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With the internationalization of commerce, new requirements have emerged to shape the software tools used by the leasing industry. This article will survey the new demands placed on lease analysis software by the international directions of multinational financiers and manufacturers.

Some corporations pursue international business simply because it is an ideal way to expand their business, especially if the domestic market is becoming saturated. Others pursue international expansion not so much as a strategic objective, but rather because the Internet is bringing them business from across international boundaries. Still others are taken abroad by their customers; once there, they find new opportunities.

In the lease financing business, software is instrumental to structuring and pricing transactions. Structures have become complicated because organizations use pricing as a strategic tool. It is not just a lease bid, but also the tool to cover an organization's costs and risks while meeting multiple profitability targets. As such, it may contain proprietary and complex information that cannot be handled without specialized tools. As multinational corporations expand into other countries, they naturally strive to extend the benefits of these advanced pricing techniques into these countries. However, a

software solution that works well domestically may not be suitable overseas. Algorithms and structures that have been “hard-wired” into a program can be difficult to modify or back out for use overseas.

The use of foreign languages is clearly an issue of significance for businesses working in other countries, and for software vendors serving those businesses. In terms of software products, the language used in the interface is one question; another is the language used for producing transaction documents. Some organizations encourage the use of English among their employees even in other countries to attempt to avoid confusion; the success of this approach depends largely on the level of English proficiency among the employees. Others use the languages of their host countries as much as possible. Using the “native language” of a software program is expedient, but it may limit the audience of users. On the other hand, a foreign language version, while appealing at first glance, may bring other difficulties. These can include not just the initial development effort, but also compatibility, consistency of results, accuracy of translations, and administration.

The variety of details that confront an expanding company may seem daunting. Brazil has a specific federal program to provide below-market financing. Australia has special fees. In Asia, there is a cultural bias against long-term arrangements in which the user does not end up owning the asset (a lease); therefore loans predominate. In Europe, strong patriotic feelings may drive the design of documents as

much as objective business factors. Different languages may require different character sets. Insurance and maintenance regulations and conventions vary from country to country. Other differences can be accounting conventions, profitability targets, internal costs, and depreciation and amortization conventions. The area of taxation is complex and specific to each country, and keeping current is a challenge even for tax professionals, let alone software developers. In fact, it is not just the tax environment, but also the company's products and strategy that play into this interaction. These points highlight the need for the users and the developers of such software to stay in close touch with respect to their needs and expectations, and for the users to be informed enough to decide how they want to do business in the host country.

As corporations expand into new countries, one major benefit of using a common software analysis tool can be uniform financial metrics, including the use of centralized databases for residual estimates, cost of funds, credit scoring, equipment information, and internal costs. The objective is to leverage domestic strengths, eliminating the need to establish these functions in target countries. Common measures can facilitate assessment of performance and be a valuable management tool, especially if they have been a part of the company's success in the home country.

At the same time, a potential pitfall of a standardized measure is that managers might expect their divisions to perform in equal fashion

against a measure that may not be appropriate in all other countries. [Organizations that use return on assets (bankers' "all-time favorite measure") are especially cautioned, because of differences in the calculation of assets under various accounting methods.] Economic, currency, inflation, credit, taxation, remarketing, and accounting differences can prevent a standard measure from being a fair gauge of performance. It is possible to mitigate these differences through specific inputs, such as the debt rate for locally borrowed funds and inflation factors, but these introduce complexities and potential misinterpretations, again jeopardizing the benefit of a common measure.

High inflation rates in some countries present a special problem for pricing, because of the need to adjust payments (upward) to compensate for inflation. If the software is to do this conversion automatically, then an item for this conversion rate needs to be established and updated periodically. Remarketing can also be a major issue, inasmuch as residual values vary significantly across borders. Of course, this depends on the type of asset. For example, a power facility's value is very closely tied into the local economy, construction equipment values depend on the local construction industry to a lesser degree, and aircraft residual values are practically independent of local conditions. Credit risk is used as a fundamental component in structuring, but credit algorithms differ from country to country.

Quality control becomes more difficult when a company introduces international versions of a program. It is a necessary step in the production of quality software, and the parties should agree on who does what part of it and how extensive it should be. It can be tempting to think that each new version is solid as long as the base program that it is built on is tested rigorously. However, each country's version would likely have features specific to it. These should be compared to benchmark values whenever an updated version is produced to ensure that the new features maintain the integrity of past results. In fact, each party is in a good position to do certain parts of the quality job better than the other. The client is the one who knows the business requirements and the desired behavior of the program best, while the vendor knows the program and can best gauge the potential side effects of new features. One must be careful not to rationalize avoiding quality control only because the other party is doing some of it.

With respect to language translation, a variety of mechanisms are available, each with its pros and cons. The one that has worked well in SuperTRUMP is a user-selectable dictionary, containing all English phrases used in interfaces and reports, plus target language entries. Our base language is English, and the client provides the translations. This allows the users to use their own business terminology familiar to their customers. As the program prepares to print a phrase in an interface or report, it queries the dictionary. If a translation is present

for that phrase, it uses it; if not, the English is used. Thus, the program mixes both languages if the target dictionary is incomplete. An accessory program allows the user to add entries at anytime, and all users in a company can share the dictionary.

Financial calculations and structures for overseas business are best built as extensions to base program capabilities. A new depreciation method should simply be one more in a list of available selections, and it should be developed, tested, and maintained as a separate method. This way it will not affect other calculations. A new yield would be a custom calculation rather than a modification to an existing one. A custom calculation has the benefit that it can be quickly changed to meet evolving business needs.

Internationalization of commerce in general and that of the asset financing industry in particular will continue to grow for both business and technological reasons. Lease analysis software, an integral part of this industry, will have to grow with it. Producing software tools that enable companies to meet the needs of markets and cultures around the world will continue to be a challenging but vital effort.

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