access extremely large data files. WebFOCUS can be distributed across multiple servers on NT, UNIX, Linux, AS/400, or mainframe computers. This reduces traffic by crunching numbers into a report before it is passed across a network
- **Clustered servers and load management** – A powerful combination of clustered servers and a robust load-balancing algorithm help to manage the distribution of work, fail-over, and resource allocation in a completely autonomic manner, ensuring optimum performance, while reducing hardware costs proportionately as the environment scales
- **Built-in stress testing** – WebFOCUS allows for testing of the environment to see how well it will perform in advance of going live

Because SaaS is not just for small and mid-sized businesses, this scalability is particularly critical in enterprise scenarios. WebFOCUS has proven its ability to scale in many real-world SaaS deployments. For example, U.S. Bank rolled out a SaaS-based application known as ScoreBoard to more than one million customers. Through ScoreBoard, small business clients can create reports about their credit cards, debit cards, corporate cards, and other types of electronic payments.

### **Minimized TCO**

WebFOCUS' unique scalability dramatically reduces total cost of ownership by allowing SaaS providers to satisfy the information needs of an almost unlimited number of users, without the need for significant investments in servers and other hardware, and with minimal administrative resources.

SaaS vendors can also enable their developers to create, deploy, maintain, and extend their SaaS applications, including all related reporting and analysis functionality, from a single, central environment.

### **Unparalleled Data Access and Quality Management**

With its iWay Software division, Information Builders delivers the broadest information reach with pre-packaged integration components for creating a unified architecture that collects and prepares any and all data for BI use – including internal applications and systems, Internet-based web servers and databases, and other SaaS solutions such as Salesforce.com.

iWay also provides a comprehensive enterprise information management (EIM) suite, complete with tools for data quality management (DQM) and master data management (MDM).

These solutions are designed to proactively address information integrity by leveraging predefined business rules and localized dictionaries that not only locate and clean corrupt or invalid information, but also prevent it from entering the environment in the first place.

### **Advanced Security**

WebFOCUS provides a robust, multifaceted infrastructure that works seamlessly with multiple levels of security, including website security, data and application security, and even high-level encryption. This is particularly important in SaaS scenarios, since it ensures that data cannot be intercepted as it is transferred from the web application to the user's desktop, and because it prevents clients from gaining access to other customers' information and assets.

WebFOCUS allows users to access information securely from anywhere using preexisting SSO capabilities. It offers security integration for both third-party and custom systems, including seamless integration with IBM/Tivoli Access Manager, Netegrity SiteMinder, and RSA ClearTrust, as well as a security plug-in that provides built-in support for Active Directory, LDAP, WebFOCUS Reporting Server, and relational database systems.

### **Unmatched Expertise in Customer-Facing BI**

No other vendor can match Information Builders' experience in building and implementing broad-reaching, customer-facing BI environments. WebFOCUS supports hundreds of external reporting applications for hundreds of thousands of users with advanced features, such as guided ad hoc reporting, and portable analytics. With WebFOCUS, SaaS vendors can dramatically reduce the time and effort needed to develop and maintain wide-scale reporting environments, while extending the value of their offerings and efficiently meeting the information needs of their clients.

### **Proven Reliability and Cost-Efficiency**

As a renowned and respected BI vendor with more than 35 years of experience, Information Builders offers SaaS vendors reliability and security, backed by comprehensive Service Level Agreements (SLAs).

Because involving too many third parties can increase complexity by adding provider "layers" between users and the BI environment, Information Builders never outsources its operations to public cloud computing infrastructures.

No other provider can guarantee the same performance and cost-effectiveness, while maximizing agility and accelerating time to market. Only WebFOCUS:

- Offers straightforward web services protocols to drive smooth, seamless integration between our offerings and the SaaS application
- Eliminates downtime with its unique Active Technologies
- Scales on-demand, allowing clients to add or remove users instantly as needed
- Combines SaaS application data with information contained in on-premise systems and other enterprise sources
- Unifies SaaS solutions with an organization's broader IT application ecosystem

# SaaS Vendors Succeed With WebFOCUS

Many ISVs and other solution providers are extending their offerings with SaaS business intelligence and business analytics. With the help of WebFOCUS, these companies are delivering complete, high-value solutions to their customers:

## CDS Global

CDS Global is a leading provider of outsourced business solutions for e-commerce, payment processing, marketing, order management, and fulfillment. Using the WebFOCUS BI platform, the company built and deployed a SaaS-based reporting environment that enables 150 of its publisher clients to maximize the value of their information by visualizing circulation, fulfillment, and order-management data via the Internet.

Users at such notable publishing houses as Reader's Digest, Conde Nast, and American Media, as well as other customers in the direct-to-consumer and media industries, rely on a WebFOCUS-based system to achieve a clear view of key business metrics. The application allows them to compare gross and net subscriptions side-by-side over several quarters, track business renewals, assess billing metrics, and monitor circulation trends.

In addition to standard reports, users can also leverage WebFOCUS Active Technology reports, which combine data and interactive controls into a single, self-contained HTML or PDF file. These portable reports enable users to conduct deep analysis and drill downs, without the need to install special client software, even when they are disconnected from the network.

## Chrome River Technologies

This software company provides SaaS expense reporting and spend management solutions for law firms and professional services organizations worldwide. By combining SaaS deployment methods with rich Internet application (RIA) technology, Chrome River delivers a full-featured end-user experience, while eliminating the need to install and set up hardware and software.

Although the company's expense management solution has always provided standard reports, Chrome River recently addressed customer demands for more advanced BI functionality in its product by incorporating the WebFOCUS BI platform.

Users now have in-depth analytical capabilities, as well as the ability to generate their own ad hoc reports, including complex reports containing highly sophisticated charts and graphs. As a result, clients have improved visibility into spending patterns, so they can achieve greater control over their expenses.

Chrome River's customer base is growing quickly, attesting to the popularity of the expense solution and its embedded reporting engine. Encouraged by positive customer feedback, the company plans to further extend the value of its offering by incorporating WebFOCUS' powerful data visualization features, such as 3D charts, dashboards, and a more compelling landing page.



## **LeanLogistics**

LeanLogistics provides web applications that support distribution and supply chain processes by automating and enhancing functions related to planning, execution, settlement, and strategic procurement. Other offerings, such as inbound supplier management, appointment scheduling, benchmarking, network-wide reporting, and a transportation marketplace, are provided through a network.

When customers began requesting more than just the basic reporting features provided by the portal, LeanLogistics turned to WebFOCUS because of its functionality, scalability, and robust architecture. The company's solution has now been extended with advanced reporting capabilities such as ad hoc reporting, graphs, charts, and dashboards. As a result, customers – as well as internal business users – can achieve total supply chain visibility by accessing and analyzing information in real time.

## **Varolii Corporation**

A leader in the market for automated multi-channel communication technologies, Varolii delivers on-demand solutions that allow organizations to effectively interact with large numbers of customers and employees. The company's Varolii ID™ platform dynamically analyzes past responses from communication recipients to personalize future outreach.

Varolii ID customers were dissatisfied with the platform's reporting capabilities, provided by a homegrown system, because the solutions were difficult to use and forced customers to use outdated information. The reporting capabilities lacked flexibility and users were unable to adjust reporting parameters to meet specific and unique information needs.

Varolii now relies on WebFOCUS to better meet the needs of its users. By extending the Varolii ID platform with advanced business intelligence functionality, including the ability to quickly and easily create ad hoc reports, the company is empowering its customers to conduct more intuitive analysis of communication results, using more current and up-to-date information.

## Conclusion

The economics of software and business are evolving at a rapid pace. As SaaS and cloud solutions continue to gain prominence, and the market becomes flooded with new vendors, providers must differentiate themselves by extending their offerings with advanced business intelligence and analytics.

By partnering with a respected BI vendor that has a solid reputation and a proven solution, SaaS companies can empower their customers to tap into the information contained in their cloud application, as well as other disparate data sources that may exist across their enterprise, and create interactive dashboards and reports on demand – without the need for new hardware, networking, security, and software, while taking advantage of the same pay-as-you-go approach to usage and licensing.

Only Information Builders WebFOCUS has the functionality, scalability, security, and low TCO that SaaS vendors need to effectively and economically extend their offerings with robust business intelligence and business analytics. Leading SaaS providers of all types and sizes, including Chrome River Technologies, CDS Global, and Varolii, trust WebFOCUS to meet client demands for innovative and broad-reaching reporting and analysis capabilities. As a result, they are boosting user satisfaction, increasing market share, and gaining an edge among other cloud solution providers.

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