Digilytics™ Oculyse

Taking businesses to next level of digitisation leveraging AI

Digilytics

OCULYSE that works for your business...

Automating paper-less systems with intelligent data capturing technology helps to improve process efficiency and to create business value

In today's world, even after so much digitisation, many organisations still rely on traditional paper-based processes. Paper documents are widely used by organisations across various industries on a regular basis.

Figure 1: Few examples where usage of paper is still dominant

Over the years, digitisation of paper documents has lead to the growth of image data in volume, velocity and variety. Organisations have been trying to generate insights from these data to improve the business processes and to add value to the business. Nevertheless, almost every organisation is struggling to ingest and capture relevant data from the images due to high complexity and lack of tools to automate these processes. It is time consuming, and inefficient in most of the cases, and requires significant level of manual processing. It gets more difficult while handling non-standard or unstructured documents.

Creating value from the image data has become a time consuming and ineffective process leading to poor data quality and lack of insights

Impact of paper-based processes

- Low profitability due to high cost
- Overheads and storage
- Poor performance
- Complex processes
- Error prone

Salient features of an IDC

- Data capture and input from multiple sources
- Data extraction capabilities for multiple languages
- Integration into existing business process management systems
- Document classification using NLP and text analytics
- Intelligent automation and decision making
- Secure and reliable system that protects interests of multiple parties
- Document storage capabilities
- Best in class user experience

Structured

These documents are in standard format and templates with fixed location for specific data-sets. Bots find it easy to extract relevant information from these documents.
eg. Passport, Driving Licence, Marketing Surveys, Loan Application Forms etc

Semi-Structured

These documents do not have a formal structure, design and layout. Slightly different from structured documents and information within these documents shall be tagged but placement could differ.
eg. Hotel and Flight Receipts, Invoices, Purchase Orders, Financial Statements etc

Unstructured

These documents have non-standard structure, data is free-flowing and lacks consistency. Data extraction from these documens is relatively time consuming, costly and more error prone. Usually, manual intervention is required to extract key information.
eg. Contracts and Agreements, Emails and letters, Credit Reports etc

OCR solutions and other tools

Optical Character Recognition (OCR) technology allows systems to capture data from images or printed sources, converts it to electronic format and stores for further use. But the OCR solutions available in the market lacks intelligence to handle different types of sources, to capture relevant data fields and to integrate them into business processes for improving efficiency and reducing cost for the business to help in decision making.

Organisations are expected to be world class in performance and services with shorter turnaround time. Hence, organisations relying on legacy processes such as paper-bound fail to reach customers' expectations or business needs and fall behind competitors. But sometimes, rather than new innovative technologies and solutions, proven technologies, such as Intelligent Data Capture (IDC), can significantly produce new values and improve business process to make an organisation perform better compared to other players in the market.

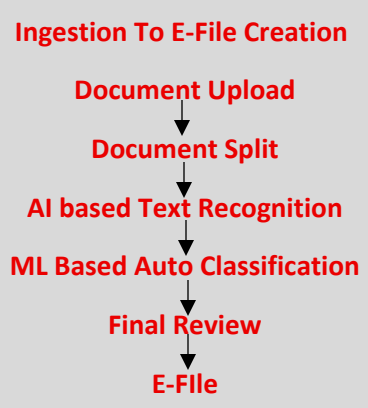
Solution Approach of Intelligent Data Capture

IDC involves combination of multiple technologies, and it creates a content flow that integrates into the existing business work flow and internal systems, improving the overall process efficiencies. Also, IDC provides documents storage capabilities in a secured manner, and it helps with data ingestion and capture from various sources, data extraction from multiple languages, and classification of documents using NLP and text analaytics

This intelligent infrastructure connects contents – from all channels using image repository, relevant data capture, information management and AI technologies – to integrate document and data (eg: scan, fax, emails, mobile, web and social) for the use of internal systems such as ERP, CRM and other business applications.

Currently businesses and institutions are adopting the transition from paper-based process to intelligent documentation solutions that offer broad strategic approach to business process work flow. Intelligent data capture technology allows for automation of many tasks which require human resources and it can save time and money while also improving the overall work flow.

Scanning devices and mobile capture technologies have extended the scope now directly to the fields; Data can now be captured, streamlined and managed by advance document handling capabilities from customer's home or workplace to other remote locations. This has improved the speed of operations and decision-making capabilities of organisations.



With the growing complexity of data coming from multiple sources, moving to intelligent data capture is the way to go. The technology continues to evolve, and its value may not revolutionise organisations, but it is a powerful tool to strengthen workflow, improve efficiency and profits while, also taking organisations to growth trajectory in future.

An IDC solution needs to handle a diverse input and technical paramenters, and expectations of every client demands customisation, which needs to be implemented with quicker turn-around time

The key items to consider before choosing an intelligent data capture solution for your company:

- **Accuracy:** set up accuracy standards for different types of data and documents you plan to capture
- **Flexibility:** based on business requirements, choose intelligent solutions that offer content management and automation
- **Reliability:** should be intelligent to mirror human comprehension and decision-making capabilities through context and error recognition
- **Self-learning Capability:** how does the solution perform with new data types or formats

Oculyse : an Intelligent Data Capture Solution from Digilytics™

Oculyse is a solution for processing, managing and generating insights from e-documents; it's an AI extension to Electronic Document Management Systems (EDMs) – that enhances business process by adding intelligence and improves process efficiency by providing access to AI enabled analytics and automation capabilities. Oculyse, is an integrated IDC tool which can handle different levels of integration, types of data and highly complex processes.

Intuitive & Efficient User Experience

Can facilitate concurrent document viewing across multiple documents Eg: signature compariosons, select & share options directly from case e-file, drag & drop feature to support page(s) movements across documents & ability to verify documents.

Data Extraction & Indexing

Seamless and quick data extraction & auto population from documents, emails and other sources Eg: when a "Account Number" field is added, it autofills other relevant fields – such as payment details, address, postcode. Can also search based on annotations made on any document page within a case.

Centralized Repository

Allows complete control, audit compliance & provides a single source of truth for all documents produced or received across organisation. Document versioning & duplication can be managed easily across the module.

AI based recognition & ML based classification

Artificial Intelligence combined with Optical character recognition technique is utilized to recognize text on individual pages to identify the content. Machine Learning technology is used to auto classify pages into relevant documents as per a pre defined file order.

Data Validation

Checks if the information added is valid and consistent with host systems such as vendor/client names, product details, passport,bank statement & pay slips.

Integration with transactional systems

Expands the possibilities & improves the customer experience by having the ability to seamlessly integrate with not only document mailing and archiving solutions but also with transactional systems suc as LOS, CRM Dynamics, Salesforce & Magento.

Digilytics™ delivers a comprehensive IDC solution "Oculyse" with a world class user experience

Key benefits of Intelligent data capture (IDC)

- Reduces processing time – automates redundant and manual processes
- Improves accuracy – reduces error rate significantly compared to manual paper-based process
- Increases scalability to handle customers data keeping expenses low
- Improves accessibility of documents to employees, especially in remote locations
- Assists with reporting and monitoring
- Increases security control and legal compliances

A leading UK bank updated it's mortgage underwriting process using Oculyse to improve process throughput

A leading UK bank implemented our Oculyse solution with the objective to bring new level of automation inside existing mortgage loan origination process. The scanned loan documents were shared from customers and brokers, which were then processed thorough Oculyse to read, classify and store the relevant information from these e-documents and make it accessible for the case preparation team. The customers' details from the loan applications were validated and verified from the information captured using Oculyse and most of the manual verification processes were automated to reduce the processing time. In addition, various parameters were passed onto the machine learning intelligence of Oculyse to categorise the risks involved with a mortgage. The mortgages were classified as either "low risk" mortgages for fast tracking the approval process or "medium risk" mortgages for getting approval and "high risk" mortgages for investigating in detail, thereby saving valuable time in the loan origination processing cycle which improved the throughput by ~36% and saved cost in millions.

About Digilitycs™

Digilytics™ is an AI platform to deploy AI-solutions Better, Faster and Cheaper for businesses that are trying to become "Insights-driven". Digilytics services business users that would like to improve their experience of consuming insights generated by analytics and AI techniques unlike others who focus on efficiency of insight generation; Digilytics™ focuses on insight consumption.

Digilytics™ mission is to help clients achieve profitable growth and deliver excellence , through the intelligent use of raolidlt expanding universe of data they operate in.

Digilytics™ is:

Embeddable. Enterprises have well-entrenched transaction systems. AI technology must be embeddable into these without replacing them

Actionable. AI technology must translate to simple actionable instructions for business operations

Simplified. In regulated industries, AI must be simplified and explainable to compliance and regulators

Integrate-able. Enterprises have integrated workspaces to facilitate smooth business operations. AI technology must seamlessly integrate with existing workspace technology.

The world of data is witnessing explosive expansion. Petabytes of data are being generated by the extended enterprise, from customers to regulators to colleagues and partners. Data Science and AI projects are mushrooming across the enterprise, but more than 80% fail to deliver results.

Digilytics™, the convergence of business know-how, data science and analytics technology, focuses on insights experience, making it easy for businesses to consume Data Science and AI technology in every day operations and delivery tangible deliver business value.

Digilytics™ is a closed loop AI-enabled cloud hosted SaaS platform. It ingests data of any variety, at any velocity and of any volume to generate real-time visual and conversational insights, using advanced analytical & AI techniques, that are embedded into transactional and decision support systems. Solutions developed on the platform create a consumer-grade insights consumption

WHAT IS DIGILYTICS™

BUSINESS UNDERSTANDING
+
DATA SCIENCE
+
TECHNOLOGY

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