ISV Sees Opportunity in Evolving IP Space

The image processing segment of our industry is undergoing some potentially seismic changes. For years, **Kofax's** VRS was the industry standard for advanced processing. But, as we mentioned in our last issue, **Fujitsu's** decision to move away from bundling VRS with its popular fi-series scanners indicates that things are changing. That's not to say VRS isn't still the premier image processing software available—Fujitsu, in fact, still recommends it for forms processing applications. It's just that there are several new options emerging, with different pricing models and functionality that are threatening to take share away from the traditional market leader.

Part of the reason for this emergence of new IP software has to do with increasing opportunity. Even though the document capture software market may only be growing in the high single digits, there is no question that document scanning is growing at a faster rate. This dynamic is a result of falling hardware prices, more hardware scanning options (including increasing use of MFPs and mobile phones and tablets for capturing documents) and

cheaper and better document capture and management software.

As a result of this increasing access to inexpensive document scanning tools, most users don't expect to pay a premium for image processing. As one VP of global sales puts it, "Most MFP users feel like high-quality scanning is functionality that is supposed to come with their devices." In other words, it's not something they expect to have to purchase separately.

DIR caught up with recently with an ISV that is hoping to gain share in the suddenly changing and rapidly evolving document image processing software market— **Dynamic Computing Consultants**, which has developed PerfectScan as an alternative to VRS.

The Avis of IP?

Dynamic Computing Solutions is a Maryland-based ISV and scanning service bureau that has been working on PerfectScan for more than a decade. "When we started out developing PerfectScan, our goal was to create something that would be as

good as VRS," said Randy McNees, founder of DCS. "Our thinking was that the market was big enough that we could be Pepsi to Kofax's Coke."

The road from product conception to realization was a lot longer than McNees anticipated. "We made a lot of mistakes along the way," he admitted. "Every time we thought we had it done, it turned out we didn't."

Until now. A demo version of PerfectScan is now available and McNees took *DIR* through a fairly extensive demo himself. "One of the characteristics that differentiates PerfectScan from most IP technology is its ability to make adjustments considering the entire contents of a page," said McNees. "Most other image processing software takes a more myopic view and focuses more on individual characters. PerfectScan considers a page the way a human eye and brain would. This enables it to make only a section lighter or darker, where needed. We call this localized dynamic thresholding."

McNees showed us what he meant utilizing a weigh bill with a

sticky note attached to it. After initially be run through the default settings in PerfectScan, the words on the sticky notes were illegible. However, with an adjustment of a slider, the contrast on just the sticky note area was increased, enabling the words to come into view, while the contrast on the rest of the document, where the text legibility was fine originally, remained the same.

The slider was a light-dark control appearing at the top of the screen. The area of the sticky note did not need to be highlighted or circled. The software inherently knew where the contrast needed to be adjusted. This type of simplicity of interface is a key feature of PerfectScan. On the demo version, there are only three controls: the light-dark slider, three buttons to select light, dark or medium mode, and an option for selecting an "enhanced" mode.

"The application appears simple to users, but whenever an adjustment is made, behind the scenes there are multiple operations going on," said McNees. "If a customer wanted us to, we could expose additional controls."

The enhanced processing mode offers features like "intergap fill," which automatically completes lines on characters that may appear broken in a scanned image. "This is not character substitution and it is language independent technology. It works on handprint as well as machine print," said McNees. "Our tests have shown that on poor quality documents, PerfectScan can improve OCR accuracy by 38% over using an OCR product's out-of-the-box binarization algorithm."

PerfectScan works with grayscale images, and an algorithm for converting color images to bi-tonal is currently in development. We saw it work effectively on a very low contrast image captured with a camera phone—for an application in which no outside light sources are allowed to be used. PerfectScan can also be used with microfilm images.

Speed is also a focus, and the images we saw were processed at a rate of well less than one second per page.

Dynamic Computing Solutions is a relatively small operation, and McNees is currently looking for partners, potentially through OEM agreements, to help him bring PerfectScan to market.

For more information: http://perfectscan.com/