

Customer Data Harmonization / A Single View of Customer Truth

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Abstract

Mergers, acquisitions and today's global landscape provides both complexity and opportunity in the practice of "Master Data Management" (MDM). Disparate platforms, data consistency, regional/governmental policy and pure economics should not inhibit the credit team's ability to provide global data standards in a manner that enhances the functional deliverables in a diverse environment.

A 'sea of data without knowledge' ...it's time for a change.

2016 could be a watershed year for finance departments moving beyond 'data noise' to materially improving their order-to-cash outcomes through data harmonization. We have all heard it, or used it ourselves: *"We need a single view of Customer Truth."*

When it comes to Order-to-Cash (OTC), the customer transactional data includes *Quotes, Orders, Invoices, Collections Notes, Treatment & Strategy, Disputes, Deductions, Delinquencies, Dunning Notices, Contracts, Warranties, Shipping Information & POD, Customer Service notes, Sales & CRM data, Credit Risk/Limits/Order-Releases, Remits, Cash Application, Credit Memos, Payment Behavior, ...etc..* The real-time availability, accessibility, quality and accuracy of this global data is not where it needs to be to be more helpful.

In a 2015 Deloitte whitepaper by Scott Barnes, Director, Deloitte Consulting, titled *"Turning Data into Insights"*, he and his team start with the fundamental business premise that: *"Organizations that can access the information they need, when they need it – and trust its accuracy – will likely have the upper hand in the marketplace. The quality of your data and the ease with which it can be examined can determine the success (or failure) of your most important business decisions."*

Not surprising, the *Data Quality Framework* that Deloitte uses, follows very closely to the old tried-and-true Six Sigma DMAIC-Loop process: Define, Measure, Analyze, Improve and Control.

Applying DMAIC to an order-to-cash (OTC) finance improvement project, at a high level, would look something like this:

- **Define** a given finance process improvement project and then establish the cross-functional team members (Collections, Disputes, Credit, Sales, Customer Service,...etc.) that are needed to deliver the target OTC outcome.
- Take baseline **Measurements** of key performance index (KPI) metrics and determine what financial outcomes you are shooting for: short, medium and long-term goals. You will want to track KPI improvements. You will be surprised just how much you can actually accomplish.
- **Analyze** the data and finance processes, driving current outcomes. Look for root causes of chronic issues upstream, downstream and within the finance department. Quantify the improvement-gap, or delta between best possible and current performance.
- Initiate the finance process **Improvement** solution – this might be just manual process change improvements, or move beyond manual methods to using scalable automation solutions to give you sustainable and replicable outcomes for other geographic operations.
- **Control** your outcomes and look for ways to realize continuous improvement in your finance processes. Control via a monitoring plan (something automation is very good at) and standardized finance processes which you can adapt and replicate to other business and operating units, in order to realize global Working Capital impacts.

Today more and more finance departments are employing these Six-Sigma and Lean Processes to improve everything from new customer onboarding to internal collaboration for dispute resolutions, in both local and geographically dispersed global financial shared service center (FSSC) operations. But, in order to be successful, they all need complete and accurate OTC data.

One of the requirements for OTC teams and improvement project processes to be effective and sustainable, involves a term we have been hearing for many years now: Master Data Management or MDM. Good data is a critical component of harmonizing customer financial information and making it useful for OTC systems, processes and FTE's (fulltime equivalent) team members, to produce better financial outcomes.

What we hear in parallel with MDM, especially from the IT departments supporting finance teams and tasked with accomplishing MDM for OTC, is: *“We don't have the resources to accomplish consolidating data across all the different finance and ERP systems we have in our company.”* or *“The available solutions (options) are just too expensive for us to implement.”* Both of these arguments no longer hold-water, technology options have moved beyond this old story and many companies are benefiting from Harmonized OTC data.

So what exactly is MDM (Master Data Management) and what role does it play in OTC? MDM is a comprehensive method or process of enabling a global enterprise to link all of its critical real-time OTC data to one set of accessible and updated files, which all finance FTE's and departmental constituents (Sales, Customer Support, Accounting, ...etc.) can work from. A single sheet of music, if you will.

When IT says that it simply can't gather, rationalize, normalize and harmonize (*make data consistent and accessible in a productive framework of OTC best practices*), across all the disparate OTC data components into globally usable database – they are right! In most corporate environments, they simply can't. This is why you need outside resources who are experts at doing this...and not just general MDM, but the specific order-to-cash MDM we mentioned at the beginning.

Effective OTC MDM and OTC Data Harmonization strategy, is about much more than just the OTC data. It involves the people, processes and technology systems and it is very common for IT departments to struggle with delivering effective MDM. Quite often they are restricted to legacy information tools, restrictive ERP information environments and business units using the same ERP systems, but in different ways and even using the same data fields in those systems, for different purposes.

The Gartner Group focuses quite a bit on Enterprise Business Applications (ERP systems), Information Strategy, Data Governance and Master Data Management (MDM). You will find many Gartner Blog Network posts on the topic of MDM.

In a Feb. 11th 2016 post titled: "Update on our Magic Quadrant's for Master Data Management 2016", Gartner informs its readers that the current two (2) Gartner Magic Quadrants (MDM of customer data, MDM of product data) are being "retired" and Gartner is moving to a much more matrixed six (6) MDM Magic Quadrants.

Clearly MDM is a Hot Topic and Gartner is enhancing its offerings to target and review: 1) B2B Customer Data; 2) B2C Customer Data; 3) Buy-side Product Data; 4) Sell-side Product Data; 5) Multidomain MDM (any domain); and 6) Multivector MDM (any implementation style, organizational structure, industry).

This recent expansion of Gartner's Magic Quadrants speaks to new MDM technical capabilities and greater client interest in more refined aspects of MDM and data lifecycle management in general. There is a great deal of client and market interest/demand in MDM today and it is accelerating as new capabilities are released by information providers.

Clearly you and your finance teams are not alone relative to struggling with access to actionable information, based on available data intelligence. Fundamentally having access to a complete, accurate and up-to-date picture of what is happening in your order-to-cash (OTC) processes and systems throughout the OTC lifecycle is critical. This is where the idea of OTC Data Harmonization and OTC data intelligence comes into play.

One definition of Data Intelligence I have found that I like is: *“Data intelligence is the analysis of various forms of data in such a way that it can be used by companies to expand their services or investments. Data intelligence can also refer to companies' use of internal data to analyze their own operations or workforce to make better decisions in the future. Business performance, data mining, online analytics, and event processing are all types of data that companies gather and use for data intelligence purposes.”*

In the PricewaterhouseCoopers (PwC) 2015 US CEO Survey “Top Findings: CEOs find upside in a risky world” by Dietmar Serbee, Dennis Chesley and Brian Schwartz, we saw that nearly 90% of CEOs identified data intelligence and digital technologies delivering increased value to the business and enhanced quality of experiences for their customers.

So why is the world of OTC (order-to-cash) master data (MDM) so complex and why is it affecting so many OTC team?

Bottom-line, your Order-to-Cash teams are not the ones creating OTC billing issues, but they absolutely are the ones responsible for resolving OTC problems and in the process achieve the absolute best working capital results possible from each FTE event (*the measure of output each FTE can accomplish against a prioritized task list*)...no matter what the state your available data is in.

So, how do OTC teams sift through tough rigid legacy information environments quickly? How do they deal with incomplete information from these critical OTC functional areas, including, but not limited to:

Multiple Systems of Record

Companies typically have multiple ERP systems of record like SAP, Oracle, Microsoft, Epicor, JDE and others. We have seen environments where the instances of just one ERP system exceeded 80 and each business unit was using the systems slightly differently.

Multiple Systems of Engagement:

Excel, Oracle DB, IBM DB2, Microsoft Access databases, Email systems, Customer Relationship Management (CRM) systems, Quoting Systems, Sales Order Entry Shipping, Customer Service and Warranty Systems.

Parent-Child Portfolio Roll-Up:

Another challenge is seeing the relationships client companies have with each other, across all of your Systems of Record and Systems of Engagement. Often your separate business units are selling to the same customer and multiple collectors are calling the same A/P person. Many times the parent company wants the child company billed separately or they want to roll invoices up across multiple children to a different parent.

Credit Risk:

There are three elements of Credit: Provisioning, Decisioning and Risk analytics. How you onboard new customers consistently across multiple systems can be daunting. How your company makes consistent decisions on what (company or invoice) to put on hold and what to ship. How is it changing over time? What is your enterprise risk tolerance and how do you make sure you do not exceed that across all the parent/child entities.

Clean vs. Dirty Receivables:

What dollar amounts are undisputed and overdue – the Clean A/R. Which dollar amounts have some kind of dispute, deduction, short-pay, Trade-Fund Co-Op, payments in work-out, payment already promised, invoices which are not due yet - the Dirty A/R. Does your system separate these automatically so your collectors and resolvers are not doing this manually dozens of times a day? Can they do that across all the OTC systems?

Internal Dispute Collaboration:

Today your collectors are resolving disputes manually, with phone calls and emails and by putting notes in either your systems of record or systems of engagement. But in many cases there is no MDM or Scalable, Replicable Automated Dispute Resolution process with SLA's (service level agreements), root-cause analytics, tracking or monitoring to help systematize these collaboration efforts and make measurable changes.

Customer Facing Portals:

Today more and more millennials (people born in 1980 to 2000) are entering the finance roles of purchasing agents and payables staff. The millennials are tech savvy and they want good OTC MDM and technology that permits them easy access, 7/24/365, to virtually anything they can do on the phone with a collector, dispute resolver, credit analyst, or payable clerk = a Truly-Virtual Customer Self Service OTC Portal.

Customer A/P Portals:

More and more Tier 1 Customers are forcing vendors to use their A/P Portals to adjudicate receivables. With companies like Wal-Mart and Home Depot, there are few traditional collections calls to an A/P person, but rather collectors and resolvers going on these A/P portals to find short-pays for trade-funds Co-Op or contractual agreements, make disputes on deductions, provide evidentiary documents like copies of invoices, proof-of-deliveries and invoice related data.

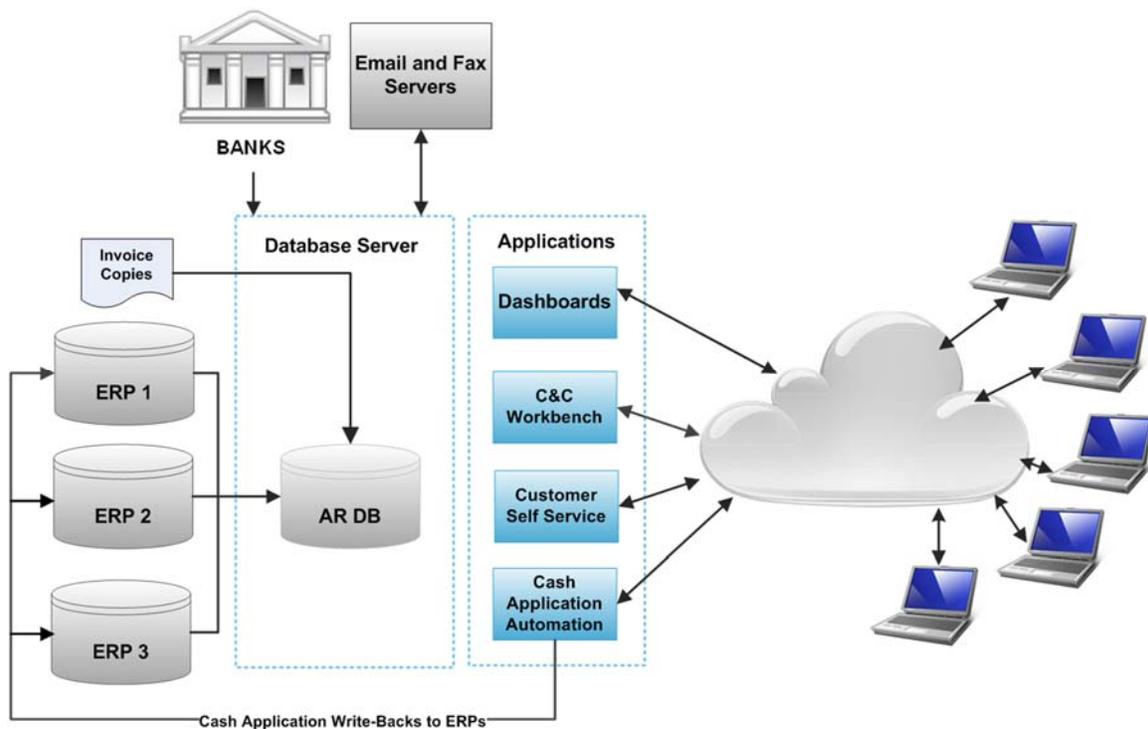
Banking and EIPP:

The United States is still very much check and lock-box centric. There are more and more EDI payments, but still loads of checks. In the rest of the world, particularly Europe, electronic payments are the norm. The trick is the amount and variety of international bank payment specifications and processes, challenges with auto-matching the disaggregated payments and remittance data for Cash App, and the unique EIPP (electronic invoicing presentment & payment) data elements.

Credit Bureau & Trade Group Data:

Today it is not enough to have just a D&B Paydex Score to determine risk. The requirements for more data, trade data, local in-country data, more complete and diverse credit data and a weighted and blended holistic approach to a credit score, is required for better risk analytics and cash forecasting. Plus, the most heavily weighted element in holistic credit scoring needs to be payment behavior (Slow-pay, No-pay, Disputes, deductions, broken promises). All this OTC data needs to be accurate, complete and available.

The illustration below depicts the complex master data that needs to be managed via Data Harmonization. You need to be able to take dozens of data elements, across multiple parent-child related companies, and consolidate them into a harmonized single view across all the systems of record and engagement. This is the only way to enable a single resource, or cooperative global team, to have instant access to the customer big picture, for all client transactions across all global operating units:



Think about your company's MDM and all the separate places OTC data currently resides in unique formats. Think about all the separate systems, programs and records your OTC team has to access on a daily/weekly basis (*quite often with separate passwords and IDs*), to discover what actually happened to a Customer transaction.

Once a sales quote is generated and the quote turns into a Customer Order, that order is fulfilled-shipped-delivered to the Customer, the Customer receives the order and their Payables department completes a three-way match against order-receipt-invoice and subsequently decides NOT to pay all or a portion of the bill due to tactical dispute reasons (Price, Freight, Tax) or contractual deductions (Trade-Funds Co-Op).

Now, take this complex OTC Lifecycle and spread it across multiple company divisions, using multiple systems to process orders and generate invoices, in multiple countries with unique billing requirements, across multiple business cultures and languages, in multiple regional and trading currencies, all using different contract types with special terms and conditions.

Add to this the extended support systems/processes of Shipping, Customer Service and Warranty, Sales, Contracts, Accounting and Marketing/Promotions – you end up with an information mess. Being a member of the OTC team, your group has the unique pleasure of figuring out what went wrong, when and where it went wrong and how you are going to fix it to the mutual satisfaction and benefit of all concerned.

The complexity of MDM and objective of Data (Customer) Harmonization is to take all the heterogeneous (*mixed*) sources of disparate Customer information and aggregate, rationalize (*make it consistent and unambiguous*), normalize (*take different versions/uses of data elements of the same or different ERP and produce consistent data out of them*) and then integrate them all into a single productivity platform for Credit, Collections, Dispute Resolution, Cash Application and Customer Self-Service functions.

IT departments have been struggling with MDM and it is quite common for companies to have a different MDM strategy in different operations throughout the enterprise. These inconsistencies degrade the MDM possibilities and reduce customer data management processes. In short, even if you have a single ERP system, the data needed to maximize OTC performance is both inconsistent and distributed across external databases and systems.

To achieve OTC MDM and realize Customer Data Harmonization, you must have a profound understanding of the intricacies of complex databases, the programs and processes that utilize that data, the interactions of the users with how that data is presented in a way that actually helps credit, collections, dispute and cash applications teams execute their daily OTC functions efficiently.

Critical to OTC MDM and Customer Data Harmonization is OTC data availability and accuracy.

Fail in either of these two prerequisites and the OTC team will never trust the OTC platform or use it for customer communications. We have replaced dozens of failed OTC automation systems due to a failure in not only the “incompleteness and inaccuracy” of data made available to the OTC team, but the OTC system being inflexible and unable to adapt to new master data requirements, particularly when companies are acquiring other companies or they are entering new regions or market segments.

There are several benefits to having a complete view of Customer OTC transactions within a single productivity platform. First and foremost is having all OTC constituents able to reference all customer OTC transactions and collaborate and cooperate with other team members inside and outside of finance. The time savings and ability to automate and track/measure and escalate internal resolution with OTC constituents, receives a huge boost from harmonized customer OTC data.

When a finance person is on the phone with a customer they are able to address other outstanding OTC issues, not just the one that instigated the call. OTC team members address, and each of the authorized customer representatives are able to see, the status and disposition of all Customer OTC transactions and address all open items in real-time. This alone eliminates many callbacks and increases the ability of the OTC team to conduct more calls in a given day.

With accurate OTC data providing complete and accurate customer transaction views, your business decisioning, reporting, executive dashboards, cash projections, risk analytics and trending graphics are meaningful and trusted by all departments and does not require time consuming extract and Pivot-Table analysis.

One common question is, *“Will simply upgrading our current ERP to a single global-instance give us harmonized data and a single view of Customer Truth?”* The answer is mixed.

ERP companies are quick to point to centralizing/standardizing on their ERP platform, *“If you simply get all of your divisions working on one instance of (SAP, Oracle, Microsoft, Epicor, Infor, etc.) and get everybody to use the now common data fields across your global enterprise consistently...most of your problems can be resolved.”*

This is only partially true. ERP systems can do a great deal, they are literally ‘jacks’ of all enterprise information ‘trades’...which by their very nature means that they are not best-of-breed products for many departmental purposes.

This is especially true for OTC, which is why SAP, Oracle and others have come up with “advanced” versions of the basic Accounts Receivables modules. The enhanced version is indeed much better than what comes standard, but they exist in a complex framework of ERP functionality and here are some use-case examples of what OTC teams discover in a new ERP implementation:

- ERPs pose heavy initial IT requirements initially and ongoing to maintain
- Few clients have seen an internal IT department not require external Consultants to customize advanced ERP capabilities, which they do to a fixed set of department requirements and then pay high ongoing fees to keep the systems up to date. This is not departmentally empowering.
- Advanced collections within ERPs are not easily adapted to changing business or department priorities. Workflows tend to be limited and rigid.
- Most ERP systems do not talk to all the subsystems involved in your OTC lifecycles. This means you will not have a single view of Customer Truth in a single productivity platform.

- If you buy a new company, even if they are on the same ERP system, the systems are absolutely not set-up or function the same, each is unique and typically set-up very differently.
- Some ERP systems can perform inquiries, dispute bills, pay invoices, and review balances via portals, but because the ERP does not have all the data from all the OTC systems, phones will light up with Customer complaints because most of your customers have services, support and transactions originating in systems outside a single ERP.

Things that best-of-breed OTC solutions do exceptionally well above ERPs, are things like:

- Strategic Collections Management: Segment, Prioritize & Treatment Based
- Dispute & Deductions Resolution & SLA Based Collaboration
- Zero-Touch Customer Self Service (ACH, Auto Debit & Credit Card)
- Customer Harmonization: Multi-ERP & Systems of Engagement = Single View of Customer Truth
- Sales Rep visibility to customer aging and disputes via SFDC
- Executive Dashboarding, Analytics & Reporting
- Order Management: Hold/Release Decisioning across Diebold order systems
- Accelerate Cash Application & Improve Lockbox Automation across all systems
- Automation of Reminders & Dunning HTML w/Robust Customer Self Service Portal Link
- Credit Provisioning, Decisioning & Risk Analytics across all systems

Rarely, (if ever) does any global company have every single OTC operational facet residing in a stand-alone or multi-instanced ERP system. It is always a patchwork of specialized technology talking with best-of-breed software solutions better suited to specific tasks, rather than monolithic and inflexible ERP systems.

These specialized OTC systems are more job-appropriate, more flexible in adapting to business needs and priority changes, faster for users to adopt and use. Because they are easier to understand and configure, they generate faster time-to-value. In fact, some of these OTC point-products are quite capable of receiving complex multi-faceted data from disparate ERP systems and can write-back updated information to the system of record while maintaining highly auditable and SOX compliant workflows and data integrity.

In a PwC post from August of 2015 titled, “Unlock Data Possibilities,” Dan DiFilippo writes, “Huge amounts of data are at the fingertips of all businesses. Data-savvy leaders are using analytics techniques to increase their decision-making speed and sophistication. Executives who unlock the full potential of data and integrate it into their decision-making culture can help their company become more consumer-centric, reduce risk, increase security, and guard against competition and new players.” The piece went on to highlight that “Data-driven organizations are 3X more likely to report significant improvements in their decision-making.”

This is no surprise at all. For the last fifteen years we have seen companies bringing together disparate data and harmonizing it to effect positive change in their OTC lifecycles. The result has been the release of billions of dollars of working capital once trapped in OTC process and

systems. They reduce reserve requirements, reduce write-offs, reduce DSO (days-sales-outstanding) and DPT (days-past-term), they compress dispute resolution cycles, better manage credit risk, do faster cash-application with better hit-rates and automation of remittance posting, are more efficient OTC teams and have happier customers.

One of the most significant improvements we see with MDM through Data Harmonization in global enterprises, is bringing together all these granular transactional pieces of Customer information stored in separate ERPs, supporting Systems of Record, Access Databases, Excel Spreadsheets, Customer Relationship Management (CRM) systems, Warranty Systems, Contract Systems, Sales-Order-Entry Systems and the empowering result of having access to critical Real-Time Data which is easy to use.

From just about any aspect of the OTC Lifecycle, think about how dramatically you can cut down the research time alone with good MDM - how quickly your team can find the needed information locked away in these incompatible data that has not been harmonized.

The next big benefit is in the increased ability your team has to collaborate with other departments and more easily communicate with Customers through each step of the OTC Lifecycle. When providing the High-Volume/Low-Value Customers access to a Self Service Customer Portal where, 24/7/365, they can initiate virtually any OTC activity as well as make payments. Using these Portals (empowered with complete and accurate Harmonized Data), Customers can respond to Reminders and Dunning notices on-line, pro-actively log Disputes, request and find copies of invoices and statements, generate a payment work-out and pay via ACH, EFT or Credit Card...this gives you a 100% Zero-Touch OTC Lifecycle – which frees up your FTE events and OTC resources to work on other priority activity.

Here are additional benefits realized in OTC MDM data harmonization:

1. "Pre-Term Touches" - The ability to identify past issues and proactively reach out to Clients with large invoices or complex orders, helping them avoid having to independently deal with issue recurrence. Even better is to do this prior to invoicing on significant orders.
2. Accounts Receivable Automation - This is tightly integrated with ERP and supporting systems of record providing evidentiary documents (e.g. PODs, PDFs, Digital Scans)
3. Dispute Case Creation -Tracking, Routing, Escalation, Approval, Analytics and Alerts
4. Prioritization - This is based on Working Capital Impact, Risk, Client Type Segmentation and Treatment
5. Root-Cause Analysis & Reporting - Reason Codes, Geography, Product/Service Type, Shipping/Packaging Methods Used, Seasonality, etc.
6. Scalable, Replicable Best Practices Resolution Cycle Compression Processes
7. Accounts Payable (A/P) Vendor Portal Automation support – This helps streamline and automate the processes of going to a Customer's portal to secure payment
8. Database Driven Automation for Deductions, Disputes and Chargeback Management
9. Rapid Closure of Disputes Supporting Faster Cash Application Cycles

In achieving OTC MDM and Customer Data Harmonization, your company will realize many of the OTC goals and objectives management has been seeking. Setting your department on a DMAIC path of continually improving and refining your OTC best practices methodology using OTC MDM and Customer Data Harmonization, you must have accurate and complete information at the fingertips of your OTC team and their constituents.

Without information automation, you cannot achieve OTC MDM or Customer Harmonization, and your teams will continue to use repetitive and redundant brute force manual methods far too often. OTC MDM and Customer Data Harmonization will create better Customer Experiences. You will be able to measure and better gauge the targeting of Customers who deserve higher degrees of engagement and be able to avoid the volunteers who will pay without having to be called. Plus, you will have the ability to maximize the output and working capital impact and outcomes of your scarce OTC resources and their capacity to optimize FTE Events.

Chris is the COO and VP of Professional Services at Cforia Software, a global enterprise software company, delivering Working Capital and Order-to-Cash (OTC) Automation Software for individual companies, global enterprises, Shared Services Organizations (SSO) and Financial Shared Service Centers (FSSC) for fifteen years. Over 230 enterprises today are managing \$240 billion in Accounts Receivable (A/R) turnover with Cforia software. In Chris's fifteen years with Cforia as one of its founders, his methodologies have driven successful outcomes based on superior technology integrated with proprietary real-time data integration tools across complex and disparate ERP and supporting systems of record. Cforia Collections Snapshot (SM), Credit Risk Analytics, Order Management, Clean vs. Dirty Receivables Tracking, multi-languages/currency, global Parent/Child risk roll-up and multi-business unit solutions are available in hosted or on-site delivery.

Chris and his OTC team offer a comprehensive suite of Order-to-Cash (OTC) products and services to maximize A/R performance through a full enterprise suite which includes Auto Cash Application, Credit, Collections and Deductions/Dispute Management Workbench, Electronic Billing and Online Payments, Internal Collaboration and Client Self-Service Portals. For more information visit <http://www.cforia.com>.