

Is Global CRM an Oxymoron? The promise of customer relationship management (CRM) is the panoramic view of the customer, providing real-time visibility of all customer information across all channels and points of interaction (POIs). Global, multilingual CRM application deployments are gated from achieving this full-spectrum view by the inability of application suites to handle complex, multilingual application issues.

META Trend: During 1999/2000, enterprises will adopt piecemeal approaches to operational CRM (i.e., sales, service, marketing) and associated analytical applications. Through 2001/02, IT organizations will increasingly craft CRM application architectures to integrate operational, analytical, and collaborative front/back-office applications; maturing enterprise marketing automation applications and call centers will converge into unified customer interaction frameworks (mobile and multi-channel).

Organizations deploying customer relationship management (CRM) applications globally are typically doing so to provide integrated business functions across locations. Typical CRM business processes implemented globally include customer service (i.e., the CIC — customer interaction center), field service/logistics, sales/service contacts, quality, and lead/opportunity management. The notion of providing real-time call escalation from a Level 1 CIC agent in Japan to a Level 2 support specialist in Germany and finally to a Level 3 engineer in the US, whereby each customer touch is treated in a local language (and then rolled up into an English-language analytical application), is certainly appealing. However, no current CRM operational suite application achieves this level of multilingual integration.

Application packages will significantly evolve to support globalization — in general, supporting basic currency and language requirements. (We note that virtually all the suite vendors have internationalized their applications — see Figure 1 in Addendum.) Through YE00, CRM operational suite vendors will be localizing their applications to support multiple currencies (including the euro), multiple languages, etc. By 2001/02, all Tier 1 suite vendors will provide single code bases for fully multilingual deployments, so user organizations will need to support only one instance of the application for multiple languages. By 2002/03, real-time call escalation and worldwide real-time business process interoperability will be implemented in the Tier 1 suites, leading to the ability to create a truly global panoramic view of the customer.

So What's the Problem? Goals of worldwide CRM initiatives typically include access to global data; worldwide standardization of processes, procedures, and data access; and consolidation of customer-facing systems. The issue is language support, because most (but not all) applications require a separate instance for each fully localized version, requiring organizations to, in effect, create stovepipes or islands of disconnected implementations, precluding real-time synchronization. Confounding the application issue is the database issue: most databases (or, more specifically, database code pages) will support either Western European character sets and the English character set in the same database or double-byte (e.g., kanji) character sets and English in the same database, but will not support (for instance) French and Japanese in the same database. Finally, even if the implementation is limited to, for example, Western European languages and English, currently there is no good answer to language translation, so data can be viewed only in its native format (e.g., a record entered in French cannot be viewed in English). And creation of the panoramic view of the customer becomes virtually impossible.

Business Impact

Global customer relationship management deployments enable enterprises to leverage customer information across countries and create a global panoramic customer view to optimize customer lifetime value.

Caught between a Rock and a Hard Place. Our research indicates there are precious few real choices, none of which mitigates all problems:

- **Standardize on one language globally:** Most META Group clients have chosen this approach, where English is the standard language. Although this is certainly most expedient for information consolidation, rollup, and reporting, it precludes the ability to fully implement real-time customer self-service in parts of the world where not all customers speak English. We note that in some countries (e.g., Japan) there are legal requirements for contract/invoice documents associated with service offerings to be delivered in the local language. In these cases, report/document translation is required, and print-streaming conversation technologies are useful.
- **Implement individual instances of the application for each language:** This creates information stovepipes (not to mention a version control/support challenge) but enables interaction in the user's native language. We recommend this approach only when each country operates autonomously and there is a very limited population of "shared" customers with other countries (i.e., no corporate imperative to integrate data to create a global panoramic customer view, and no need for real-time call escalation).
- **Use a Hybrid Approach:** This suggests implementing multiple servers and languages in Asia Pacific and Europe, and English in English-speaking countries. Incident escalations (and orders/leads, etc.) would be sent back to the US for manual translation and entry into the system. The limitations of this approach are obvious.

Several META Group clients have standardized on English around the world, but when local languages are required, orders are shipped to a local third-party reseller.

Financial consolidation information is manually shipped back to the "home office." The disadvantage is that visibility of the customer and the order is lost.

Many of the limitations of storing combinations of multiple languages in the same database are due to database encoding. Unicode, a standard that will enable any combination of languages to be stored in the same database, will solve this problem but does so at the expense of database performance and size. And Unicode alone is not the entire solution — the applications themselves must be retooled to support this new standard. Application vendors must explicitly provide support for Unicode in their applications to enable use of Unicode data. Relying on the database alone does not work.

Criteria for Global Deployments. Specific functionality is needed for successful global deployment:

- Common user interface (UI) across languages
- Shared business objects — real time, not batch
- Single instance by default
- User/role-based language abstraction layer
- Common UI look/feel, with all fields localized
- Business rules/application logic stored on the server
- Data services gateway brokering communication
- Language-independent key stored in the target DB
- Language code translation also in the DB
- Extensibility

Of all the operational CRM suite vendors, Siebel has the richest multilingual functionality (its multilingual list of values enables the user to select a language for the UI). Clarify is currently collecting requirements for multilingual support, and we believe it is 12-18 months away from being a truly multilingual client.

Bottom Line

Organizations requiring worldwide, real-time call escalation, lead sharing, or order management must choose between supporting local language requirements by implementing stovepiped application instances or creating the panoramic view of the customer by standardizing on a single language (often English). Currently, users should look to Siebel for the richest multilingual capabilities and insist that all vendors support Unicode in the long term.

Figure 1 — Internationalization versus Localization

An internationalized application is one that supports various (operating system) languages and locales using the same code base (i.e., no modifications in the source code). Internationalized products must:

- Manipulate data independently of the operating system “language” (i.e., locale)
- Have a common user interface that does not require modification for use in a particular country
- Enable the creation of reports that can be easily translated into other languages outside of the application, if required

Internationalization does not include translating a product into any particular language. For instance, many organizations need to deploy applications in different countries using an English user interface and English error messages while running on a non-US/non-English operating system, with locale settings appropriate to the particular country.

A localized application is one that has been modified to support cultural norms of a specific country, including the language. In particular, this includes translation of the product (user interface, error messages, and documentation) into a particular language (e.g., French, German, kanji).

Character Set Limitations

- When a database server is configured, the code page for the supported character set is defined. If the system is installed in Japan on Oracle, for instance, the code page is specified for Japanese (e.g., code page JIS). The code page for Japan supports kanji and English; the code page for Western Europe supports all European languages and English. English is the common denominator of all databases.
- Western European languages cannot be combined with Japanese. This is a limitation of the database that can be resolved only with Unicode.
- Unicode alone is not the panacea, however. The OS, database, application software, and third-party products must all support Unicode, with one code page supporting all databases. Vendors are moving to support Unicode in the long term.
- Two separate instances are needed for Japan and Europe. English is the lowest common denominator and is supported in all code pages. So, if English is the “master language,” data in English can be entered in the same database as data in other languages, but the data can be viewed only in the language in which it was entered.

Multilingual requirements include real-time call escalation as well as lead/opportunity sharing and management.

Source: META Group