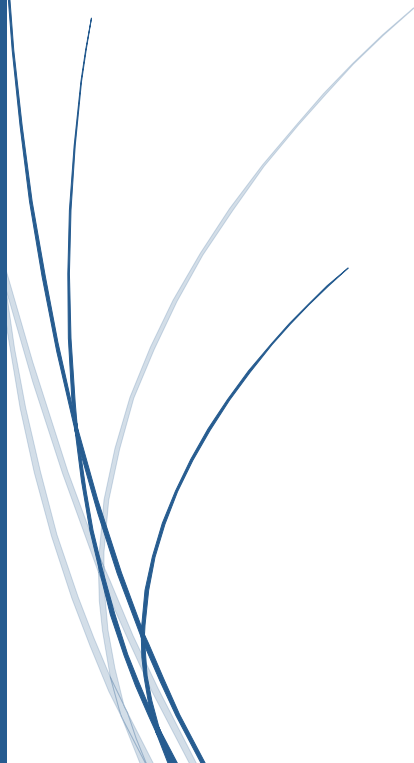# Gain Process Efficiency Through Intelligent Capture

Executive Summary

Many organizations have invested in Capture software and technologies to transform paper documents into digital artifacts, but a strategy that focuses on capture as a standalone solution is tactical and limiting. Today's Capture software has evolved so that it can hand off captured data from paper or electronic media to any repository or line of business application and initiate processes. Capture software understands the process inputs and, via execution of business rules, delivers appropriate data to these processes with limited or no human intervention. The emergence of agile rapid development and deployment models, along with Capture Services, means capture workflows can be created and implemented faster. Interoperability and improved connections to business systems, social and collaboration platforms, and content management repositories mean that capture technology serves as the critical on-ramp to business applications supporting transactional processes, customer-facing activities and real-time decision making. Organizations that consider Capture as a key element of an overall information management strategy can meet cost reduction and efficiency goals.

Introduction

Organizations require information to execute business processes and to meet and maintain regulatory compliance. If that information is contained in paper documents, it cannot be easily accessed and thus slows down the process. Many organizations have implemented Capture software to convert their paper documents into digital images, but simply creating a digital image still leads to inefficiencies and increased

Capture 2.0: Delivering Content Intelligence

Capture 2.0 consists of services that enable organizations to interpret and understand incoming multichannel (paper or electronic) data and thus transforming them into information. Input media can be on the form of images (document, photographic) voice, video, text messages (SMS/Chat/Social Media. Capture 2.0 technologies include: OCR/ICR, image recognition, object recognition, voice recognition, Natural Language Processing (NLP), semantic understanding, sentiment analysis, and more. In short, Capture's next generation of capabilities make content intelligent. Traditionally a Batch Oriented Process, Capture is now becoming services based and integrated with business processes.

labor costs from manual data entry. The volume of data available to the organization is also increasing and coming from a variety of sources and in a variety of formats.

Today's Capture software has evolved into a set of software tools that are applied to interpret, understand, extract and validate data from a variety of information types. Harvey Spencer Associates (HSA) defines this next - generation of capture as "Capture 2.0" (see Figure 1. Capture 2.0 Framework).

Figure 1. Capture 2.0 Framework
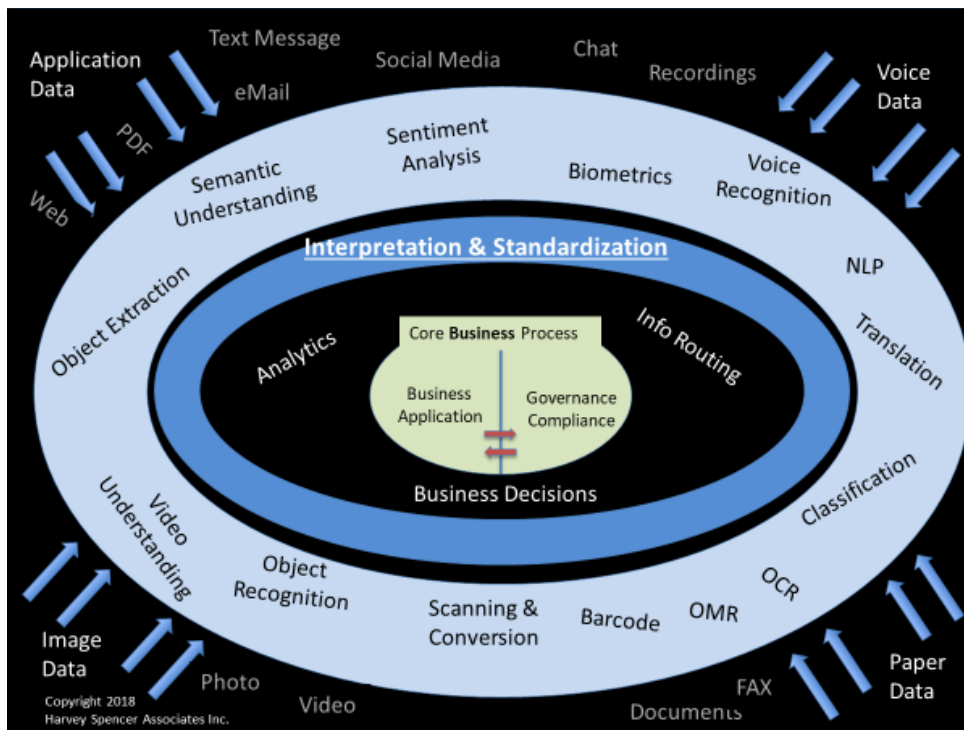
Source: Harvey Spencer Associates Inc.

Enterprise Challenges to Efficient Processes and Information Management

Organizations and industries face digital disruption with business being transacted at ever increasing speeds. To compete, business must understand incoming information faster and more accurately. Information must get converted to usable data quickly and routed to the appropriate people or applications, so actions can be taken.

Organizations undergoing digital transformation face challenges regarding business processes and the unstructured information required to make them more streamlined and efficient. These include the following:

- Changing service expectations: As businesses become attuned to digital transaction, expectations for immediacy heighten. Service expectations are compressed with customers expecting answers or decisions in minutes now. Content needs to get to right person at the right time and in the context of the moment. Capturing information close to the data source is essential.
- Data quality: Critical data remains locked in unstructured and semi-structured content. Document images are often simply "dumb" static images with poor or missing metadata. Manual key entry can introduce errors.
- Manual and multiple touchpoints: Document preparation, indexing/validation, quality control and exception processing are labor intensive activities. Organizations must reduce touch points and eliminate manual roadblocks to document throughput.
- New content types: Data now needs to be gleaned from multiple media, including documents, images, voice transcriptions, social media, and video. Business applications also need to understand when the data is really a case of "same info, different content type." For example, an eForm, a PDF and a scanned image may just be replicas of the same single piece of information.
- New input streams and multiple endpoints: Content is created, accessed and submitted into a process from e-mail, mobile devices, or cloud applications. Business applications must use data that is generated in field offices, customer facing encounters or even information that comes from customers. Capture has to be integrated at multiple points in a process and accommodate multiple end points.

Capture Benefits

Opportunities remain for reducing operational costs and optimizing processes by taking paper out of the equation, but new uses are emerging where capture and related capabilities can be further leveraged to interpret, classify and understand multichannel data. Capture Services classify and extract accurate relevant transactional data, which is then integrated with

the business process. Capture transforms business by enabling increased revenue through better sales efficiency, faster access to data, more accurate new account on-boarding, enhanced claims and inquiry processing, and improved customer acquisition and retention.

Capture software has improved, getting smarter at interpreting, classifying, and understanding data. From its roots as centralized batch capture of paper, Capture has evolved into a decentralized solution capable of handling multichannel inputs and multimedia content. Smarter Capture software reduces the need for human intervention and enables automated routing of information to the appropriate person, location or application. For example, an invoice that never changes should not have to be touched by humans. With classification, data extraction and process integration, the invoice can automatically be routed to where it needs to go. Integration and Connectivity enable Capture to serve as an on-ramp to processes, content management and collaboration applications, and Line of Business (LOB) applications (e.g., ERP, CRM, EMR, HRIMS).

Capture is as much about business processes and business rules as it is about technology. Application developers can now build an integrated Capture capability as a component of a business workflow much more easily thanks to advances in Capture services. The technology components are designed to understand the process inputs and via execution of business rules, deliver appropriate data to these processes with limited or no human intervention. Business Rules Processing determines what actions are needed, drives dynamic workflow and decides how best to route information to the proper business application. Capture Services can be called at each workflow decision point and where a human is involved, Artificial Intelligence (AI) will learn the process decision, which gets incorporated into the rules set.
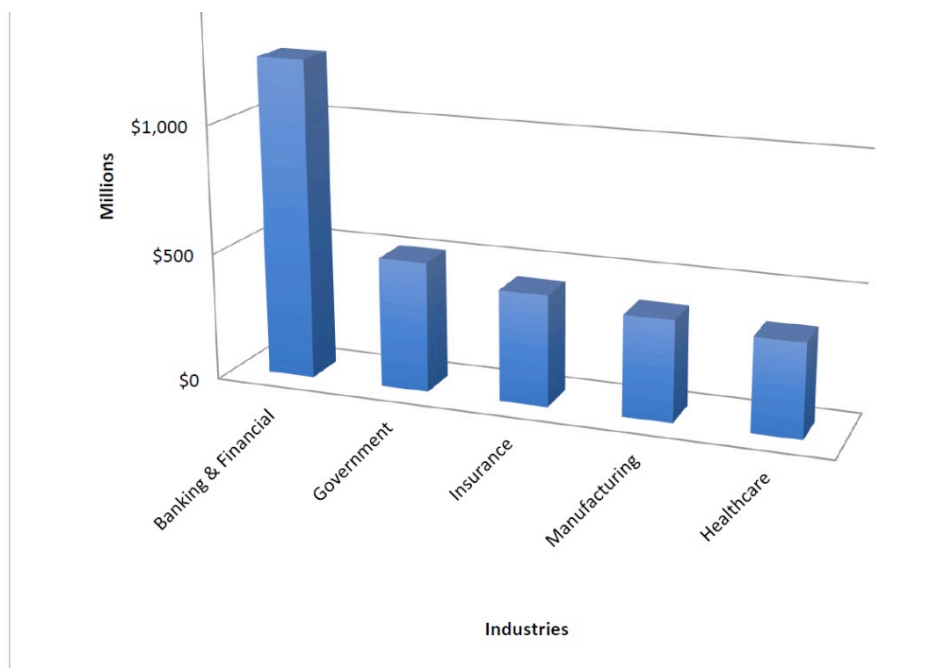
> The overall Capture Software value proposition will stem from enhanced classification, interpretation, identification, extraction and routing of information that is key to the business process. –HSA, Inc. Worldwide Capture Software Market Report, 2017-2018

Capture in the Real World

As Capture software becomes more deeply integrated into business processes, it is being optimized and packaged to address the needs of specific vertical industries and horizontal applications. Figure 2. Vertical Markets for Capture shows the top industries with continued opportunities for Capture software and services. Along with traditional back-office applications, solutions now address customer-facing applications where the real time understanding of various forms of digital content is critical. Interoperability and improved connections to business systems, collaboration platforms, and content management repositories mean that capture technology serves as the critical on-ramp to business applications supporting transactional processes, customer-facing activities and real-time decision making.

Figure 2. Vertical Markets for Capture

While paper processing has value, Capture software's process integration capabilities can positively impact customers and help an organization meet

its strategic goals. Use cases include onboarding, new account opening, and financial processes such as payments and invoices.

- **Onboarding:** Consider a real-time or automated client onboarding scenario in which the capture solution processes and identifies information related to routing, thus allowing for greater straight through processing. A client-centric South African bank (https://www.opentext.com/customer-stories/customer-story-detail?id=1345) embarked on a digital strategy to improve client interactions and enable a more streamlined, real-time onboarding process. The bank used OpenText Captiva with advanced recognition to capture customer documents right in the branch, providing real-time validation and processing. OpenText Captiva is integrated with OpenText Documentum and OpenText xCP for process automation. OpenText xPression generates all necessary agreements requiring a signature. The client signs agreements electronically and files are stored in the Documentum repository. The bank was able to reduce the time spent on client interactions, reducing costs and improving customer satisfaction.
- **New Account Opening:** Many financial service companies have streamlined the process of opening a new account with batch Capture and content management technologies, saving money and increasing the volume of accounts. In the digital age, opening a new bank or investment account requires accommodating a variety of input channels. It is critical that banks scan and process these documents at the point of interaction with the customer. Capture solutions designed for distributed deployment, such as mobile capture applications, support on-demand document gathering, classification, validation and interpretation.

Conclusion: Take Action

A strategy that focuses on Capture as a standalone solution is tactical and limiting. Organizations should consider Capture technologies and services as the critical on-ramp for enterprise information management and focus on process and application integration. Doing so will enable them to meet cost reduction and efficiency goals, increase revenue through such activities as better sales efficiency, faster access to data, more accurate new account on-

boarding, enhanced claims and inquiry, and improved customer acquisition and retention. Specific actions include the following:

- Consider ways to improve data quality at the point of capture. Basing document classification/ metadata on existing organizational knowledge may be desirable.
- Determine what information needs to be captured and acted upon versus simply being historical/archival. Determine the value of capture with process/routing mapping.
- Streamline the flow of information by connecting your Capture solution to back-end systems, repositories and processes.

About HSA, Inc. (Harvey Spencer Associates):
Since 1989, HSA, Inc. has specialized in electronic information capture technologies used to create, understand and extract meaningful information from semi structured and unstructured data to improve business process efficiencies. HSA assists organizations and vendors that support them with market support, insight and future direction.

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