At-a-Glance

W. R. Grace & Co.

Headquarters: Columbia, Maryland

Industry: Specialty Chemicals and Materials

Employees: 6,500

Revenue: $3.1 billion (2007)

Company details:

- Leading specialty chemical and materials company
- Two operating segments: Grace Davison and Grace Construction Products
- Offices in more than 40 countries
- Founded in 1854

SAP systems:

- SAP ERP 5.0
- FI-CO, SD, MM, PP, PM
- SAP NetWeaver Portal 7.0
- SAP NetWeaver Business Intelligence 7.0

Global Enterprise Unites as One

W. R. Grace & Co. Migrates to SAP General Ledger

by **Chris Maxcer**

photographs by **Jim Greipp**, Pau Hana Productions

Michael Brown & Edward Taylor

On the surface, a typical enterprise appears to look like one company that operates as a smoothly functioning unit. However, a little digging usually reveals a deeper truth: Many companies are actually made up of multiple operating divisions, subsidiaries, and business units that work in silos – using different financial data, reports, and reconciliation processes.

If there's a single area that's almost sacred to companies — especially public corporations and organizations that are saddled with a dizzying array of industry reporting regulations — it's the companies' financial statements. They've got to be accurate, they've got to be stable, and most importantly, they must be consistent.

With all of these separate business units creating their own versions of data, it's uncommon for the data from these fractured entities to come together to form one accurate financial statement for the company. That being said, W. R. Grace & Co. (Grace), one of the world's leading specialty chemical and materials companies, has set out to defy the odds. The company is on the path to becoming an enterprise that — although operating 178 subsidiaries, partnerships, and joint ventures that constitute two operating segments, three product groups, and five product lines — can actually manage its fiscal operations and declarations as one cohesive whole.

"We needed to do something to come up with one version of the truth," says Michael Brown, Director of Financial Systems for Grace. "All the numbers were right, but they looked a little different depending on where they came from. What we needed was one way to look at this data. That was what led to the conversation about moving to a more flexible general ledger."

Edward Taylor,
SAP Global Financial Team Manager

Michael Brown,
Financial Systems Director

On New Year's Day 2009, Grace will become a global company with multiple operating units functioning with a straightforward single source of financial data. Responsible for this simplification will be SAP General Ledger (SAP GL): a newer, more flexible offering from SAP that replaces the classic general ledger introduced with SAP R/3 and that aims to reduce financial operating complexity.

Get to Know SAP General Ledger

The flexible, multidimensional SAP GL isn't exactly new. SAP first introduced the ledger with SAP ERP 5.0. However, most companies haven't yet taken the steps to migrate to this ledger, so SAP customers are still referring to it as a "new" offering.

SAP GL promises to let companies enter all of their financial data into a single source, preventing companies from resorting to the frequent practice of combining multiple ledgers, such as the classic general ledger, the special purpose ledger, and profit center accounting ledgers. This single source of financial data then provides all of the different business units with the ability to select and define their own reports. Because the basic input implementations remain consistent, a financial manager working at an office in Europe, for instance, will see the same data as a colleague in Africa. And both managers, who may have radically different sets of statutory reporting requirements, can generate reports from the exact same SAP GL — without performing inefficient reconciliation beforehand.

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>
> *Ed Taylor, SAP Global Financial Team Manager, Grace*

While this ledger simplification is an incredibly attractive idea, it comes with some risk: the data has to be clean, the company has to change disparate business processes, and at some point, it might even have to shut down company operations. For these reasons, making the move can seem a little daunting to some companies. As an early adopter of SAP GL, Grace has eagerly embraced it and is encouraging

other companies to do the same. It operates with a corporate strategy of "one Grace" — meaning that it wants to function as one company, not as separate businesses within a company. Applying this strategy to its finance department means that the company needs to create one common financial reporting platform.

The Need for Common Reporting

W. R. Grace & Co., which was founded in 1854, has over 6,500 employees scattered around the globe in more than 40 countries. It brings in more than $3 billion in sales each year from two operating segments: Grace Davison and Grace Construction Products. Its first installation of SAP software came in 1997 (version SAP R/3 3.0B), which was for the Grace Construction Products business, but another IT group implemented SAP software in 2001 for Grace Davison in the same instance. The differences between these financial designs seemed small at first, but as Grace began globally using SAP Business Information Warehouse (SAP BW) and SAP NetWeaver Portal-based solutions, the seemingly minor differences had a tendency to become significant discrepancies.

Within the SAP technology that Grace leverages across the company, it uses separate financial ledgers to suit different business needs, depending on location or business unit. "We want to have one ledger that suits all needs," says Edward Taylor, the manager of the SAP Global Financial team at Grace, "whatever business unit I'm in, wherever I am in the world, whatever I'm doing, whether it's management or statutory."

The overall business driver for Grace to move to a new ledger is its goal of common reporting. "We will see some additional benefits like enhanced balance sheet reporting, but really, the main driver is consistency at our company," says Taylor. "The goal at the end of this project will be really to get rid of the silos that say, 'This is a Grace Davison report, and this is a Grace Construction Products report.' No longer will we have people looking at different sets of reports."

Getting Executive Approval

When trying to get approval for the project, Brown had to convince members of the company's senior leadership team. He explained that they had to stop operating as if they had two instances of SAP systems. "The first comment by one executive was, 'I thought we had one SAP,'" recounts Brown. "And depending

on your perspective, we do have one SAP. We all log in to the same system. But the designs are different."

Brown provides an example of how the different designs present problems: "The CFO of one Grace product line was looking at one report, and then he was trying to explain it to one of the regional CFOs," he explains. "They both thought they were right, and they were, but they were looking at two different reports off of what should have been a common set of data."

With the general ledger migration, Grace will alleviate situations like these. Brown says that once decision makers realized this benefit, it was pretty easy to get them on board to support the project. "As soon as I started throwing examples out of what kind of complexity this causes us, it was a pretty easy sell."

Complexity Abounds

Before deciding to migrate to the more flexible SAP GL, Grace had been using a combination of three ledgers: both of the operating segments used the classic general ledger for statutory reporting in

local countries; Grace Davison used the profit center accounting ledger; and Grace Construction Products used the special purpose ledger. All three of these ledgers were receiving postings in parallel, and the company had 222 company codes in use.

"The inefficiencies were enormous," notes Brown. "We started thinking about implementing new planning systems and dashboards and score cards — and we realized that without one common, core version of data, every time we put a new system in, we'd have to reconcile data from multiple areas," he explains.

Plus, while the finance department was supposed to operate across all global locations, the personnel could not. "If we wanted to transfer a person from Grace Construction Products over to Grace Davison, we pretty much had to retrain them," Brown says. "The complexity on the accounting side handcuffed us and limited our ability to master our own department."

Turning to a single general ledger provides them with a solid foundation for financial planning. For instance, SAP GL can improve balance sheet reporting at a profit center level with real-time document splitting. For Grace, this meant SAP GL wouldn't require three different month-end processes and countless ledger reconciliations just to get all the financial data together in one place.

Driving the Migration

It's easy to think of the move to SAP GL as a technical migration, but if a company views it primarily as a technical upgrade, Brown says that the project will fail. "There are too many things that you have to do on the business side — a lot of business process change management," he explains.

The single most important task, it turns out, was splitting the project into two components and creating a team with experts from both the IT and the financial sides of the business. The first component was the actual general ledger data migration, and then the second component was business process testing.

"It's like any two-phase migration project," Taylor explains. "You activate your new ledger, and then your second phase is your parallel phase, where you build new reports and get the business comfortable with those reports."

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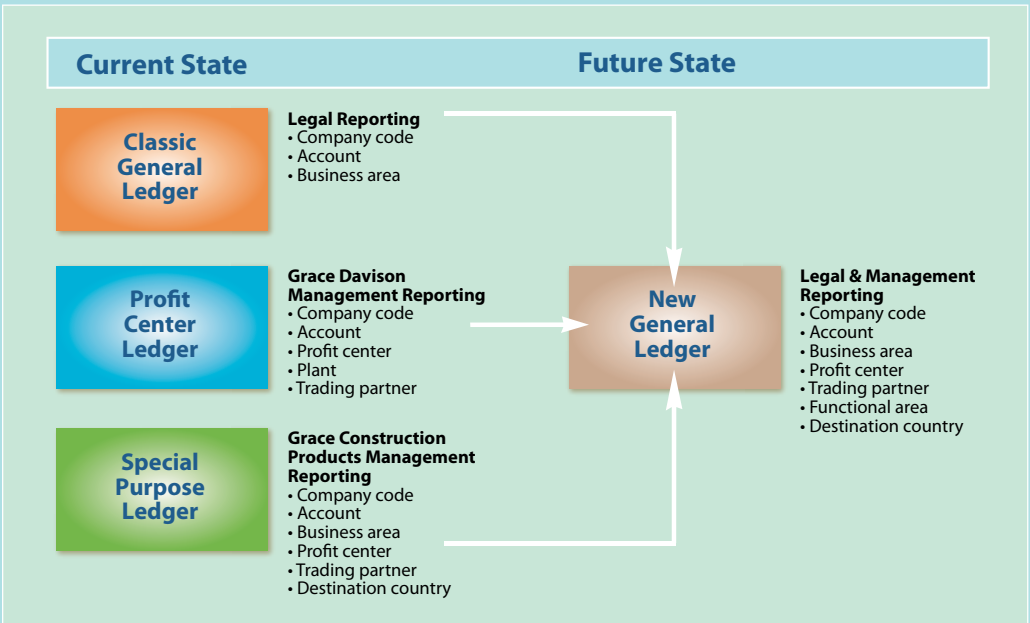
When it comes to the actual data migration, Taylor says companies must truly understand their data. "Over most of the 11 years that Grace has been using SAP-based solutions, it maintained financial master data in a decentralized manner. For instance, many GL accounts were changed from non-open item managed to open item managed. This approach can cause some difficulty with the migration," he says. "We had also developed some inefficiencies over the years that can cause problems with a migration." For instance, various Grace units had allowed large volumes of open items to build up.

"When we first started the project, we had 2.3 million open items," Taylor recalls, noting that the finance team jumped on the task and hammered 2 million open



The future of Grace reporting: SAP General Ledger will combine three ledgers into one

items out of the system in preparation for the SAP GL installation. "We would have had a significant challenge from a technical perspective to migrate 2.3 million open items, so that's critical — open items have to be looked at early and driven through the finance department if you're serious about migrating to SAP GL."

In terms of timing the data migration, Taylor recommends that companies start as early as they can relative to their fiscal year-end so they'll have plenty of time to clear their open items. Grace's timeline for the entire migration effort was eight months, and Taylor recommends that companies, especially larger ones, start even earlier.

SAP Experts Lend a Hand

For help completing the migration project, Grace looked to two sources of expertise directly from SAP. The first was a pair of hands-on consultants that helped guide the migration plan. "They were invaluable to really helping us get started and organized," says Taylor. The consultants worked both on and off site and were crucial players in helping solve technical errors that the Grace IT team hadn't seen before.

The second source of expertise was assistance from back-office consultants at SAP headquarters in Waldorf, Germany. Migration to SAP GL requires accessing an SAP tool called the migration cockpit, which Grace installed on all of its SAP systems, including the production server. "The SAP back-office group does remote sessions — they dial in and do some remote checks on your system to see if you're technically ready or not," Taylor notes. "It helps you through the whole migration process."

The migration cockpit tool recognizes problem areas, such as any settings or configurations that could cause conflicts with SAP GL, and generates reports to send to the client. These reports use red, yellow, and green lights to indicate areas that are problematic, require attention, or ready to roll. "The reports uncovered a lot of things that could have caused problems in our system that we were able to change," Taylor notes. And because Grace was such an early adopter for the migration, the team was able to provide SAP with quite a lot of useful feedback regarding their experiences with their migration tools.

Getting Used to the New System

While most of the project went swimmingly, the Grace team did run into a few head-scratching moments, particularly when it came to understanding how some local geographies had created site-specific accounting processes that didn't necessarily reflect similar processes in other countries.

For example, "in Latin America, we had several sample order processes that used the Sales and Distribution (SD) module that only affected tax accounts," Taylor explains. "There actually was no customer or revenue like you would normally see. So we had to develop new

SD configuration and some new financial accounting document types to deal with that."

SAP GL is based on a broader database that groups the previous data from multiple ledgers into a single data record. However, it also puts some new restrictions on the way businesses can make new accounting postings.

"There are really three main points you focus on: customer, vendor, and cash. When you think about documents splitting in SAP GL, those three points are key in how your transactions have to operate," Taylor explains. "Something that's labeled as a customer invoice has to have a customer on it. It sounds pretty obvious. It cannot have a cash account on it. If it's labeled a vendor invoice, it has to have a vendor and cannot have a cash account. Then there are other types of transactions that are labeled as payments, which have to have cash on them. So it was really just a matter of learning these concepts, understanding the accounting processes closely, and figuring out how this relates to your chart of accounts."

44 Hours Later

Rigorous and repeated testing, not surprisingly, was one of the keys to success for Grace's migration to SAP GL. The testing took several forms. "We did a full worldwide set of tests to cross all sorts of functional areas, different business processes, and interface testing. We tested everything we could think of that might have an impact," Taylor explains. "While that was going on, we were doing iteration after iteration of the migration testing. This required many late nights and weekends for both the IT and Finance departments. There's also a heavy component with the Basis team. Your SAP landscape needs to change during this project. You might go from a three-tier landscape to a five-system landscape to support this project. So it's an all-encompassing global SAP project."

Taylor recommends that organizations perform at least three full migration tests with a production copy of the system in the current fiscal year before moving forward with the live data migration. "We did seven different practice migrations before doing it for real in production," he says. "We went through the entire migration process, migrating all the data to make sure it worked technically before we went to our migration weekend."

And the downtime? Grace took its business offline for just 44 hours during a weekend in March 2008. This downtime included not only the migration, but important steps like system backups and validations as well.

Replacing the Old with the New

After the migration of the data, the project took on an element of irony: "We went from having three ledgers to having four ledgers," Taylor explains, noting that all of the old reports and processes still need to be replaced before the old ledgers can be decommissioned. "The goal is that by the end of our fiscal year, we'll be left with just one ledger: SAP GL," he says. "We will stop posting to all three of those ledgers so that in 2009 forward, we're left with that single version of the truth."

Decommissioning ledgers, it turns out, is much easier said than done.

Grace took its business offline for just 44 hours during a weekend.

In the 11 years that Grace has been using SAP-based solutions, the company has created more than 1,000 reports that are running off of the three ledgers. "There have been a lot of different reports built off of the special purpose ledger, built off of profit center accounting, built for China, built for Brazil, built for whomever. Why do I need all of these different versions of a management profit and loss (P&L) report?" Taylor asks.

The answer, of course, is that Grace doesn't need so many custom reports.

"The number we're shooting for is fewer than 100," Brown says. "So from a change management point of view, that's an enormous task, obviously."

To tackle the problem, Grace has recruited employees from every aspect of the finance organization — globally, regionally, and even down to the country-specific level — to look closely at how they do their jobs and which reports they truly need to run. After those requirements come in, Grace will build new reports that run only against SAP GL.

"There are probably 500 to 600 different versions of a management P&L," Brown says. "The effort now is really all about identifying the new requirements and then building and testing the new reports."

A Firm Date to Flip the Switch

At some point, the finance organization has to stop posting data to all four ledgers because trying to manage these ledgers could easily turn into a reconciliation nightmare. With the support of Grace's Chairman, President, and CEO — and its key financial leadership team — the company has set its switch date to January 1, 2009.

By using a set-in-stone cut-off date, Grace has been able to get quick action out of all its key employees. "It was really, 'We're turning off the old reports, so participate now in defining the new reports. We're going to take your feedback, and we're going to build from it,'" Brown explains, noting that the entire effort was made possible by a management team operating under the clear message of "one Grace."

Despite Brown's initial reservations about how employees would react to the migration, he notes, with a laugh, that the greatest sign that the project has been a success is a bit ironic.

"The interesting thing is, when we were successfully migrated to SAP GL, nothing changed for the users," says Brown. "So success for us was measured by the fact that no one noticed it happened."

And yet, the ultimate goal of the project is monumental. After all, he says, "We have a vested interest in making sure that no matter who's looking at our data, we're all looking at it in the exact same way." And shouldn't that be every company's goal? NWM

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8 Lessons Learned

- **Don't get discouraged:** This simple lesson is perhaps the most important one that Grace can offer. "There were plenty of times over the eight months in phase one where I think we could have said, 'This is just too tough.' And then when you get the remote session reports from SAP and there are red lights all over it, it can be discouraging," Brown recalls. "But the lows are never as low as they seem," Taylor adds. "Give it 24 hours, and it'll probably get better."

- **Go to school:** SAP GL is not just a data migration project. SAP's New General Ledger Configuration (AC210) and New General Ledger Migration (AC212) classes helped Grace understand that the project included both a large data migration effort and significant business process testing.

- **Create two teams:** Two teams are better than one. Grace recommends using a Global SAP team for testing all the business processes and a smaller finance team to manage the data migration. Both teams will also need strong technical experts who understand data from a financial and an IT perspective. By having two teams with different expertise, you can often solve what seems like a show-stopping problem by simply consulting with the other side. "A number of times, Ed would come across things he saw as major problems, but all we'd need to do is make a minor change on the finance side to resolve the issue," Brown says.

- **Engage with SAP consulting:** Most companies will need on-site consulting assistance, regular remote consulting assistance, and SAP Back Office remote sessions for scenario and technical validation via SAP's migration cockpit tool.

- **Look for data inconsistencies:** Most companies will find inconsistencies with data before the migration, which they will need to address immediately, and possibly address again during the migration planning stages. Be prepared for unusual accounting practices and/or statutory requirements.

- **Create a data validation plan:** Because critical financial data will be moving to SAP GL, it will need to be validated for 100 percent accuracy. Cut-over plans should be made as early within the fiscal year as possible.

- **Secure strong business sponsorship:** Because SAP GL migration reaches into every nook of the business and will require extensive business process change, leadership will need to drive change management compliance.

- **Practice, practice, practice:** SAP GL represents the very core of the business – the stakes are too high for the data migration to fail. Grace practiced seven times before they went through with the real thing, succeeding thanks to their diligence and careful attention to the details.