

Paint Formulation SOFTWARE



The size of your company, and your IT department, are important factors in choosing a solution

Size matters when a coatings company makes the decision to choose a commercial paint formulation software package or a customized, in-house-designed software solution. “Most of the larger companies use in-house software, while the smaller companies purchase,” explains Corey Noorlander, IT consultant for Serif Coatings and Chemicals, Mississauga, ON, a company that uses an in-house system for its formulation process. Noorlander, who says he tailored Serif’s software to its users’ needs, cites “user friendliness” as one of the main advantages of a customized system.

If a company can afford it, continues Noorlander, "it's a better way to go because you can tie it in to other things, like inventory control, invoicing, profit and loss and so on."

Robert Chapman, president of Allcolour Paint Ltd., Oakville, ON, skipped the middleman completely and wrote his paint formulation software by himself. "If you write it yourself, like I did," he says, "you can save a lot of money and you can add just about any feature you want, as long as you are willing to spend the nights and weekends learning how to program." The programming tools available today are much more powerful than they were 20 years ago, he adds.

Allcolour's in-house software got its start on a Radio Shack TRS-80 in the late '70s, says Chapman. Prior to the TRS-80, most computers were large and expensive and any commercial paint formulation software was way beyond the reach of a company

Allcolour's size at the time, he says. "When I got the TRS-80, I sat down with a book and learned how to program, and soon I had something that allowed us to quickly cost every batch we made," he explains.

For Chapman, this was a revelation because raw material prices had started to move and Allcolour's traditional feel for paint raw material costs was way out of date. "We kept building, modifying and expanding my paint costing program until today it has formulation, analysis, scheduling, MSDS (material safety data sheet)

generation, raw material inventory and consumption, and QC and production record

keeping." Today, Chapman says, his software runs on a PC-style computer and multi-user operating system with 20 to 24 users with essentially instant response time. As a result, Allcolour's master formula file has over 13,000 formulas.

However, Chapman's results were no small accomplishment. His software took over 20 years to perfect and, "even with modern tools, good paint formulation software is complex and time-consuming to develop, and very few people have the time or ability to do it themselves," he says.

Home Hardware's Paint and Home Products division, St. Jacobs, ON, is currently using an in-house type of paint formulation software but is in the process of examining three different software types to better suit its needs, says materials manager Lisa McLaughlin. "The selection process of our current system was driven by an underlying move away from several isolated subsystems that were mainly home grown to an integrated system that solidly linked all departments together using a single common database," she says.

Although Home Hardware had ample checks and

balances in place to ensure the integrity of its data, the company did identify points of risk where the hand-off of data from one department to another could become misaligned, says McLaughlin. "An integrated system addressed this concern and brought all departments together, talking the same language, working from common data," she explains. In making this move, Home Hardware achieved a better overall system, but some areas lacked the functionality that an in-house system allowed. As a result, some areas were opened up to varying degrees of customization.

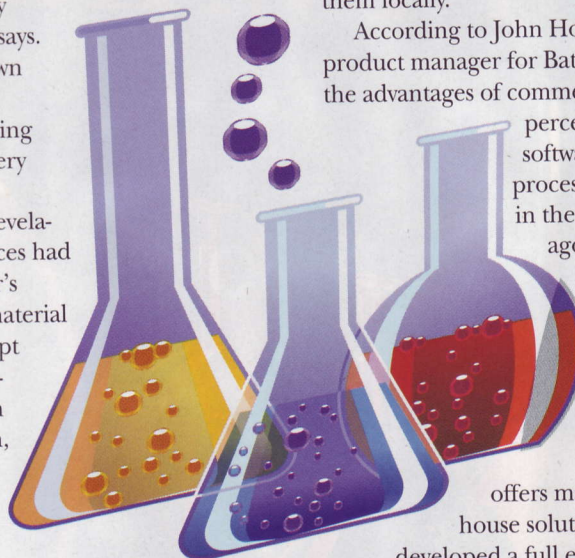
Paint companies have differing reasons why widely-marketed software does not coincide with their organization's needs. But despite those reasons, the reality may be that they are simply not aware of the features commercial products have to offer nowadays. Paul Marriott, technical manager for DuPont Performance Coatings, Ajax, ON, admits he is "unable to comment on commercially available software products as we have no experience of them locally."

According to John Houltham, marketing and product manager for BatchMaster, Laguna Hills, CA, the advantages of commercial software far outweigh any perceived disadvantages. BatchMaster software is a complete recipe system for process manufacturers that was launched in the coatings industry almost 25 years ago, he says. "We were probably the first out with the process manufacturing and with the formulation capability for coatings manufacturers, and we've stayed in the field the whole way through from then to now," he asserts.

These days, commercial software offers many of the same features as in-house solutions. BatchMaster, for instance, has developed a full enterprise resource planning (ERP) software system, explains Houltham. "Formulation is certainly at the heart of it, but it comes with everything from purchasing, sales, production, formulation. Basically it's the whole scope of operations for a coatings company," he says.

Tempo Aerospace Inc., Toronto, ON, Allcolour Paint's sister company, currently uses BatchMaster after switching from an in-house package. Harry Tappen, plant manager for Tempo, says that after evaluating three commercial packages, "we chose BatchMaster due to the features, relative ease of use and their pricing, which has improved since we (initially) purchased their product." In addition, "BatchMaster allowed us to choose from one of three configurations (each with a different number of features and price point) which suited our business at the time."

Tempo Aerospace chose to use a commercial program after using an in-house software package mainly due to the support, says Tappen. The company's previous in-house program was developed by one of the owners of the company who, consequently, was the only person that could repair any problems that occurred with the system, he explains. Adding additional features was also time consuming.



Houltham says the advantages of using a commercial product are clear, and include stability, cost ("when you buy commercial software, you pay a share of the total development that's gone into a system for many different people; if you do it yourself, you cover all of that development cost yourself"), and experience ("we have a large team...that gives us the ability to respond very quickly to changes in the market, best practices, and our individual customers").

The latter benefit was the main reason for Tempo Aerospace's switch, says Tappen. "A commercial program allows for immediate technical support along with many additional features," he explains.

McLaughlin shares these sentiments, and adds, "commercial software leaves the designing of software to the experts and allows our chemists and staff to do what they do best, which is to formulate excellence into all of Home Hardware's products."

The million dollar question: Is there reasonable value for a company to switch from in-house software to a commercial product?

For DuPont, chances are slim. "We have used our in-house system for many years and have a wealth of experience and data associated with it," he explains. "The choice of this system has been mandated by the global business for many years in order to facilitate standardization and consistency of products around the globe."

And Noorlander adds that it is even more costly to switch because the re-enter cost for formulas is far greater than the initial costs for the software. "What you have is years and years of data, so usually once someone is into a piece of software, they're very reluctant to change for that reason. They may not even like the software, but they'll live with it because they don't have the time."

Once the formulas are re-entered, they have to be checked and double-checked by someone to make sure no errors were made. "That, in itself, is a very expensive proposition," he concludes.

While the size of the company plays a large role in choosing commercial or customized paint formulation systems, it is also beneficial to break down all the pros and cons involved before deciding based on size alone. In Tappen's opinion, "unless you have an IT department, which is costly in itself, commercial is the best route for small to medium as well as large businesses." **CM**

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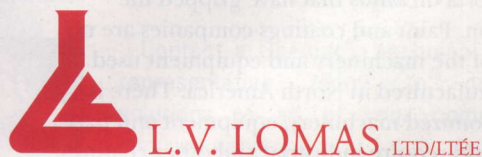
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