

Multidomain MDM: The Best Value For Your Business

By **Dan Power**, Founder & President, Hub Designs
and **Julie Hunt**, Editor, Hub Designs Magazine



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EXECUTIVE SUMMARY

Every day, in every industry, the damaging consequences of unreliable, outdated information are revealed.

- Retailers struggle to keep up with their customers' multichannel buying preferences as well as with product data challenges. Not understanding their customers' buying behavior and sentiments will impact their survival against more agile, responsive competitors.
- U.S. health care costs are skyrocketing while high quality patient care is decreasing. Timely and reliable medical data that could drastically cut expenditures and ensure higher quality patient care isn't easily accessible, according to executives at healthcare companies.
- IT organizations operate with inaccurate assessments of their current architecture, technologies and capabilities. CIOs make decisions based on out-of-date data, resulting in the wrong technology purchases, reduced productivity, greater costs and increased risk.

Information is a critical asset for today's organizations – it supports almost every enterprise need and objective. And it's clear that managing data has become mission-critical, while also becoming more complex. In response to today's volatile business and market conditions, more processes are becoming real-time to support more agile decision-making. Enterprises realize they **must** have trustworthy and timely data for planned and *unplanned* situations and transactions.

The Cost of Poor Data Management

The average billion-dollar company loses \$130 million per year due to poor data management.

Few Companies Are Prepared

While 67 percent say that deriving intelligence from all that data is a priority, 29 percent gave their organizations a "D" or "F" grade in terms of being prepared to manage it. Less than 10 percent gave themselves an "A".

Source: [Channel Insider](#)

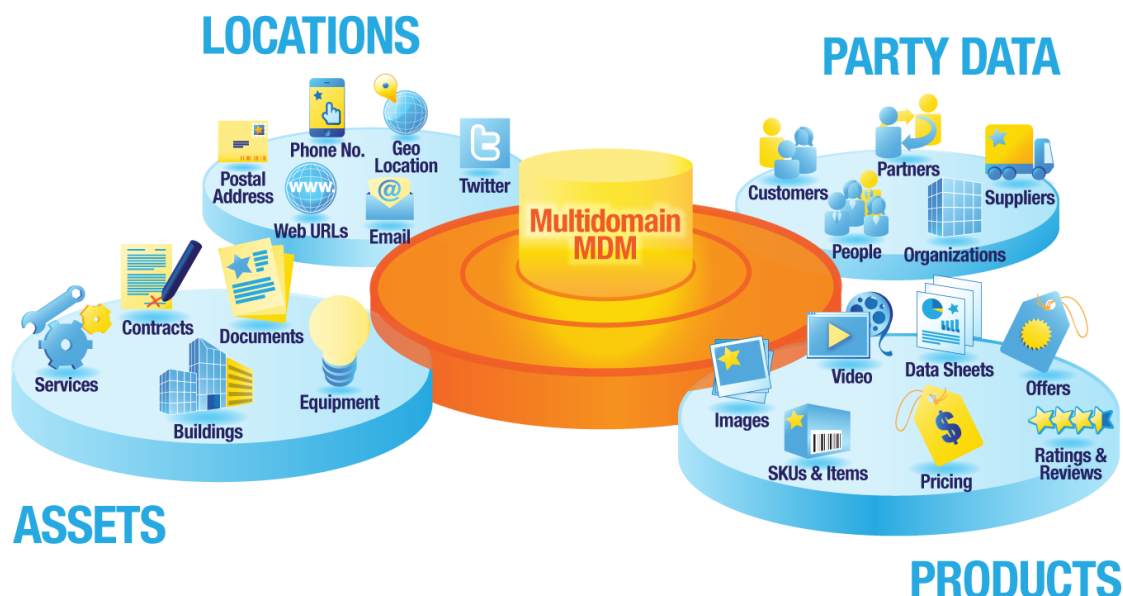
Senior management and line-of-business users are becoming more involved with data management strategies, adding important knowledge of how data is used in business processes and how it needs to be used to benefit the enterprise.

Master data management (MDM) and data governance are appearing on the radars of both management and business users, as organizations realize that having the right information at the right time is required for success, innovation and growth.

Companies depend on their master data to deliver reliable and relevant information in support of transaction processing, as well as analytic systems, decision-making processes and compliance efforts.

A multidomain MDM platform provides a **single technology stack** for managing data across internal groups and functions, and can integrate views of customers, products, suppliers, employees, assets, locations, and other core components of the enterprise. Instead of distinct, uncoordinated approaches to separate master data domains (built on multiple technology stacks), multidomain MDM enables an **integrated master data approach**, based on a single technology platform, with a unified governance framework, and much more straightforward data modeling and mapping.

Multidomain Master Data Management



Multidomain MDM reduces costs, streamlines information management and delivers what the enterprise needs most: accurate, complete, timely and consistent views of information that are critical to achieving business objectives and strategies.

Multidomain MDM – A More Powerful Approach to Finding the Right Information

Master data management, as both a discipline and a practice, relies on dynamic collaboration between business and IT teams. It enables the creation of master data hubs for the most important information in the enterprise. MDM relies on data management activities such as data integration, data quality, and data governance to derive master data attributes that are accurate, consistent and uniform, in relation to core information building blocks such as: customers, products, suppliers, employees, assets, locations, and financial components.

Until recently, most MDM platforms placed functional or line of business data categories into separate single domain hubs. Frequently, however, the greatest value comes from integrating different domains for business intelligence and analytics purposes.

That integration becomes much more complicated when data is segregated into siloed hubs which place obstacles in the path of establishing critical relationships between core data domains.

Gartner Defines Multidomain MDM

Multidomain MDM technology is a purpose-built solution targeted at addressing the multidomain technology requirements of an MDM program. It has the following characteristics:

- It can be implemented in a single instance.
- The data model is uniform or is interoperable and able to manage cross-domain intersections.
- The workflow and UI elements are uniform or interoperable.
- It supports at least one use case, implementation style and organization/governance model, for specific industry scenarios.

Source: Gartner Magic Quadrant for Master Data Management of Customer Data Solutions, October 18, 2012

To increase the usefulness of master data, a new approach to MDM has emerged: multidomain master data management.

True multidomain MDM builds on a comprehensive and seamless technology platform that provides unified management, modeling and governance of all data domains. It manages master data, correlating it with how the people in the enterprise run the business.

The Agile Enterprise is Within Reach

To understand why a multidomain MDM approach significantly impacts the effective use of master data, let's first look at customer information.

A customer's experience with an organization may span multiple physical locations, marketing channels and social media sites, internal enterprise functions and teams, numerous products, and a variety of different interactions.

While the customer travels through various business processes, the enterprise has the opportunity to capture a great deal of data in many different formats. But in focusing solely on customer master data, organizations see only part of the story, which can lead to an inaccurate understanding of customer needs and expectations.

For customer data to attain its greatest value, relationships and integrations with other data domains, such as products, employees, locations, and financial components, are required.

Customer Loyalty Programs Use Case

To encourage repeat business, retailers work hard to improve the customer experience. Loyalty programs are a popular means of further engaging customers with the brand.

Whether the customer is in the store or on a mobile device using an app or browsing the retailer's website, real-time delivery of relevant and accurate information is an essential component of a successful loyalty program.

Customer and product data must be seamlessly integrated to feed into real-time customer offerings. A multidomain MDM platform ensures the delivery of the right information at the right time.

The "customer" also manifests in multiple roles as it goes through the buying cycle, each of which may have multiple unique identities, such as: prospects, buyers, contacts and locations. The "customer" may actually be a composite of managers, end users and other corporate roles such as Legal and Purchasing.

This matrix of information results in a complex model that requires a platform that can nimbly manage data in separate domains.

Relying on a single domain MDM application may result in a skewed or truncated view of critical information that impedes an accurate understanding of customer needs, both present and future.

With a unified view of customers and all of their related transactions and activities, enterprises can zero in on what is needed to develop new product offerings and services that better meet customer requirements and expectations. Integrated master data improves marketing and sales efforts across multiple channels, strengthens targeted promotions, and delivers significant intelligence regarding target markets. These improvements positively impact market segmentation, product development, future direction, initiatives such as marketing automation, and enable product co-creation with customers through deep customer intelligence.

Multidomain MDM: The Next Generation of MDM

Multidomain MDM lets enterprises tap into valuable relationships between the master data domains, allowing them to make concrete improvements to existing operations and strategies and to explore new directions for innovation and competitiveness.

Enterprises can leverage integrated master data to continuously improve analytics and decision-making processes, particularly to make real-time decision-making possible, both for strategic planning and operations. And more broadly, business functions can now have access to a unified view of critical master data to make process efficiency advances throughout the enterprise.

Many organizations have kicked off MDM initiatives with a single data domain approach.

After extensive work on the first domain is completed, it then becomes evident to business and IT teams that to attain the next level of value, the initiative must extend to other domains to meet the goal of uniform, integrated master data across the enterprise.

A multidomain MDM technology platform resolves many data management problems. It streamlines most of the implementation and maintenance work required and gives organizations **a faster path to realizing MDM's benefits** across their multiple master data domains.

The resulting integrated master data supports agile, comprehensive views of Customers, Products, Suppliers, Locations, Employees and other data domains that will alleviate many enterprise challenges and deliver:

- Optimized approaches to customer service that meet (or exceed) ever-increasing customer expectations.
- Reliable information for building customer trust and positive relationships.
- The right up-sell and cross-sell opportunities, matched to the right customer, at the right time.
- An ability to support predictive analytics for “next logical purchase” – based on accurate master data and historical order activity.
- Customer privacy and communications preferences which are made available to all enterprise functions, ensuring that the company will avoid large fines for failing to observe customers’ “opt out” choices.
- Improved business process efficiency and relevance across the enterprise.
- Reliable and timely information for employees to help them improve their performance. Easier and better compliance, audits and risk management, which typically results in significant cost savings.
- Accurate analysis and integration of master data resulting from mergers and acquisitions. For example, overlap analysis can show what percentage of an acquired company’s customer base are already customers of the acquiring company.

The Pitfalls of Single Domain MDM Applications

Often, different functional groups or business units in an enterprise each implement separate MDM applications to address critical data for their groups: HR sets up Employee MDM using one vendor application, Sales and Marketing set up Customer MDM with a different vendor application, and so on. These separate groups don't necessarily collaborate on choosing an overall platform to handle MDM for multiple domains. In fact, they may not even be aware of the other MDM initiatives in the enterprise.

Until recently, many MDM vendors promoted their applications as point solutions that specifically addressed one data domain, trading on their expertise in that domain.

For example, the Customer domain has had a number of specialist vendors providing "Customer Data Information" or CDI applications. At times, there are benefits in taking this route so that a particular data domain like Customer can be handled in a specialized way. But the point solution route also means that different groups may be adopting different technology stacks.

In general, segregated MDM solutions result in isolated cycles of redundant costs, reflected in implementations, training and maintenance that require duplicate sets of resources. Additionally, they produce duplicate integrations into the enterprise information infrastructure.

Single domain silos act as barriers to: unified definitions, standard handling of common reference data and unified governance practices, and processes that allow correlating critical information across the enterprise. With the addition of new data sources, such as social media, the integration of multiple segregated domains is made more difficult and less reliable with a single domain MDM application.

The "big pictures" needed by enterprises to answer strategic questions are best built on diverse sets of information, which should be anchored in well-integrated, trustworthy master data that is managed through a centralized governance effort. A single domain MDM application does not easily accomplish these goals.

Business Problems Usually Don't Involve a Single Domain

A common business problem in the pharmaceutical and medical device industries, where the new Federal Sunshine Act requires reporting aggregate spend by physician, could involve as many as 70 different domains of master and reference data. There are "person parties" (healthcare professionals) and "organization parties" (healthcare organizations), plus products, product reporting hierarchies, employees (sales reps), marketing events, geographies, and vendors – all redundantly stored in various ERP, accounts payable and expense reporting applications across the company.

Trying to get an accurate view of this information from an MDM hub that was originally designed for a single domain is challenging. Other business problems are similar. An initiative may start out in a single domain, but in one white-boarding session, it can easily become a multidomain problem.

Organizations don't want to end up with multiple MDM silos. Bridging the separate single domain hubs through some type of "hub of hubs" is expensive and difficult to sell to senior management. They rightfully ask, "why didn't we just architect the solution correctly from the beginning?"

More Siloes Aren't the Answer

Trying to solve the problem of multiple siloed applications in multiple siloed business units with single domain MDM hubs only **creates more silos**.

If an organization does have multiple MDM hubs, chances are very good that – even if they're from the same vendor – they'll rely on multiple technology stacks. It costs more to operate and maintain multiple single-domain hubs than it does to operate a single multidomain hub operating on a single technology stack that meets the organization's requirements.

Companies often try to justify this by claiming they'll initially do a "best of breed" strategy for the various hubs and then stitch them together later. Then, perhaps further down the road, they'll convert to a future, multidomain version of the hub.

This is a common approach by companies locked into a single vendor whose MDM platforms are not yet multidomain-capable.

"ESSA: Eliminate. Simplify. Standardize. Automate."

ESSA is the management philosophy of Jeroen van der Veer, the CEO of Royal Dutch Shell:

Eliminate what you can

Simplify what's left

Standardize how you do it

Automate as much as possible

This can apply as much to information management as to streamlining a \$484 billion oil company.

Comparing Costs: Single Domain vs. Multidomain MDM

Today, more and more enterprises need to master multiple domains. Enterprises having multiple MDM solutions face a number of hard and soft costs that reduce the inherent value of MDM.

For enterprises that are weighing how to address MDM for multiple data domains, it's essential to understand the costs of single domain MDM compared to the costs of a multidomain MDM platform.

Sample MDM Solution Costs			
Single Domain MDM Solution		Multidomain MDM Solution	
<u>First Domain</u>		<u>Single Technology Stack, One Implementation</u>	
Software License Fees	\$700,000	Software License Fees	\$850,000
Maintenance at 20%	\$140,000	Maintenance at 20%	\$170,000
Services / Training	\$700,000	Services / Training	\$850,000
Total for 1st Domain	\$1,540,000	Total for Multidomain	\$1,870,000
<u>Second Domain</u>			
Software License Fees	\$400,000		
Maintenance at 20%	\$80,000		
Services / Training	\$350,000		
Total for 2nd Domain	\$830,000	MDM Multidomain Savings	\$500,000
Total for Both Domains	\$2,370,000	Source: Hub Designs (includes Year 1 costs only)	

Single domain solutions are typically more costly because they require the purchase of multiple software licenses, the payment of multiple annual software maintenance contracts, and performing multiple implementations. In addition, internal groups and resources must develop skill sets to keep the multiple hubs running smoothly.

While a multidomain MDM implementation may be a little more complex at the outset, in the end, the amount of data integration and data quality work is usually similar to a single domain. But more importantly, having a single, seamless technology stack that can handle any type of master data an organization can throw at it can result in **significant** savings.

These savings only increase as an organization tackles more and more master data domains, since the base cost of the multidomain hub doesn't increase by very much as additional domains are added.

The Soft Costs of Single Domain MDM Applications

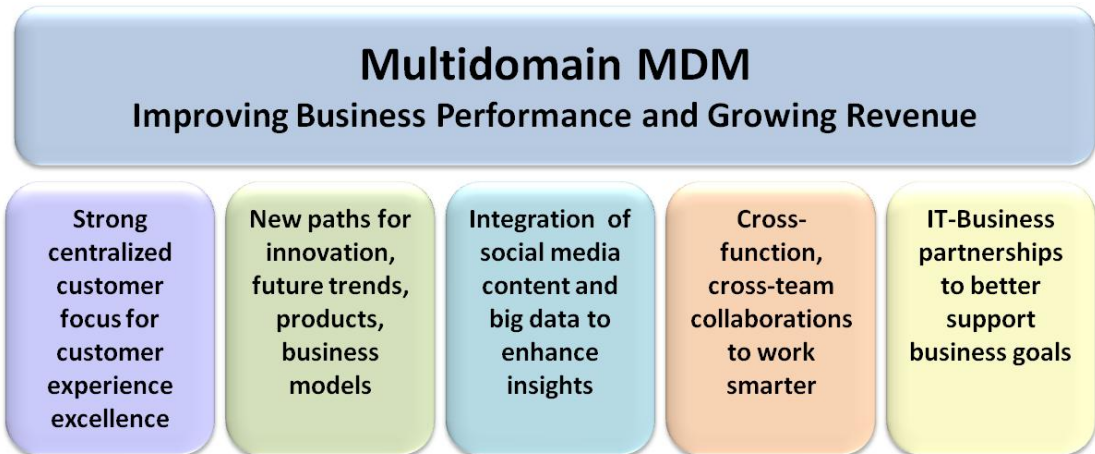
The qualitative or soft costs of relying on a single domain MDM application, instead of a seamless multidomain MDM platform, can negatively impact the enterprise as much as the actual monetary costs.

To understand the current state of the business or to be able to process the information needed for high-level strategies, enterprises need reliable, comprehensive views of core data “building blocks” like customers and products. It's much more difficult to integrate divergent data domains that are built with entirely different technologies, and even harder to identify vital relationships between those domains.

Negative consequences that arise from single domain MDM applications include:

- An uncompetitive enterprise; data isn't integrated so organizations don't understand the dynamics of their information.
- Reliable data is not “at the fingertips” of all groups and functions across the enterprise.
- A less customer-focused enterprise.
- Agility, flexibility and faster decision-making are all impacted.
- An organizational culture that doesn't value data quality, because the company's people are not trying to manage all of the major domains in a single platform. Often, data quality issues are “out of sight, out of mind”.

The worst outcome of utilizing a single domain MDM application is that it can defeat the entire purpose of MDM, which is to enable an integrated view of the enterprise's most critical information as it flows into the processes that drive the business and decision-making. This significantly impacts desired business outcomes.



Multidomain MDM: Timely and Accurate Information for Better Business Performance

An important objective for reliable and integrated master data focuses on the business intelligence (BI) and analytics processes that matter to many groups in the enterprise. Most companies would prefer to go directly to the BI and analytics solutions. However, they realize their master data must be addressed first because it's just not accurate and complete enough "as is" to support their desired BI and analytics strategy.

At one point, BI and analytics processes were the sole dominion of the C-suite and upper level managers. Today, more groups within the enterprise are using this type of information. Studies continue to underscore the direct correlation between the proliferation and smart use of analytics throughout the enterprise to successful outcomes, growth, competitiveness, and innovation.

"Hawthorne Effect"

First noted in 1950 by Henry A. Landsberger, the Hawthorne Effect states that subjects improve their performance simply in response to the fact that they know they are being measured.

So there's a sound research basis in business performance improving through a focus on analysis and measurement.

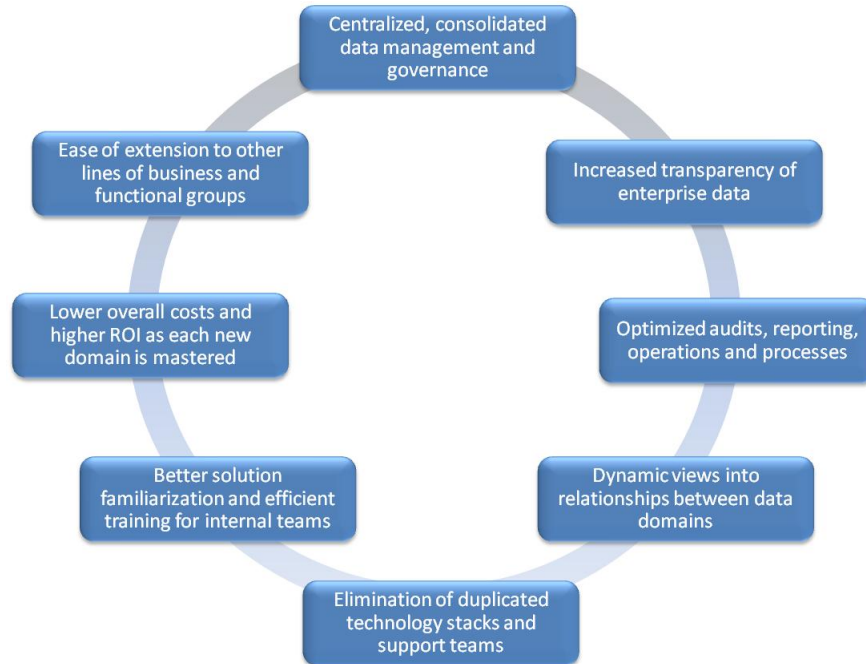
But BI and analytics insights only make a positive difference if they are based on high quality, accurate and timely data. Through data quality and data governance capabilities, master data hubs provide correct, ready-to-go data that can be used for any application.

And real-time capabilities are fast becoming a competitive necessity for many enterprises – but the successful use of real-time data is completely dependent on trustworthy data.

As new data sources such as the burgeoning volumes of social media content and "big data" yield essential information, MDM solutions must be able to process and manage this data and eventually integrate it with existing data sources.

Insights derived from comprehensive analytics flow into right-time decision-making processes. And better and faster decisions open the door to rapid responses to market changes (good and bad), which also lead to more agile adoption of new business models, more efficient creation of new products, and more on-target connections to new customers.

Enterprise Agility: Improved Business Performance



Organizations must be able to change strategies and execute on them rapidly – in response to a competitor, a market trend, an acquisition, pending government regulations, ups and downs in the economy, or customer demand. The survival of the enterprise may depend on it.

Every day, the business news contains stories of:

- Companies shutting down
- Debuts of new technologies like 3D printing
- Corporate or government networks being hacked
- Multi-billion dollar mergers and acquisitions
- U.S. government stalemates creating economic uncertainty
- New technology trends such as “big data”, social media and the movement of IT infrastructure to the cloud.

In order to keep up with the rapid pace of change, companies must use an agile information management approach, where the core master data is reliable, trusted, accurate, cross-border consistent, timely, and complete.

Time and resources can’t be wasted on creating multiple, redundant MDM silos. A safer, more rational strategy is to create this critical information resource once—and use it as widely as possible.

If the Return on Investment (ROI) analysis and business case creation are performed correctly, the MDM initiative will pay for itself with the initial use. After that, every additional domain and business problem that can be managed and solved using the same platform spreads costs out over a wider base and increases the cumulative ROI.

Conclusion: Connecting Multidomain Master Data to Business Value

By itself, divorced of its context, data has no value. Unusable and poorly managed data can actually do a great deal of harm. The data that matters for better business insight and decisions comes with a short shelf life of significance. For enterprises to continuously gain value from data, the right technologies and practices must be in place to ensure that this information is trustworthy and timely.

Real cost savings result when data management processes are streamlined and integrated master data is reliable, enabling processes to be more responsive to business needs and increasing trust in the data throughout the business. Through business processes, data can be tangibly connected to business outcomes and goals that can be measured against performance standards. These metrics help enterprises truly understand the value of their data, in many cases for the first time.

Any data strategy should really be a **business** strategy for better performance, faster decisions, sharper customer focus, and right-time changes in direction. The value of data comes from what can be done with that data to attain business goals and objectives, improve competitiveness, grow revenue, and sustain successful outcomes.

Multidomain MDM platforms provide a dynamic approach to resolving data-related business challenges and revitalizing enterprise business processes and performance. It is critical to solve the problem of master data silos, since business problems usually don't involve just one domain. Multidomain MDM opens the door for enterprises to tap into valuable relationships between master data domains allowing them to make concrete improvements to existing operations and strategies and to explore new directions for innovation and competitiveness.

Perhaps the greatest value of utilizing a multidomain MDM platform is that it achieves the core purpose of MDM: enabling a fully integrated view of the enterprise's most critical information as it flows into and through the processes that drive the business and its decision-making. This continuously and positively impacts overall business success, relevance and survival.

As customers become more demanding and the overall pace of change increases, companies will no longer be able to achieve meaningful competitive differentiation through how they use technology. But they will be able to differentiate through how they use the information they capture, generate and find through external sources. Better decision-making and faster response times are the battle cry of the twenty-first century corporate landscape.

About Hub Designs

Hub Designs is a global leader in the development and delivery of high impact master data management (MDM) and data governance strategies. The company publishes Hub Designs Magazine, one of the first online publications specifically for the information governance industry. The firm's Thought Leadership practice produces white papers and webinars, and Hub Designs' President, Dan Power, is a frequent presenter at conferences and trade shows. For more information, please visit <http://hubdesigns.com>.

About Stibo Systems

Stibo Systems gives data direction by providing organizations with a leading multidomain master data management (MDM) solution. Stibo Systems enables its customers to better manage enterprise intelligence on a global scale, improve sales, and quickly adjust to changes in business requirements. Stibo Systems' STEP technology is a flexible, uniform MDM solution that provides a single trusted source of operational information for the entire enterprise. Stibo Systems is a subsidiary of the privately held Stibo A/S group, originally founded in 1794 with corporate headquarters in Aarhus, Denmark. For more information, visit www.stibosystems.com.

Hub Designs

188 Whiting Street
Suite 6A
Hingham, MA 02043 USA

+1 (781) 749-8910 office
+1 (781) 735-0318 fax

hubdesigns.com
hubdesignsmagazine.com

Stibo Systems Inc.

3550 George Busbee Parkway NW
Suite 350
Kennesaw, GA 30144 USA

+1 (770) 425-3282 office
+1 (770) 425-3012 fax

stibosystems.com
datafusionblog.com

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