

InfoApps™ Q & A  
**The New Era of Self-Service Analytics**

A White Paper

WebFOCUS    iWay Software    Omni

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# Introduction

Until recently, the notion of using data and analytics applied only to specialists and business analysts. This was mainly because business intelligence (BI) applications were too complex to serve the needs of mainstream business users and information consumers.

The consumerization of technology has changed all that. Consumers are now data-driven. They want information in real time, in context with what they are doing. They use apps on the web and mobile devices to shop, manage finances, check the weather, book a reservation, and answer just about any question that comes to mind. They're also more exposed to data analytics on fitness, travel, shopping, and banking websites, on wearable technology devices and social media platforms. They expect accessing and analyzing data to be easy. They don't want a BI tool – they'd like an app for that, thank you very much. And if IT cannot deliver this experience, their users will go find it somewhere else.

So how should IT and business leaders respond?

IT must transform itself into an organization equipped to empower and delight users with self-service analytics. They must reinvent themselves to appeal to millennials and all consumers with high expectations for the digital experience.

As a result, IT and business leaders are looking at BI technology with fresh eyes. They see the potential for creating custom self-service analytics apps designed for specific scenarios, and deploying them to users via a simple app store-like experience. That's an InfoApp™. InfoApps let users visualize, analyze and explore the data that matters to them and help users convert insights into action in real time, in an easy-to-use fashion. The best part is that IT can create game-changing InfoApps for anyone from the C-suite to the front lines of the operation, and deploy them from desktops to mobile devices, seamlessly.

InfoApps not only empower employees, but also extend self-service analytic capabilities to customers. Many organizations recognize the power of customer-facing InfoApps, and have packaged data analytics as new product or service offerings to add value to relationships and differentiate in a crowded market.

There are many exciting use cases for InfoApps. In this white paper, we'll answer frequently asked questions about InfoApps, and provide examples of how they are redefining the landscape of self-service analytics, while helping IT empower the business more effectively.

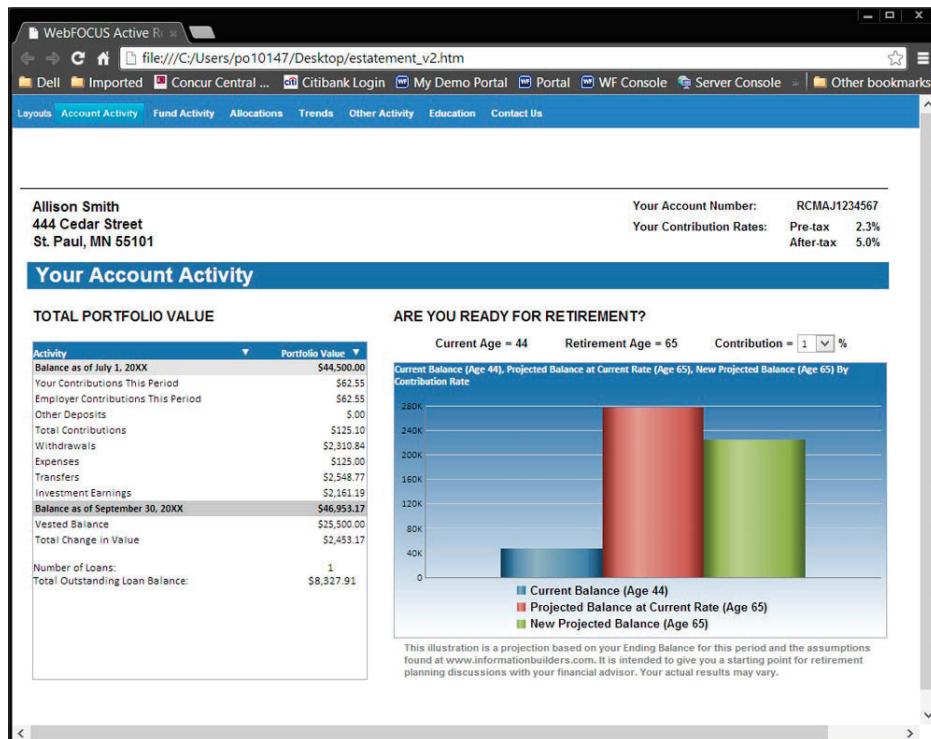
# InfoApps Q & A: What You Need to Know

## What Are InfoApps?

InfoApps deliver interactive analytic content such as data visualizations, charts, graphs, and reports to users through a portal for an easy “app store-like” experience. InfoApps go beyond dashboards by offering a variety of controls and filters on a custom user interface to aid in decision support. Examples of InfoApps include guided self-service reports, search-based apps, and predictive analytics apps, all of which can be customized further through a portal for a highly personalized user experience.

Instead of learning complex tools and worrying about data preparation, users can tap into InfoApps to serve themselves and quickly get answers and insights from relevant data, right when they need it. InfoApps make it easy for non-technical, mainstream users to get and analyze information on both web browsers and mobile devices.

InfoApps make it easy for organizations to operationalize insights by making them accessible to everyone.



**Interactive eStatements InfoApps – These are live visual and customized InfoApps that can help your customers make smarter choices about their future.**

## What InfoApps Are Not

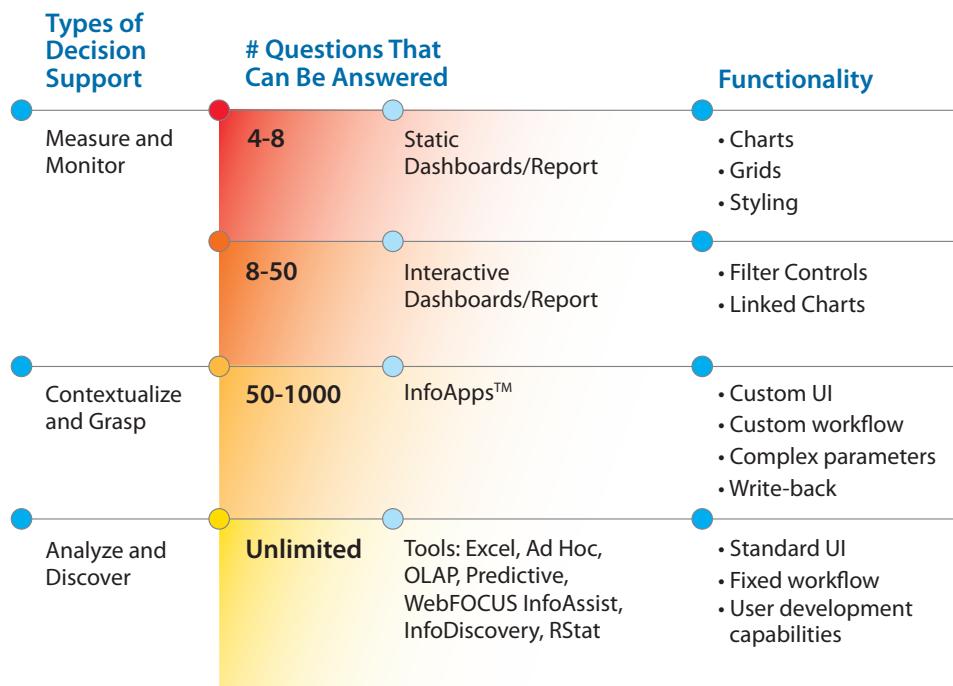
**They're not generic analytic tools – they're apps.** Analytic tools aren't specific to any business problem, so they require training on how to select, collect, and manipulate raw data. InfoApps deliver an analytical user experience in the context of a business problem or scenario, without all of the data prep. So even non-technical users can ask questions and get answers.

**They're not ERP, CRM, or other applications – they're analytic apps.** Where ERP applications collect data, InfoApps provide information. Where ERP applications are rigid and force users to follow particular processes, InfoApps are flexible and allow ordinary users to see data in millions of different ways.

**They're not dashboards – but they can be used as components of custom dashboards in a portal.** Traditional dashboards are built all at once by IT, are lacking in interactivity, and relate to one specific topic. InfoApps are built individually by IT, are self-contained, and are highly interactive. Because of their modularity, end users can assemble them into a portal to create a custom type of dashboard, or they can run standalone on a webpage or mobile app. They can also be embedded in other applications to provide on-the-spot support to decision-makers.

## How Do You Create an InfoApp?

InfoApps can be easily built by power users or developers and delivered to users and groups of users. See “What Are Some Creation Vehicles for InfoApps?” later in this white paper for more information on the tools available for building and delivering InfoApps.



## What Value Do InfoApps Provide?

InfoApps eliminate the complexities associated with BI tools, so users can easily perform analysis of information, without having to worry about preparing data, constructing queries, and ensuring data integrity. All they have to do is use intuitive app-navigation buttons to filter, select, and view data, like they would with any other consumer app.

The real power of InfoApps is their ability to operationalize insights. Putting analytical capabilities into the hands of each and every stakeholder can increase BI adoption, improve customer and partner relationships, and empower employees at all levels to become more productive and work smarter in real time. Everyone from executives and frontline workers, to customers and business partners can access and interact with any information, whenever they need it – without learning a complicated tool or asking an analyst for help. They've got easy, convenient apps right at their fingertips, so they can get quick, relevant answers to any business question at any time, regardless of their skill level or the device they're using.

## Why is the Apps Approach Better Than Tools?

Most people want apps, not complicated or confusing tools. For a long time, only two types of tools dominated the BI market. There were tools for creating static reports for the masses, and others that allowed power users to perform rather sophisticated analyses. Today, the need to make advanced analytical capabilities available to business users is becoming more critical. It's a great idea; an attempt to make a larger number of people "smarter" by helping them meet their own information needs. However, the way most organizations try to reach that goal, using complex or disconnected toolsets, has serious flaws. InfoApps give everyone a way to take full advantage of BI, regardless of their skill set.

**Filters:** Choose which geographical areas you would like to report on. These filters will be applied at run time.  
**Columns and Measures:** There are four dimensions and two measures preselected, which you can change. There is no limit to the number of columns your report can have.  
**Pivot Fields:** To create a cross-tabular report, choose a pivot field. In this example, we have allowed up to three, although there is no limit to the number of pivot fields.  
**Display Output:** Interactive output provides analytical capabilities including charting, calculations, annotations, sorting, and more, in a completely disconnected manner.

**Guided Self-Service InfoApps – End users can manipulate the contents into diverse permutations on their own and forward these reports to other users without any network or device constraints.**

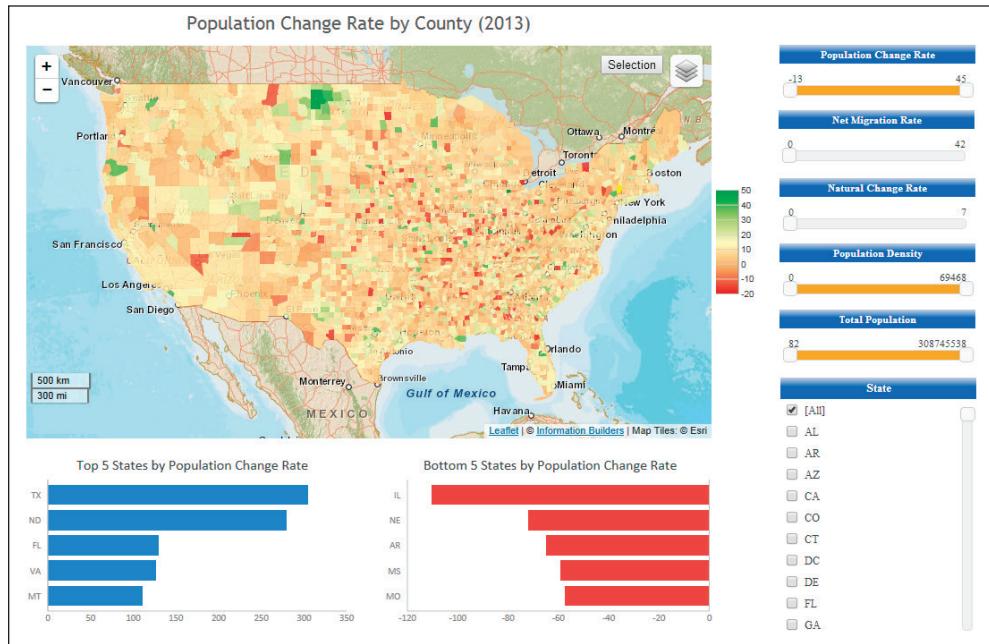
## How Can You Manipulate Data Within an InfoApp?

InfoApps offer more than simple filters. InfoApps have sophisticated controls that allow users to query and manipulate data as it is shown on a desktop or mobile screen. InfoApps are unique in that they allow users to take advantage of BI functionality without requiring them to know the tool. The controls are built into the app and part of an intuitive user experience.

## How Do InfoApps Compare With Data Discovery Tools?

Data discovery tools work well in many scenarios, as does traditional reporting. But, if you really want to make advanced analytical capabilities readily available to a large number of business users, neither approach will work. You'll need interactivity coupled with simplicity and scalability. And that's the InfoApp.

Many data discovery tools deliver powerful analytical functionality that is too sophisticated for the typical business user, and can't scale to users outside the firewall. Analysts and power users can take advantage of these tools, but that still leaves a large portion of the BI audience in the dark. They have to rely on guesswork and assumptions, muck about with Excel spreadsheets, or depend on analysts and IT staff for assistance.



Graphical InfoApps allows power users to do geographical analytics -combining charts, graphs, maps, and other data sources to create sophisticated visualizations.

Additionally, many data discovery tools are completely disconnected, and lack version control and auditability. This only exacerbates the “Excel Hell” that has been plaguing companies for decades. These solutions allow users to access and manipulate an arbitrary data set, much like Excel has done across boardrooms for dozens of years, only with better images and graphics. Disparate dashboards and visualizations, however, may still lead to inconsistencies in the data and underlying analytical methods, causing the same headaches as Excel.

InfoApps, on the other hand, eliminate the problems associated with disconnected data discovery tools, because they are self-contained and integrated with a broader BI platform.

### **Are InfoApps as Simple as Other Apps?**

InfoApps are high-value, low complexity analytic apps. They aren’t all-purpose solutions that do everything. Instead, they’re designed to address a single unique need, and provide only those features and functions required to satisfy it. So anyone, even a business user with little or no technical skills, can interact with an InfoApp and instantly get the results they need. InfoApps don’t manipulate arbitrary data sets either. They include all the needed data and interactivity, so all users get exactly the same results. No confusion, no rogue spreadsheets or inconsistent visualizations, and no multiple versions of the truth.

### **What Are Some Common Characteristics of InfoApps?**

Intuitive development tools allow developers and analysts to create custom-tailored InfoApps designed to address the specific needs of their users. Unmatched styling flexibility allows for full customization for each user. A wide selection of interactive controls and parameterizations – calculations, styles, drill-downs, etc. – can be incorporated, to empower end users to manipulate data in an almost unlimited number of ways. A library of 100+ HTML5 visualizations and interactive grids allow developers to depict data via a wide variety of presentations. Finally, users can be given the option to output the information derived from their InfoApp in almost any format they desire – Adobe PDF, Microsoft Excel, PowerPoint, and more.

### **Don’t Dashboards Deliver This Kind of Information?**

Dashboards and reports are somewhat static, and users often find themselves going back to IT to add summarizations or graphs, or to make other changes when their question wasn’t answered the way they wanted. InfoApps are designed to be extremely interactive. Users can manipulate the data in an almost unlimited number of ways using familiar features like drop-down boxes or radio buttons. Anyone can get immediate answers to questions, without having to drop data into a spreadsheet or call an analyst for help.

InfoApps also eliminate the need for IT staff to build static dashboards. End users can assemble their InfoApps onto a portal, so they have full control over exactly what information they see, and how they see it, based on their individual needs. Compiling these portals is so simple, that any business user can easily do it without special training.

## How Do InfoApps Affect BI Adoption?

True BI pervasiveness is something that organizations have always struggled to achieve. With InfoApps, analytic functionality is finally simple and intuitive enough for all users, even those with little or no technical skills. They can now get the information they need, in just a few clicks, without learning a complicated new tool or asking an analyst for help. InfoApps are also device independent, and can be accessed conveniently through any PC, laptop, smartphone, or tablet. This opens up BI to a whole new universe of users and makes them more eager to embrace it.

## Can InfoApps Help With Customer Engagement?

InfoApps aren't just for internal employees. They're also beneficial to customers, suppliers, business partners, and other third parties. Better collaboration and information sharing can create a stronger competitive advantage or more efficient supply chains – and drive higher levels of customer satisfaction and retention. Companies can even boost profitability by making critical information available through fee-based InfoApps.



nVision InfoApps – The Global's iFocus Dashboard includes a number of InfoApps that let you easily view reports, key performance indicators, and global mapping and graphing features.

## Do InfoApps Offer Advanced Analytics Such as Predictive and/or Social Media Analytics?

InfoApps are designed to be fully self-contained and give users everything they need to get the exact answer they're looking for. This includes advanced functionality like data visualization, as

well as predictive and social media analytics. These can be embedded directly into the InfoApp, so users can take advantage of multiple types of analytics to view data from different perspectives.

## How Many Users Can an InfoApp Support?

An InfoApp is extremely scalable, and can be made available to an almost unlimited number of users, inside or outside the firewall. Because they're self-contained, they can also be published to portals, sent as e-mail attachments, or stored for future use. Our licensing model keeps cost of ownership at a minimum, because there are no per-user fees for InfoApp recipients.

## How Do I Ensure My Users Get the Most Out of Their InfoApps?

To be most effective, InfoApps should provide a superior user experience:

**They must be intuitive and interactive.** Timely and relevant information must be available for instantaneous analysis, to answer a specific question, without the need for extensive training.

**They must be customizable.** The beauty of an InfoApp is that one size does not fit all. Every user can make the app their own by personalizing the filters and controls on the user interface, and combining it with other BI content in the portal.

**They must be focused and straightforward.** InfoApps should address a single, very specific business need. They can then be deployed rapidly, for immediate benefit, and expanded as needs change.

**They must be optimized for mobile consumption.** Many users rely on tablets and smartphones to access BI content. InfoApps must take into account smaller screen sizes, bandwidth and connectivity constraints, and consumer-style expectations for ease of use, interactivity, and end-user engagement.

**They must be self-contained.** Everything needed to answer questions and resolve issues – including advanced functionality like data visualization and predictive or social media analytics – must be part of the InfoApp itself. Users shouldn't have to pull data from other sources, or move information to another tool for further analysis. This self-containment also allows InfoApps to be saved to any mobile device or computer, so users can work in disconnected mode without loss of interactivity.

## What Are Some Creation Vehicles for InfoApps?

Information Builders provides easy-to-use tools to help power users and developers build InfoApps and deliver them to individual users and groups of users. These tools enable the creation of InfoApps that meet users' precise information needs with rich functionality:



**Casino Gaming Analytics InfoApp – This includes revenue analysis by game type, transactions by casino, and guided self-service reporting.**

### Guided Self-Service

Guided self-service uses simple, familiar controls – drop-down boxes, check boxes, radio buttons, sliders, and the like – to ask the user what view of the information they'd like and how they'd like to see it. Unlike traditional parameterization that's limited to sorts and filters, guided self-service lets users change the dimensions they're using, the appearance of visualizations, types of visualizations, and virtually every other aspect of the data source under consideration. By keeping the interface simple, but providing lots of options, a single guided self-service InfoApp delivers a simple user experience that can lead to millions of easily understood permutations of highly relevant information. Visualizations can include different chart types, graphs, maps, and even old-school report formats, either stand-alone or linked together. Guided self-service InfoApps can be built using WebFOCUS InfoAssist and App Studio.

### Active Technologies

Active Technologies adds powerful analytical capabilities to simple reports and dashboards. Sorting, filtering, and ranking ensure that users will be able to answer many more questions through pivots, visualizations, charting, and roll-ups that are only a click away. InfoApps built with Active Technologies have the data and analytical engine built in, so there's no additional server load as users manipulate the data. In fact, they can be e-mailed, shared, and used offline without any software installed except a desktop or mobile browser.

### **Data Discovery**

Matrix charts, tree maps, and geographic visuals depict visual ensembles that can facilitate insight. While data discovery is generally the domain of analysts, it's sometimes convenient for them to publish visualizations that end users can manipulate. All of the data preparation, initial manipulation, and selection of controls can be managed by the analyst – so that when they're ready to publish, everyone can view the same insights in a highly visual and interactive, but simplified, environment. WebFOCUS InfoDiscovery helps users build InfoApps with data visualization components.

### **InfoApp Delivery**

The WebFOCUS BI Portal gives end users access to the functionality of a BI platform. Like an app store, it serves as a dynamic repository, management, and distribution system for a variety of BI content, including InfoApps, reports, dashboards, and visualizations.

## **What Are Some Examples of InfoApps?**

### **Ameritas**

InfoApps are helping Ameritas, a provider of insurance and financial products to individuals, families, and businesses, to establish a single, consolidated view of company operations, while streamlining billing, enrollment, and reconciliation processes for its customers. Among the InfoApps created were a Benefits Administrator portal that helps policyholders retrieve bills, eligibility information, and claims details, and a Business in Motion application that gives dozens of regional sales reps insight into existing and new agents. The organization now has a simplified, cohesive way to enable internal and external users – including hundreds of employees and thousands of customers – to contextualize and grasp information about sales, commissions, customer service, underwriting, and actuarial.

### **City of Philadelphia**

With the help of WebFOCUS, the City of Philadelphia's Office of Behavioral Health and Intellectual Disability Services developed user-friendly reports and InfoApps that empower more than 100 provider agencies and nearly 500 program managers to analyze and deliver information, and make changes to data in underlying systems via write-back capabilities. For example, one InfoApp allows users to track the homeless population and coordinate the activities of the various outreach teams. Another tracks the use of the city's 2,000 residential beds for persons with mental illness, allowing staff to monitor admissions, discharges, absences, and more. InfoApps have improved the tracking of social services, enhanced the allocation of agency resources, and enabled the delivery of more effective services to citizens.

### **Paycor**

This leading provider of human resource and payroll services embedded InfoApps directly into its product suite, extending it with advanced data manipulation and analysis functionality. These InfoApps give clients a more comprehensive view of their HR operations by empowering them to tap into data in HR, payroll, and timekeeping systems to quickly answer questions about total compensation, labor distribution, general ledger issues, and employee overtime. By providing clients with powerful analytical capabilities not offered by other providers, Paycor has increased customer acquisition and retention and differentiated itself in its market.

### **Kronos**

InfoApps have been incorporated into Kronos' software-as-a-service (SaaS) workforce management solutions. Users now have a more modern way to access calculations and metrics related to the hiring process and related application and labor activities. Users can choose the InfoApps most relevant to them through a virtual "app store," adding the content they want to their dashboards by simply dragging it onto their portal. As a result, Kronos is offering reporting services that few competitors can match, and helping customers to do their jobs more effectively.

### **Mercurial**

This consulting and services company specializes in sales and marketing effectiveness, performance management, and cloud-based BI applications. Mercurial recently build a SaaS portal – complete with InfoApps – for its life sciences customers. These InfoApps contain analytical and forecasting capabilities that allow users to perform deep analysis of their sales, marketing, and distribution activities, and coordinate the efforts of large sales teams. Thanks to InfoApps, Mercurial clients can now formulate sales force strategies, identify commercial risks and opportunities, and increase the quality and velocity of sales and marketing decision-making.

### **North American Lighting**

WebFOCUS is helping North America's largest non-affiliated lighting supplier to keep a handle on costs with reports, dashboards, and InfoApps that enable more effective management of overtime, inventory, production, quality, and other business metrics. Users can easily access information about plant operations from enterprise applications in support of the company's continuous manufacturing model, to ensure that all orders are delivered, in the right amounts, and at the right times. The company can now plan production schedules more quickly, fill orders more efficiently, track customer shipments more accurately, and supply executives with a real-time view of operational performance.

### **Sparta Systems**

Sparta's TrackWise enterprise quality management software has been extended and enhanced with InfoApps. These InfoApps deliver data about quality assurance, deviation tracking, and non-conformance management, as well as advanced capabilities such as data visualization and mobile analytics. This gives authorized users at customer sites the insight necessary to foster strategic development, formulate plans, and optimize business operations, while reducing cost and risk.

### **Appvion**

InfoApps are helping Appvion, a manufacturer of paper coating and chemicals, to overcome problems associated with a disparate information environment by consolidating enterprise information and ensuring its accuracy and accessibility. The first InfoApp created empowers users to perform deep analysis of inventory operations. New InfoApps for finance, procurement, and account will soon be rolled out. By allowing users to work in a unified environment with consistent, high-quality data, Appvion's InfoApps have decreased administration time and are expected to reduce maintenance and support costs by more than \$100,000 annually.

# BI Glossary

The building blocks of all BI content are data display components, such as graphs and grids, which have historically been used to create reports and dashboards. Now the business intelligence landscape has evolved rapidly, with new techniques and analytic styles for the consumption of information by a variety of users. This glossary of terms will help you understand the different kinds of BI content and how they relate to one another.

**Query** – An unformatted subset of data.

**Report** – A report organizes data from a query to help users understand it. It provides periodic, accurate, and relevant information in a presentable format with a specific intention, such as communicating financial or sales outcomes. Reports can use complex grids to display, calculate, aggregate, and summarize information, and will often contain a cross-tab view of detailed and summary data with sorting, filtering, and drill-down capabilities.

**Parameterized Report** – A parameterized report allows users to apply filters to organize the information on the report and specify how it should be executed. Functionally, a parameterized report uses input values to dynamically direct the report output. It is important to note that the parameters are selected before the report request is submitted, not while the data is displayed.

**Chart** – A traditional visual report using graphical elements to convey the meaning and relationships of the underlying data. Examples include bar charts, line charts, and pie charts.

**Dashboard** – The purpose of a dashboard is to provide a high-level graphical view of key performance indicators that are tied to specific business process, such as manufacturing production or sales performance. The term originates from the automobile dashboard, where drivers monitor their instrument cluster. Dashboards are typically limited to showing summaries, key trends, comparisons, and exceptions, and interactivity is limited to drill-downs to find a root cause.

**Data Visualization** – The purpose of data visualization is to organize and present data to discover business insights, and to tell a story using information. As such, visualizations offer interactivity to manipulate data, and more complex charts that have pop-out effects to reveal patterns and outliers. Arriving at these insights involves an interactive and iterative process, and usually encompasses multiple sources, including personal data and big data. Visualizations might include an ensemble of geographic analysis, multi-dimensional charts, and color-by banding, and can be incorporated into a dashboard for monitoring.

**Storyboard** – A storyboard helps to communicate the results of data visualizations and create a narrative of visual insights. Storyboard functionality can include reports, dashboards, and visualizations, as well as exporting results to a presentation tool.

**InfoApps** – InfoApps deliver interactive analytic content such as data visualizations, charts, graphs, and reports to users through a portal for an easy “app store-like” experience. InfoApps go beyond dashboards by offering a variety of controls and filters on a custom user interface to aid in decision support. Examples of InfoApps include guided self-service reports, search-based apps, and predictive analytics apps, all of which can be customized further through a portal for a highly personalized user experience.

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InfoApps make it easy for organizations to operationalize insights by making them accessible to everyone.

**BI Application** – BI applications can include any combination of BI content – InfoApps, dashboards, data discovery visualizations, and parameterized reports – to cover an organizational area for decision-making. The difference between an InfoApp and a BI application is scope. A BI application is for on-the-job decision-making, while an InfoApp address area-specific reporting and decision-making needs.

**BI Portal** – The purpose of a BI Portal is to enable end-user access to the functionality of a business intelligence platform – and provide a personalized “app store-like” experience for users. In many instances, a BI portal represents a user’s first impression of a BI system. It is content-rich and easily customizable. Functionally, a BI portal is a dynamic repository, management, and distribution system for a variety of BI content including reports, InfoApps, dashboards, and visualizations.

## Meeting the Challenge – Next Steps

The challenge for IT in this data-driven and self-service world is clear: transform the experience for business users, partners, and customers – or step aside and let an outside vendor chip away at those relationships.

Information Builders has a better way. Our flexible, easy-to-use WebFOCUS business intelligence and analytics platform serves the needs of both IT and business users. IT can benefit from an integrated platform with the broadest range of solutions to support data discovery, reporting, dashboards, InfoApps, predictive analytics, social media analytics, search-based apps, and more. They can offer a rich, interactive analytics experience that is custom built and branded, and rest assured that the data is accurate, secure, consistent, and reliable. Business users can benefit from InfoApps that are made just for their needs and backed by data they can trust, so they can be more effective and successful.

*Let us help you to get started building your own InfoApps.* [Contact Me](#)

*To see InfoApps in action, watch an online demo of an e-Statement InfoApp at [informationbuilders.com/go/demo](http://informationbuilders.com/go/demo).*

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