Become a better business detective with image analytics

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Everyone knows that a picture is worth a thousand words. Computers realize this now, too.

The days of having to open hundreds of files to find the right image or document are gone. Long gone, too, are the days of processing and categorizing images with only special optical character/mark recognition (OCR) forms and scanners.

analytics — is here. And with these imaging advancements comes the increased ability to detect patterns and harvest clues from volumes of .jpg, .png, .tif, .pdf, etc. files.

Use cases for image processing and analytics

Image machine learning makes structured data, unstructured data, handwritten text, object identification, and facial recognition more widely accessible, searchable, and categorizable. It converts all types of graphics into words and data that can be harnessed for better use and decision making.

Image machine learning enables you to extract meaning and value from a much wider variety of images, including photos, freeform notes, video clips, forms, and drawings.

And, once images are scanned and processed, image analytics can reveal trends hidden within that unstructured data. Using image analytics, you can reveal information about your customers, your employees, and your business that may be buried within files that were previously inaccessible or rarely opened.

In business environments (including contact centers), you can leverage advanced image processing and analytics, for example, for the following:

- Marking assessments, surveys, and quizzes
- Processing enrollment and application forms
- Searching and indexing contracts and legal do

product descriptions, etc.

- Digitizing prescriptions and doctors' orders

- Maintaining accurate inventory counts
- Processing return, warranty, and technical support requests
- Categorizing stock and corporate images, footage, and content for marketing departments
- Adjudicating insurance claims
- Archiving performance reviews, confidentiality and nondisclosures, resumes, and applications for HR
- Converting hand drawings, sketches, and whiteboard notes into digital files
- **Monitoring, with webcams, worker adherence, health, and safety in real time [https://www.hgsdigital.com/solutions/artificial-intelligence-workplace-safety]**
- Analyzing surveillance footage

With tools like scanners, file conversion software, cameras, image cleansing software, image processing and analytics tools, and an image management system, the value of your company's reams of existing unstructured data and images increases immensely.

By combining advanced image processing and image analytics with robotic process automation, process reengineering, and/or artificial intelligence (AI), you can reduce repetitive processes, focus staff on higher value tasks and, in turn, reduce costs.

A typical image processing and image analytics implementation project only takes 4 to 6 weeks, including needs analysis, design,

training.

Common challenges with image processing and analytics

Without a doubt, image processing has come a long way. But it's still not quite perfect.

Image quality may leave room for improvement. Illegible handwriting, lack of contrast, blurry images, or partial images occasionally can still pose challenges but, over time and with some human intervention, image machine learning can indeed improve.

Advanced image processing systems are not "one-and-done" systems. Occasional maintenance is required. Eventually, software upgrades, new use cases, new metadata categories, new equipment, new image types, and changes to interconnected systems must be accommodated. It's critical to always build maintenance time and costs into your plans.

Depending on the types of images, videos, and documents you are analyzing, privacy, security, and level of access could be of concern. Common challenges include:

- Using personal information (e.g., names, birthdates, addresses) for tagging individuals who may appear in photos, or video clips
- Limiting access to signatures, health records, and other sensitive information
- Abiding by copyrights, trademarks, licence restrictions, and industry regulations (e.g., HIPAA)
- Establishing how much metadata info should be captured or shared

policies

- Balancing file storage and data center costs with actual utility

- Recognizing international data storage and sharing laws (e.g., many image recognition, processing, and analytics solutions are cloud-based; bringing all technologies on-premise may be required)

In short, harnessing unstructured data may not be simply a matter of installing and configuring the right equipment and training your staff. You may need approvals, release forms, or licences to do certain types of advanced image processing properly.

Common concerns and potential issues aside, there is still ample potential to harness the untapped power of image assets. The obstacles listed are not insurmountable. At HGS, we have used advanced image processing and image analytics to increase efficiency and add value in industries with numerous restrictions and challenges, including **healthcare [https://www.teamhgs.com/results/cognitive-intake-automation-cuts-costs-50-leading-healthcare-company]** .

For decades, secret agents and police officers in the movies have used image processing in the form of facial recognition, fingerprinting, and handwriting analysis to solve mysteries and stop criminals. Now you can use these technologies to get to better know your customers and employees.

Image machine learning and image analytics — especially combined with intelligent automation and AI — can make you a better business detective.

Tags: digital asset management, **image analytics**, **machine learning**

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