**CDI Alert™ **

The CDI Institute
Independent. Authoritative. Relevant.

When [CDI-MDM] Elephants Mate … 3rd Generation Solutions Mature

Subtitle: Is There a Market for Specialist/Best-of-Breed CDI-MDM Vendors Given the Mega Vendors' Momentum?

Monday, May 8, 2006

(Note: If you have trouble accessing the hyperlinked articles, please go directly to CDI Alerts)

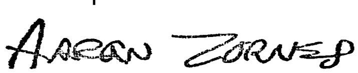
This newsletter focuses on analysis of product strategies and best practices rather than the vendor press releases. The intent is to provide ongoing advice for enterprise data architects, data stewards, CIOs, CTOs and CDI-MDM project leads in helping develop their CDI-MDM strategies **–** via independent, authoritative, and relevant analysis.

SUMMARY:

Not every enterprise's requirements are met by the mega vendor's CDI-MDM solutions. The systems overhead, tool kit approach flexibility vs. pre-fabricated and less flexible package-centric approach, and high price point of value-based pricing – all of these issues provide a compelling business case for certain IT organizations to go "build" rather than "buy".

Products such as Data Foundations' OneData and Siperian Hub meet the CDI Institute's requirements for third generation solutions and have sufficient track record and references to be considered a rational alternative to the higher-priced, pre-fab CDI-MDM solutions.

"Heads up" from the CDI front lines,



Aaron Zornes
Chief Research Officer
The CDI Institute
mailto:editor@tcdii.com

Feel free to pass along a copy of this newsletter to colleagues who may be interested.

To automatically subscribe/unsubscribe, enter your e-mail address on the form at this link.

Questions should be directed to www.the-CDI-Institute.com site coordinator by emailing webmaster@tcdii.com or writing to us at the following address:

Webmaster
The CDI Institute
500 Airport Boulevard
Suite 100

Burlingame, CA 94010
USA

**CDI Alert™ **

The CDI Institute
Independent. Authoritative. Relevant.

When [CDI-MDM] Elephants Mate … 3rd Generation Solutions Mature

Subtitle: Is There a Market for Specialist/Best-of-Breed CDI-MDM Vendors Given the Mega Vendors' Momentum?

Monday, May 8, 2006

Why Are Third-Generation CDI-MDM Solutions Necessary?

Based on conversations with the 500+ attendees of our most recent CDI-MDM SUMMIT (san Francisco, March 2-3, 2006), we were further convinced that **the CDI-MDM market is indeed settling into a status quo where users have expectations that any and all products must pass muster as a "3rd generation" data hub**.

Given that there are multiple vendor camps now contesting leadership in CDI and MDM, in combination with a feverish M&A pace, the question begged is **"Are the mega vendors' CDI-MDM products the only alternative … or is there a role for best-of-breed/specialty CDI-MDM vendors?"** Hence the title of this CDI Alert as a paraphrase of the classic Swahili proverb ("*Wapiganapo tembo nyasi huumia*" in Swahili and "*When elephants fight, the grass gets hurt*" in English).

To recap the 2005-06 M&A scene regarding CDI-MDM software:

- Business Objects (Firstlogic)
- Hyperion Solutions (Razza Solutions)
- IBM (Ascential, DWL, LAS, SRD, and Trigo)
- Informatica (Similarity and took an investment position in Purisma)
- Initiate Systems (Journeé)
- Oracle (Siebel UCM, UPM, UAN and Siebel Analytics)
- Pitney Bowes (Group 1 Software, Sagent)
- SAP (Callixa)
- SAS (DataFlux)
- Siperian (Delos)
- Sun (SeeBeyond)
- Sybase (Avaki)
- TIBCO (ObjectStar and Velosel)

Can today's mega vendors monopolize the market for CDI-MDM capabilities? Or does the very nature of mega software vendors thwart the innovation that "type A" IT organizations are looking for in their next generation CDI-MDM platform/infrastructure? Recent surveys of the 3,000+ membership of the CDI Institute's Business Council show that the solidifying requirements for a contemporary 3rd generation solution can be summarized as:

- Multi-entity hub capabilities
- Data governance-ready framework
- SOA/shared services architecture and evolution to "process hubs"

- Sophisticated hierarchy management
- High-performance identity management.

Multi-Entity Hub Capabilities

As the products in the churning CDI-MDM market mature, true competitive differentiation will focus on the mission critical aspects of managing the diverse range of master data – in addition to the lifecycle approach that this enterprise IT infrastructure will necessitate. By 2007-08, IBM, Oracle and SAP will dominate the broad market, with CDI-MDM specialists prospering in industry-specific or highly-specialized (best of breed) niches such as military command and control, sales force automation hierarchy management, etc.

During 2006, customer and product data interdependencies continue to broaden CDI requirements – i.e., from "customer" to "product" to "vendor". During 2006-07, niche vendors will provide multi-hub connectivity (Data Foundations, Initiate Systems, Kalido, Purisma, Siperian, Stratature) via hierarchical management extensions to provide a registry capability that spans diverse data hubs. For a more detailed review of this CDI-MDM Road Map Milestone, check out our 1H2006 CDI-MDM Roadmap.

Clearly, 2006-07 will be good years to take advantage of the market awareness that SAP will create via its marketing budget for such multi-entity hubs. Concurrently, both IBM and Oracle will struggle to reconcile their diverse customer and product data hubs – WebSphere Customer Center (formerly DWL Customer) with WebSphere Product Center (formerly Trigo) for IBM, and Customer Data Hub with PIM Data Hub for Oracle.

During 2006-07, a market for "multi-entity hubs" will arise due to customer:product:supplier convergence in the CDI-MDM market. Neither customer-centric nor product-centric, such MDM hubs will require the flexibility of data models such as Data Foundations' OneData, i2 MDM, and Siperian MRM to model *both* customer and product (as well as supplier master, price master, etc.) within the same logical data model and (often) the same physical hub. Ideally, such multi-entity data models will enable a "Type A" IT organization to build out its own master data infrastructure. One of the key differentiators will of course be the amount of overhead or system footprint that such multi-entity hubs bring with them – ranging from small footprint (and less built-in application package connectivity) to SAP-esque system footprints (who correspondingly bring much value in application connectivity with them).

Data Governance-Ready Framework

"Data governance" is most commonly defined as "the formal orchestration of people, processes, and technology to enable an organization to leverage data as an enterprise asset." During 2006-07, data governance will become a mainstay of large scale CDI-MDM projects as RFPs increasingly mandate that component. That is, the Global 5000 size enterprises are looking for systems integrator assistance in crafting together the processes and staffing to manage the master data management processes.

Throughout 2007-08, major systems integrators and CDI-MDM boutiques will focus on productizing their data governance methodologies. While certain of these will look to evolve their data warehouse methodologies to this end, others will focus more on a top-down business rule approach – in particularly, focusing on the financial and security aspects of risk management of such corporate assets.

By 2008-09, data stewards will be a common position both in IT organizations and businesses as enterprises formalize this function amidst increasing *de facto* and *de jure* recognition of information as a corporate asset – with larger enterprises staffing full-time corporate data stewards and business unit data stewards.

While the mega vendors are currently occupied with integrating disparate software technology acquisitions, in addition to rationalizing the various data models inherited in the numerous application packages they are required to support as part of the mega vendor's overall go-to-market strategy. In contrast, best-of-breed vendors need not spend the mega resources required to support a mega vendor's overall product infrastructure – instead, best-of-breed or specialist CDI-MDM vendors tend to focus on flexibility over (mega application package) compatibility.

For example, one of the more powerful facets of the Data Foundations' OneData product is its support for business users to directly manage complex data and process models beyond simple master customer data synchronization – i.e., blending together via a single user console the business processes for customer data cleansing, product data synchronization, and territory/household hierarchy management. Moreover, tightly integrated stewardship and change management within OneData enables ease of transfer of data stewardship to business owners.

SOA/Shared Services Architecture and Evolution to "Process Hubs"

During 2006-07, Global 5000 enterprises will migrate en masse from custom-built customer data hubs onto commercial CDI-MDM solutions – primarily those of mega vendors IBM, Oracle-Siebel, and SAP.

Through 2007-08, systems performance will remain problematic as enterprise infrastructure teams hedge between virtual, persisted and composite/hybrid hubs; applying point solutions such as enterprise information integration (EII) middleware (a.k.a. "dynamic CDI" or "data services") will help adjudicate both performance and political stalemates.

Typically there is a classic trade-off in CDI scenarios wherein the business must decide between how much of the master customer data to centrally persist and manage vs. the need for performance and throughput. Moreover, the politics of unifying parochial data sources in a master data federation further complicates matters as many of the trusted sources of master customer data desire to "remain the trusted source". Yet another wrinkle in the CDI fabric is the need many businesses face to repurpose master customer data and publish it in a wide variety of formats to the consumers of such master data.

One of the underlying and unspoken realities (the "dark side of data hubs") is that the IT industry does not yet have a clean answer about how an organization can cobble together the various business processes that comprise the corporate data governance processes. Without a firm commitment to business process management (BPM) or workflow compatibility, data hubs run the risk of becoming "yet another data hub silo". Without such flexible workflows, organizations are merely rebuilding the same master data files they evolved the past 15-20 years with their ERP and CRM infrastructures. By 2008-09, both market-leading enterprises and CDI-MDM vendors will have completed their transition from client/server to service-oriented architecture (SOA) by migrating from "data hubs" to "process/policy hubs"; concurrently, CDI-MDM requirements will drive vendors into 4th generation, full spectrum hubs (support for structured and unstructured info with extreme scalability).

When you look at the service-oriented architectures (SOA) adopted by the majority of the CDI-MDM vendors, indeed there lies the genesis of a business policy/process hub architecture. Third-generation CDI solutions recognize the business value inherent in such policy/process hubs. In one such centrally managed (and auditable) IT system, the entire enterprise can finally share key master data (e.g., pricing masters, discount policies, privacy preferences) such that: (a) the business is in compliance with the numerous regulatory mandates, (b) all applications and entrusted employees have a central, secure and trusted source of such info, (c) new applications can leverage this existing shared functionality ("shared services" model), and (d) customer/business partner satisfaction goes up due to "once and done" business process for updating such policies.

Clearly, BPM workflows are critical to achieving value from CDI-MDM, and to ensuring that the outcome of such data governance infrastructure is actually orchestrated across business units and master data hubs. And just as clearly there are major ROI and other benefits from centrally managing such policies within a single trusted "policy/process hub". Through 2007, service-oriented architecture (SOA) and XML Web Services, along with workflow standards such as BPEL, will make it easier for businesses to coordinate business process flows within and among horizontally-differing and brand/architecture-differing, policy and/or data hubs.

Sophisticated Hierarchy Management

During 2006-07, mega CDI-MDM vendors (IBM, Oracle-Siebel, SAP) will continue to focus significant resources (R&D and marketing) on the "industry content" aspect of data models which will force specialist CDI-MDM vendors to stay “data model lite” via specializations such as B2B hierarchy management and distributed CDI-MDM.

By 2007-08, sophisticated hierarchy management will become a mainstay feature of all CDI-MDM vendors, yet support for metadata repositories to link the mega vendors’ multitude of acquisitions will continue to lag significantly.

Not until 2008-09, will the mega CDI-MDM vendors have rewired software to fully support their strategic application infrastructure (Oracle Fusion, SAP NetWeaver, et al). Concurrently, CDI-MDM vendors will migrated from data model-centric architecture to process model centricity.

Best-of-breed vendors such as Data Foundations, Initiate Systems, Purisma, Siperian, and Stratature focus on the hierarchy management issue – especially, business/organizational hierarchy mapping via relationship charts and rules management.

High-Performance Identity Management

During 2006-07, independent data quality vendors will struggle to compete against better funded match/merge and data profiling capabilities increasingly integrated with mega vendor CDI-MDM solutions (e.g., IBM Customer Center with WebSphere QualityStage and Enterprise Analytic Solutions, Oracle Customer Data Hub with Data Librarian).

By 2007-08, standalone data quality vendors will either evolve into standalone CDI hubs focused on the mid-market while maintaining postal service address cleansing as their forte – else be acquired by mega vendors in search of high-performance identity management. With IBM taking Language Analysis Systems (LAS) and Systems Research & Development (SRD) out of the picture, Initiate Systems looks to be a target for either IBM to corner the market on identity management or another vendor (Oracle in particular) to increase its high-end CDI-MDM capabilities.

Through 2008-09, high speed probabilistic matching algorithms will dominate over deterministic models despite hybrid solutions providing the best results.

Justification Strategies for Alternatives to Mega Vendors’ CDI-MDM Products

Several major reasons are cited by users as justification for “build” over “buy”:

- **Flexibility of a Toolkit Approach** – The ability blend together best-of-breed components provides both specific functional advantage and major flexibility over the (relative) pre-fab inflexibility of an application-centric CDI data hub.
- **Value-Based Pricing of Mega Vendors –** The perceived onerous pricing of mega vendors forces the “buy” decision; note that the mega vendors are dogmatically following a value-based pricing model where the minimum ante is US$1.2 million. Many organizations believe they can build and maintain a more cost-effective CDI-MDM hub using piece parts and toolkits from best-of-breed vendors.
- **Software as a Service (ASP Model)** – Certain enterprises decide to forestall making either a “build” or “buy” decision given the M&A flux in the market, and the belief by certain advanced IT organizations that they need “process hubs” or 4th generation CDI-MDM solutions. Yet the business needs to prepare for the eventual build or buy solution by readying its data governance and other preparatory stages. The service bureau model (“software as a service” or “application service provider”) allows for this staged strategy.

BOTTOM LINE REDUX:

Not every enterprise’s requirements are met by the mega vendor’s CDI-MDM solutions. The systems overhead, toolkit flexibility vs. pre-fabricated and less flexible package-centric approach, and high price point of value-based pricing – all of these issues provide a compelling business case for certain IT organizations to go “build” rather than “buy”.

Products such as Data Foundations' OneData and Siperian Hub meet the CDI Institute's requirements for third generation solutions and have sufficient track record and references to be considered a rational alternative to the higher-priced, pre-fab CDI-MDM solutions.

About The CDI Institute

To provide feedback on our client's CDI initiatives we have two levels of sponsorship for IT organizations: (1) free membership (by invitation) in our CDI Institute Advisory Council providing unlimited CDI consultation by phone, and (2) free membership in our CDI Institute Business Council (survey base) which provides bi-weekly updates on key CDI trends and issues via an email newsletter.

- **CDI Advisory Council™** of fifty organizations who receive unlimited CDI advice to key individuals, e.g. CTOs, CIOs, and CDI project leads
- **CDI Business Council™** of 3,000+ Global 5000 IT organizations who receive a limited distribution, bi-weekly newsletter with CDI industry updates
- **CDI Alert™** bi-weekly newsletter provides IT organizations, CDI vendors, and investors hard-hitting insights into best practices as well as market observations derived from interactions with the CDI Advisory Council™ and the CDI Business Council™. Initially free to qualified individuals, the CDI Alert™ is expected to become a fee-based product 1H2006. The intended audience includes: CDI project managers, CIOs, CTOs, chief customer officers, chief privacy officers, data quality managers, data stewards, market analysts, metadata managers, and project teams responsible for CDI solutions and infrastructure, data quality, data warehousing, customer relationship management (CRM), enterprise resource planning (ERP), product data management (PDM), supply chain management (SCM), partner relationship management (PRM), and business intelligence.
- **CDI MarketPulse™** monthly survey results, e.g. budgets, success/failure rates, mindshare based on ongoing surveys of the CDI Advisory Council and the CDI Business Council
- **CDI Fast Track™** quarterly 1-day workshop – fee-based and rotating through the major North American, European and Australian metropolitan areas
- **CDI-MDM SUMMIT™** quarterly 3-day conference and exposition – rotating through east and west coast North America, London, Amsterdam, and Sydney.