

better business decisions. This involves workflow and automation. According to the consulting firm **McKinsey**, helping knowledge workers make better decisions is a multi-trillion dollar opportunity annually.”

When discussing the logistics of M&A, Carman noted that he strongly advises against earnout clauses. “In 80% of the deals I’ve analyzed, the earnout is not achieved,” he said. “Oftentimes, after the acquisition, material changes are made that alter the structure of a business.

“If an earnout is being negotiated, I encourage including a clause prohibiting material changes. This will often change the buyer’s mind—because they often want to make these types of changes. If an earnout is involved, I encourage sellers to work to achieve their goals before the earnout, and treat the earnout as a bonus.”

For more information: <http://xamcor.com/>

## TWG, PDF Association Collaborating on PDF/R

In tandem with the development of its new TWAIN Direct Standard, the **TWAIN Working Group** (TWG) has formed a partnership with the **PDF Association** to develop a new PDF/Raster (RDF/R) format. With the aim of submitting the specification to ISO, the organizations are working together to create an image format that can be efficiently produced within a scanner driver and viewed with standard PDF technology. It will be the default image interchange format for TWAIN Direct and required for certification.

“After two decades of experience supporting TWAIN Classic, it was obvious that a key to the success of any new standard was going to be selecting a common image interchange format that can be easily created by any scanner and just as easily read by any application,” said Jon Harju, vice chair of TWG. “Currently, with TWAIN Classic, the document image file format typically varies based on the application, the driver, and even the operating system. With PDF/R and TWAIN Direct, we are enabling the driver to produce a fully formed file vs. raw image data.”

Launched two years ago by TWG, TWAIN Direct is an initiative designed to enable scanners to talk directly to applications utilizing Web service calls over a network [see *DIR* 9/26/14]. TWAIN Classic is the traditional TWAIN driver that has historically been installed on a PC, used to run a scanner, and

connect that scanner to third-party imaging applications. “With TWAIN Classic, if the driver supports TIFF and the application asks for TIFF then TIFF is what gets transferred,” said Harju. “Same for PDF.

“TWAIN Direct presents challenges because of the driverless nature and network connection. Any scanner may be connected to any mobile or desktop platform so the interchange format must make as much sense to Android, as it does to Windows, IOS and so on. In addition, with the network and cloud nature of TWAIN Direct, compression is important. So, we wanted to raise the bar and create a single common format that could support both the uncompressed and compressed image formats generated by scanners today and in the future.

“With TWAIN Classic, the default and required image interchange format is uncompressed. While it is possible to transfer compressed image data, it is not required and therefore not supported by all applications and drivers. Ultimately, with TWAIN Direct, an application can still ask for uncompressed data and it is possible the scanner will have hardware limitations and not support compressed image data, but the default image transfer format [PDF/R] will support compression.”

Harju added that it’s important to note that although PDF/R is the default format being implemented with TWAIN Direct, users can still get at the raw raster data and use it to create TIFFs or other image formats. “We ultimately chose to utilize PDF for the standard over TIFF because PDF is a more modern and active standard with existing viewers that do not exhibit some of the rendering problems you can encounter with TIFF viewers.”

According to an initial draft of the PDF/R specification, the format offers three important advantages over regular PDF for storing scanned documents:

- **Original raster image data can be recovered, which is not true of PDF in general.** “PDF/R defines a precise file structure and prohibits the use of rich content such as text, fonts, vector graphics, etc.,” explained Harju. “An application can reliably find and extract the image data produced by any scanner without any additional parsing requirements. Put another way, an application reading a PDF/R file can make assumptions and take programming shortcuts that would not be acceptable with any other PDF file.”

- **PDF/R can be rendered without the complex rendering engine required by full PDF.** “Our intent is for scanners to be able to

implement PDF/R as a simple wrapper over image data they already produce without adding the additional computing power necessary to host and execute rich libraries or transform image data," said Harju.

**■ It provides a precise, well-defined target, simplifying engineering design and testing.**

"PDF/R is a precise file structure, which means it will be simple during testing to detect if a particular file is 'painting outside the lines' and doing something that does not comply with PDF/R and would therefore not pass certification," said Harju.

Harju said that TWG's alliance with the PDF Association is designed to ensure that PDF/R stays within the standard realm of PDF. "We want to make sure we don't break any rules in regards to PDF," Harju said. "We want to stay in compliance with the PDF standard. We thought leveraging the expertise of the PDF Association would be a good way to do that."

As was alluded to earlier, an initial draft of the PDF/R specification has been completed. "We hope to complete the text within a few months and pursue an ISO standard following our own publication of the specification," said Harju.

For more information: <http://bit.ly/PDF-R-PR>

**LEXMARK, FROM PAGE 1**

alternatives. "We're quite encouraged with the progress that we're making in our software business, and we just fundamentally believe that it's time to

start looking at some of these alternatives to unlock the value that we've created," said Rooke. "The range of things that we will be looking at will include a sale or a spin or public or private—I mean, all of those types of things will be included in our list of alternatives."

For more information: <http://bit.ly/LexmarkIR>; <http://bit.ly/LexmarkBuyer>

**TIS ADDS BNY MELLON TO CUSTOMER BASE**

**BNY Mellon** recently announced that it would be collaborating with **Top Image Systems (TIS)** to upgrade its receivables services. BNY Mellon will deploy TIS' iRemit—the cloud based payment processing offering TIS picked up last year through its acquisition of eGistics [see *DIR* 7/18/14]. According to the press release, "iRemit will enable BNY Mellon to significantly enhance its delivery of archiving, retrieval, and reporting services to corporate clients and other institutions, as well as client banks that rely on BNY Mellon for white label receivables solutions."

"The decision by BNY Mellon to incorporate TIS iRemit further re-enforces our continued growth and increasing footprint within the banking sector for document process automation solutions that span remittance, digital mailroom, lending, enrollment, customer communications, fraud detection, mobile check, and mobile pay solutions," said Andrew Pery, CMO, TIS. "With the BNY Mellon relationship, now five of the top banks in the U.S. deploy our banking solutions. In addition, we work with the top tier of financial services/remittance providers such as **FiServ, First Data, Jack Henry,** and others."

For more information: <http://bit.ly/TIS-BNY>

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