Information Builders

5 Ways to Boost Adoption of BI and Analytics

How to Enable Data-Driven Business for All Your Stakeholders

WebFOCUS   **iWay Software**   **Omni**

Information Builders helps organizations transform data into business value. Our business intelligence, integration, and data integrity solutions enable smarter decision-making, strengthen customer relationships, improve performance, and drive growth.

WebFOCUS   iWay Software   Omni

Table of Contents

Introduction

> *"User adoption is the only metric that matters in BI."*
>
> *Mico Yuk*
> *Author of Data Visualization for Dummies*

If you want to achieve rapid ROI and maximum value from your business intelligence (BI) and analytics environment, you need to make sure it's widely used. More participation means more benefits for your organization. Yet, years after their initial implementations, organizations still struggle to realize desirable levels of adoption.

"User adoption is the holy grail of BI," says Eckerson Group founder Wayne Eckerson. "All BI managers want 100 percent adoption of their BI tools, (but) adoption rates still hover between 25 percent to 30 percent. Clearly, most organizations have a long way to go to make BI pervasive and a key driver of business value." [1]

This paper highlights five effective ways to promote widespread adoption of BI and analytics across your enterprise. You'll learn how to engage all your users by providing them with the tools they need to meet their specific information requirements, and how to ensure that your environment can support growth in the user base without negatively impacting performance or driving up hardware and administration costs.
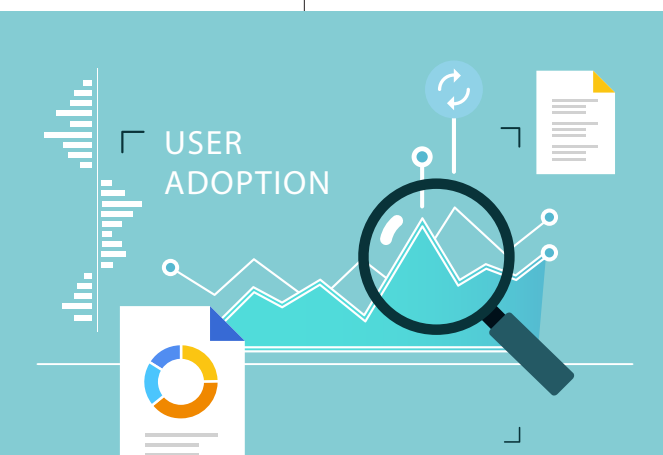
[1] Eckerson, Wayne. "The Secrets to BI Adoption," Eckerson Group, November 2015.

#1: Know Your Users

Different users have different needs. Taking a one-size-fits-all approach to BI and analytics will alienate portions of your user base and hinder pervasiveness. So it's important to know who your users are and what requirements they have.

The majority of your potential user base is made up of business users who are looking for efficient ways to interact with enterprise information. But what data they need, and how they want to analyze it, will vary greatly. For example, those who are more technically savvy, such as your analysts and power users, will require advanced solutions that enable them to perform deep analysis. However, business users who don't have the time or the inclination to upload spreadsheets, access data directly, or learn to use a sophisticated tool – your casual business users – need to consume data in a simpler and more straightforward way. They want to quickly answer questions and solve problems without building their own reports from scratch.

Your ability to satisfy the distinct needs of each type of user in your organization will directly impact your adoption rates. For your power business users, you'll need data discovery and visualization tools, with robust capabilities for content sharing. Your casual business users are better served by flexible and customizable self-service environments, and pre-built interactive BI apps – which can then be published and shared through dashboards for executives and other stakeholders.

Mobile functionality is also important for business users of all types. According to BI Scorecard, typical BI adoption rates hover around 22 percent. But companies that have successfully deployed mobile BI show the highest adoption at 42 percent of employees. [2]

Analytical documents play a role here too, adding another level of convenience that will encourage more users to participate in BI. This type of portable WebFOCUS content packages data with analytical views, so business users can interact with information even when they are disconnected from servers, outside the firewall, or have no Internet connection.

The combination of tools, apps, and analytical documents, enhanced with mobile capabilities, can help you promote a self-fulfilling analytics culture across your organization.

To support a wide variety of users, on their terms, WebFOCUS offers a broad range of analytical outputs, including InfoApps, self-service tools, enterprise reporting, and In-Document Analytics.

[2] Howson, Cindi. "BI Adoption Flat," BI Scorecard, April 2014.

#2: Choose a Unified Platform

Some companies attempt to satisfy varying needs by deploying several different disparate solutions – one for each different type of user. While this may meet short-term requirements one-by-one, it creates larger problems that will deter user engagement in the long run.

This approach risks creating siloed insights that can lead to flawed decisions. Users have their own data sets and their own ways to manipulate information, so chances are they will arrive at different conclusions. Once these inconsistencies come to light, users will shy away from using those tools again in the future, reverting back to old methods of information analysis, such as Excel spreadsheets or turning to IT to create reports.

"Having to deal with different technologies and data sources in the decentralized model can have a negative impact on the users of the BI tools," states author Richard T. Herschel. "Users have to run reports from different systems, in different business units or departments, and then integrate and validate the data to confirm its accuracy. This is a taxing process which, in many cases, will result in the loss of user adoption." [3]

Furthermore, many of these tools do not scale easily to external stakeholders such as customers, suppliers, and partners – audiences that are critical to promoting the widespread adoption that drives true business value, as we'll discuss later in this paper.

Your BI strategy must embrace it all, and be powered by a unified, feature-rich platform with capabilities that satisfy the unique needs of even the most diverse user populations. By allowing users to consume and operationalize data in different ways, you can eliminate the potential for "multiple versions of the truth" by delivering a consistent view of information through dashboards and scorecards for executives, ad hoc reports and visualizations for analysts and power users, intuitive and straightforward analytic apps for casual users, and so on.

[2] Herschel, Richard T. "Principles and Applications of Business Intelligence Research," December 2012.

#3: Pay Attention to Performance

Some BI and analytics applications experience low adoption because of poor performance. Large data volumes, poorly designed data warehouses, an increasing user base, and a high number of ad hoc or unplanned queries are just some of the factors that can negatively impact response times. Regardless of the underlying cause, users can become impatient and will seek out other ways to get the information they need.

"In the age of Google, casual users expect immediate response to on-screen clicks and gestures," Eckerson says. "If users have to wait ten seconds or more on a regular basis, they grow impatient and stop using the BI tool." [4]

Information is only valuable if it arrives on time. So when your goal is pervasiveness, speed is a must. Yet few BI architectures are structured to effectively support a large number of users, and efficiently process a large number of sophisticated queries or massive amounts of data. Companies may try to address the problem by purchasing additional hardware, creating and maintaining indexes and cubes, or moving data into marts and warehouses. But these approaches drive up costs and drain resources.

To ensure optimum performance at all times, you need a BI platform that can handle a large number of users, a large amount of data, and a large volume of queries. Look for one that offers:

- The ability to scale to support any number or type of internal or external users, or any kind of reporting and analysis application – without requiring extensive amounts of hardware or administrative resources
- An embedded analytical database that can be shared across users, to improve the performance of BI and analytics applications and address queries faster – without being limited by a user's individual machine performance
- Pre-packaged content with interactive controls that can be used even when offline
- Support for big data, with the ability to efficiently access, integrate, and deliver large volumes of structured and unstructured information
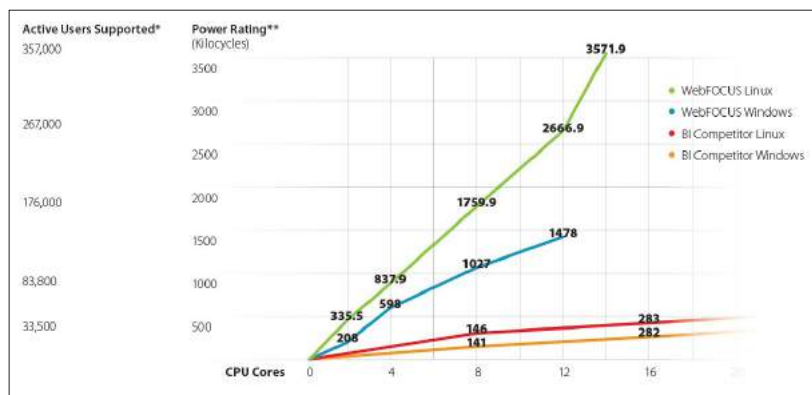
A recent benchmark demonstrating the super-linear scalability of WebFOCUS shows that customers can dramatically increase their system's capability at a much lower hardware and software cost than other BI platforms.

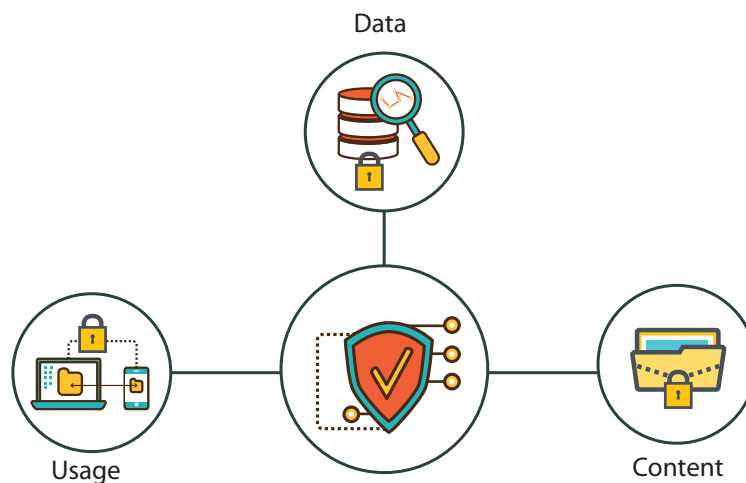[4] Eckerson, Wayne W. "Part III: The Holy Grail of Enterprise BI – User Adoption," Eckerson Group, November 2015.

#4: Make Sure Your Data Is Trustworthy

Your users expect your BI and analytics environment to serve as a trusted means of gathering insight for planning and decision-making. However, recent surveys show that 51 percent of BI, analytics, and information management professionals consider data quality to be a barrier to BI success.[5] If your users question the accuracy and consistency of the data being delivered to them, they'll abandon your solution and find other ways to get the information they want.

Almost every organization today has data quality problems. Close to 60 percent of companies consider their data to be unreliable, with as much as 25 percent of the information in the average database containing inaccuracies.[6] Proactively identifying and correcting these issues will encourage users to embrace the environment as a valid and reliable source of insight, eliminating the use of disparate and disjointed reports and spreadsheets, or one-off data discovery tools.

"Casual users won't use a BI tool if they feel it delivers inaccurate or incomplete data," claims Eckerson. "They will force BI managers to validate or reconcile the BI data with the other sources of data before they trust it, a laborious process that can take months or years."[7]

Choose a BI platform with integrated data quality management and master data management capabilities that will prepare and optimize data for analysis by ensuring its accuracy, completeness, timeliness, and consistency at all times. By embedding capabilities like profiling, cleansing, matching, and merging directly into your environment, you can build confidence in your data and promote greater adoption – without spending a significant amount of time manually finding and fixing bad data.

By combining data management with BI and analytics, it is possible to achieve the three layers of data governance.

[5] Henschen, Doug. "5 Analytics, BI, Data Management Trends for 2015," InformationWeek, January 2015.

[6] Vasudev, Mahak. "What Is Bad Data and Its Side Effects," Business 2 Community, February 2015

[7] Eckerson, Wayne W. "Part III: The Holy Grail of Enterprise BI – User Adoption," Eckerson Group, November 2015.

#5: Don't Forget Your Customers

Nothing will expand your user base faster than opening up your BI and analytics environment to your customers, business partners, and other third-party stakeholders. This audience contains thousands, possibly tens of thousands of users who can benefit greatly from improved access to information.

"Which in the grand scheme of things has a higher priority, customer-facing vs. back-office analytics?" asks Forrester's Boris Evelson. "Well, in what Forrester calls the age of the customer (AOC), the results are in. Customer-facing priorities trump back-office priorities and business users rule." [8]

The benefits of customer-facing BI and analytics extend far beyond pervasiveness. Enhancing the customer experience with convenient, information-based services can boost acquisition, loyalty, and retention. Many organizations have even opened up new revenue streams by deploying fee-based information services to clients and partners.

"Although developing customer-facing analytics is becoming a goal of many organizations, doing so effectively can be challenging because it requires a mindset that is different from the one required to create internal business intelligence applications," says analyst Lyndsay Wise.[9]

For example, when exposing enterprise information to external audiences, the importance of scalability increases exponentially. The size of your potential user base is vast and unknown, so you need to be confident that your infrastructure can handle it.

Security also becomes a greater concern. The confidentiality of sensitive enterprise information must be protected. Information falling to the wrong hands internally would be a problem; having it leak externally would be a disaster.

Finally, data quality once again plays a crucial role. Customers, like employees, will come to rely on the service as a source of trusted data. If the information being shared is inaccurate, the environment that was once seen as a competitive differentiator will quickly become a liability.

Vantage Point, a travel-based company, created a new division called Data Visualization Intelligence and uses WebFOCUS in its DVI Vantage Point product, featuring a suite of visualizations that graphically displays all aspects of a corporate travel program

[8] Evelson, Boris. "BI-Self-Service Will Close the Business and Technology Gap in 2015," Forrester, November 2014.

[9] Wise, Lyndsay. "Developing Better Customer-Facing Analytics," TDWI, October 2014.

Conclusion

Information is the most valuable when many stakeholders can leverage it. That's why high levels of user adoption are so important to achieving maximum return on your BI and analytics investment.

WebFOCUS delivers all the features and functionality you need to engage everyone – from your executives to your frontline workers and even your customers – in your analytics strategy.

BI and Analytics for All
A wide range of BI and analytics capabilities address the information needs of all decision-makers:

- Dashboards and scorecards give executives and managers a high-level view of critical indicators and metrics
- Self-service and data discovery tools allow analysts and power users to perform analyses and visualizations, and easily create and share InfoApps™ for guided ad hoc exploration of data
- Mobile BI allows people to interact with right-time data on any device, whether connected to the Internet or not
- InfoApps™ enable casual users to analyze and manipulate information, with no training required
- In-document analytics instantly packages a data set with a combination of analytical views to provide highly intuitive and interactive self-service business intelligence – completely portable and independent from servers

Data Integrity
Data quality, master data management, and data governance tools ensure the ongoing accuracy, consistency, completeness, and timeliness of the information used in analysis, so your users always have confidence in the data they rely onto support decision-making.

A Robust Architecture
WebFOCUS is built on a flexible and scalable infrastructure that can easily adapt as data volumes grow, new information sources emerge, your user base expands, or your analytics needs change. It also meets the highest demands for security, ensuring that data is fully protected from unauthorized viewing. This empowers you to create secure, reliable environments that efficiently and economically meet the needs of thousands, tens of thousands, or even hundreds of thousands of users inside or outside your organization.

High Performance
An embedded data store, known as WebFOCUS Hyperstage, optimizes the performance of BI and analytics environments. It eliminates clunky cubes, indexes, and partitions, while dramatically accelerating response times for analytic workloads by combining the I/O advantage of in-memory analytics with an intelligent architecture and built-in Knowledge Grid that allows data to be stored on disk.

And best of all, these features are all delivered through a single, fully integrated platform – no disparate tools or disjointed solutions. Everything you need to satisfy all types of users is available through one seamlessly unified environment.

Worldwide Offices

Corporate Headquarters
Two Penn Plaza
New York, NY 10121-2898
(212) 736-4433
(800) 969-4636

United States
Atlanta, GA* (770) 395-9913
Boston, MA* (781) 224-7660
Channels (770) 677-9923
Charlotte, NC (980) 215-8416
Chicago, IL* (630) 971-6700
Cincinnati, OH* (513) 891-2338
Dallas, TX* (972) 398-4100
Denver, CO* (303) 770-4440
Detroit, MI* (248) 641-8820
Federal Systems, D.C.* (703) 276-9006
Florham Park, NJ (973) 593-0022
Houston, TX* (713) 952-4800
Los Angeles, CA* (310) 615-0735
Minneapolis, MN* (651) 602-9100
New York, NY* (212) 736-4433
Philadelphia, PA* (610) 940-0790
Pittsburgh, PA (412) 494-9699
San Jose, CA* (408) 453-7600
Seattle, WA (206) 624-9055
St. Louis, MO* (636) 519-1411, ext. 321
Washington, D.C.* (703) 276-9006

International
Australia*
Melbourne 61-3-9631-7900
Sydney 61-2-8223-0600
Austria Raffeisen Informatik Consulting GmbH
Wien 43-1-211-36-3344
Brazil
São Paulo 55-11-3372-0300
Canada
Calgary (403) 718-9828
Montreal* (514) 421-1555
Toronto* (416) 364-2760
Vancouver (604) 688-2499
China
Peacom, Inc.
Fuzhou 86-15-8800-93995
SolventoSOFT Technology (HK) Limited
Hong Kong 852-9802-4757
Czech Republic InfoBuild Software CE s.r.o.
Praha 420-234-234-773
Estonia InfoBuild Estonia ÖÜ
Tallinn 372-618-1585
Finland InfoBuild Oy
Espoo 358-207-580-840
France*
Suresnes +33 (0)1-49-00-66-00
Germany
Eschborn* 49-6196-775-76-0
Greece Applied Science Ltd.
Athens 30-210-699-8225
Guatemala IDS de Centroamerica
Guatemala City (502) 2412-4212
India* InfoBuild India
Chennai 91-44-42177082
Israel SRL Software Products Ltd.
Petah-Tikva 972-3-9787273
Italy
Agrate Brianza 39-039-59-66-200
Japan KK Ashisuto
Tokyo 81-3-5276-5863
Latvia InfoBuild Lithuania, UAB
Vilnius 370-5-268-3327
Lithuania InfoBuild Lithuania, UAB
Vilnius 370-5-268-3327
Mexico
Mexico City 52-55-5062-0660

Netherlands*
Amstelveen 31 (0)20-4563333
▪ Belgium
▪ Luxembourg
Nigeria InfoBuild Nigeria
Garki-Abuja 234-9-290-2621
Norway InfoBuild Norge AS c/o Okonor
Tynset 358-0-207-580-840
Portugal
Lisboa 351-217-217-400
Singapore Automatic Identification Technology Ltd.
Singapore 65-69080191/92
South Africa InfoBuild (Pty) Ltd.
Johannesburg 27-11-064-5668
South Korea
Dfocus Co., Ltd.
Seoul 02-3452-3900
UVANSYS, Inc.
Seoul 82-2-832-0705
Southeast Asia Information Builders SEAsia Pte. Ltd.
Singapore 60-172980912
▪ Bangladesh ▪ Brunei ▪ Burma ▪ Cambodia
▪ Indonesia ▪ Malaysia ▪ Papua New Guinea
▪ Thailand ▪ The Philippines ▪ Vietnam
Spain
Barcelona 34-93-452-63-85
Bilbao 34-94-400-88-05
Madrid* 34-91-710-22-75
Sweden
Stockholm 46-8-76-46-000
Switzerland
Brugg 41-44-839-49-49
Taiwan
Azion Corporation
Taipei 886-2-2356-3996
Galaxy Software Services, Inc.
Taipei 886-2-2586-7890, ext. 114
Tunisia North Africa Business Consulting
Bizerte 215-22-86-85-79
Turkey Paladin Bilisim Danismanlik A.S.
Istanbul 90-532-111-32-82
United Kingdom*
Uxbridge Middlesex 44-20-7107-4000
Venezuela InfoServices Consulting
Caracas 58212-763-1653
West Africa InfoBuild FSA
Abidjan 225-01-17-61-15

* Training facilities are located at these offices.

Find Out More
We can help you succeed. Talk to your local Information Builders representative to learn how. Visit us at **informationbuilders.com**,
e-mail **askinfo@informationbuilders.com**, or call **(800) 969-4636** in the U.S. and Canada. To improve your skills, visit **education.ibi.com**.