The optical character recognition (OCR) technology buying guide

How to close the gap between executive goals and developer needs
In most software companies, the executive team paints the big picture and sets organization-wide goals, while software developers bring their vision to life. As a product manager, you may be tasked with bridging the gap between those two worlds. You need to ensure that the executive team’s vision is properly communicated, while also managing all the critical requirements, such as meeting deadlines and staying under budget.

Maybe your executive team added optical character recognition (OCR) to its wish list. Or perhaps, based on your executive team’s goals or your businesses’ product roadmap, you did some preliminary research and identified OCR as the best option for your application or technology.

So, what’s your next step? Use this buying guide to help your business make the best decision. It details the critical components of a best-in-class OCR solution.
If you’re not an OCR pro, don’t panic. By starting with the basics, you will have all the foundational information you need to find the best vendor for your business.

OCR is the mechanical or electronic conversion of text. This text can be typed or handwritten, or taken from a scanned document or photo of a document. OCR allows text to be converted into a format that can be electronically edited, searched, stored more efficiently, displayed online or used in other machine and business processes.

When researching OCR solutions, you may find these terms:

• **Document conversion**: Converting an image-based document into a text-based document. Input could be PDF, TIFF, BMP, JPEG or another image document. Output could be Text, Searchable PDF, XML or other text document types.

  Advanced document conversion includes complex layout recognition so that columns, tables and graphics are faithfully reproduced in Microsoft® Word, Excel®, PowerPoint® and Corel® WordPerfect® documents.

• **Document classification**: The automatic categorization of documents into classes based on common features.

• **Template-based forms processing**: Using pre-defined templates to automatically extract specific data points from a structured document. For example, once OCR is complete, you can extract text information, such as an invoice number, date and amount total, from a digital image of an invoice.
Know your executive team’s key concerns

Your executive leaders probably have some legitimate concerns about integrating an OCR solution into your business applications. For example, if you’re in the healthcare industry, you store and transmit documents that contain patient information that is protected by HIPAA (Health Insurance Portability and Accountability Act). They must be accurate and secure. It’s not just the law, but a duty to the safety of patients. And the legal industry must be certain that client information isn’t accidentally changed to misrepresent the facts. Regardless of your industry, data integrity is crucial, and every C-level leader is focused on ensuring the safe exchange and storage of information.

Other top-of-mind concerns your executive team may have include:

- **How does licensing work?** Your leaders may wonder whether a solution’s licensing is based on clicks or pages, and whether it is reliant on your hardware. They may want to know: Are there dongles? Is an external Internet connection required? Is there flexibility to grow the license with your business? And of course, what are the costs?

- **How good is the organization that backs up the product?** When you choose an OCR provider, you’re trusting that company with the security and reliability of your application. Your executive team will want to know how long that company has been in business. Are they simply repackaging someone else’s technology? Do they offer ongoing support or a warranty? Bottom line, your leaders want to know whether the company will still be around in a year, five years or 10 years from now if there’s a problem.
How to communicate C-level imperatives to the development team

As the product manager, you must convey executives’ questions and concerns to your development team. That way, your developers can help facilitate the vendor researching process. They also can test and narrow down your list to the most relevant and high-quality options.

Help provide your executive team with the answers they need by asking your development team these questions:

• **To which operating system will they deploy image-based documents?** For instance, they may plan to use Windows, Mac or Linux. You may need an OCR solution that can convert to text-based documents for use on various operating systems.

• **What programming language(s) will they be developing in?** Their answers could include C#, VB.Net, C++, Java, Ruby or others. Be sure to select an OCR solution that is compatible with their development process.

• **What type of deployment will it be?** Will it be on-premises, cloud, hosted or desktop?
When you and your executive team have a clearer understanding of how the development team will use the OCR solution, you can work with your team to build a list of OCR options. Your developers will need to run tests to gauge the reliability and overall performance of each solution you’re considering. As the product manager, you should get involved in this process to ensure you’re relaying the best vendor option to your executive team.

Once testing is complete, discuss the takeaways with your development team. Ask them questions such as:

- How accurate were the OCR results?
- Was the formatting (such as columns, tables and graphics) preserved when the document was OCRed?
- How long, on average, did it take to OCR a document?
- How does the output file size compare to the original file size?

Based on your development team’s feedback, you will be able to select the OCR solution that works best for your business application. When you’re ready to present your selected vendor to the executive team, explain the benefits they will get by paying for an OCR engine rather than using a free engine. A paid OCR solution will often provide improved accuracy, performance, access to support, and a development team dedicated to improving the product.
Give your executive team peace of mind

If you’re ready to select an OCR solution, consider learning more about Nuance® OmniPage® Capture SDK (Software Development Kit) or OmniPage Server. The OmniPage Capture SDK is a robust package of technology and tools that lets you build a complete OCR application from scratch. There is literally no application you can imagine that can’t be developed using the OmniPage Capture SDK.

As a finished product ready for deployment, the OmniPage Server doesn’t require you to build an application from scratch, create administrative interfaces or build web clients. All you have to do is connect your business application to the OmniPage Server, and you’ll be able to process documents non-stop, automatically scaling to millions of pages at a time as long as you have the processing power to do so.

The OmniPage Server product suite includes server applications, server API, folder watcher and web conversion client. All its user interface components are web-based. It offers a low cost and low effort for the highest performance, simplifying your developers’ jobs and providing the security and ongoing improvements that will give your executive team peace of mind.
About Nuance Document Imaging

Nuance Document Imaging provides the software solutions and expertise required by professionals and organizations to gain optimal control of their document output and information capture processes. The comprehensive suite of leading-edge solutions provides the opportunity to reduce the costs of cumbersome workflows and eliminate gaps across the lifecycle of their documents from origin to archiving. Nuance’s cross-platform compatibility provides seamless deployment across all MFPs, printers, desktops and mobile devices. With an intuitive user experience, Nuance delivers more efficient and natural interactions with the technologies used to create, print, scan and process documents securely.

Learn more about Nuance® OmniPage® Capture SDK.

Contact us at Imaging@nuance.com

Nuance Communications, Inc.

Company strength
- Approximately 14,000 employees
- Regional offices in 35 countries
- FY 2014 non-GAAP revenue was approximately $2.0 billion

Innovative solutions
- Nuance speech solutions support up to 80 different languages
- Nuance holds more than 4,300 patents and patent applications
- A team of more than 2,000 voice and language scientists, developers and engineers
- Nuance maintains one of the world's largest libraries of speech data
- Nuance has won awards for its solutions in every major product family

Proven use
- Nearly two-thirds of Fortune 100 companies rely on Nuance solutions
- The 8 largest handset and 10 largest auto makers use Nuance solutions
- Nuance solutions have shipped in more than 5 billion mobile phones and approximately 110 million voice-enabled vehicles globally
- There are more than 22 million registered users of Nuance desktop solutions