

A Comprehensive Guide to Leveraging Intelligent Document Processing for Efficient Customs Clearance



Within the ambit of global supply chains, customs departments act as the de facto gatekeepers of trade flow, ensuring compliance with international trade regulations, assessing import/export duties, and verifying the accuracy of documentation.

“ Customs processes are notorious for being challenging and time-consuming,

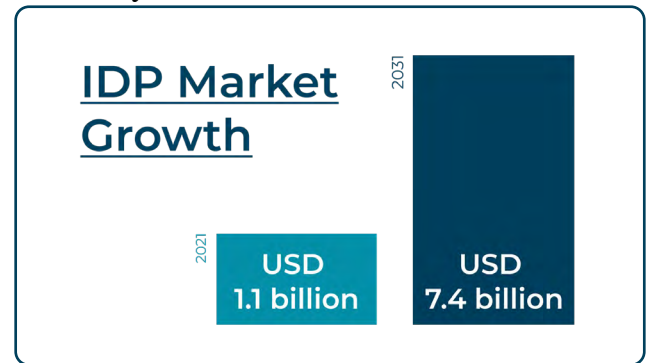
often involving a web of bureaucratic red tape.

Companies engaged in international trade face numerous challenges, thanks to the cumbersome documentation requirements, numerous forms to be filled, and adherence to ever-changing regulations. To make matters worse, traditional customs operations involve manual handling of documents, making them prone to errors and delays. Even a minor mistake in paperwork can lead to costly delays and fines, leaving companies frustrated and customs teams under pressure to deliver from other business departments.

For decades, businesses have grappled with finding effective ways to streamline their customs operations. They invest significant resources in recruiting entry writers, training personnel, improving coordination, and enhancing compliance efforts. However, these traditional approaches have their limitations, as they still rely on human intervention, making them susceptible to human errors and inefficiencies, especially if job satisfaction levels are low. As companies expand their international trade activities, the sheer volume of documents further compounds the complexity of customs processes. Many businesses find themselves drowning in paperwork, leading to delays, lost opportunities, and an unfavorable impact on their bottom line.

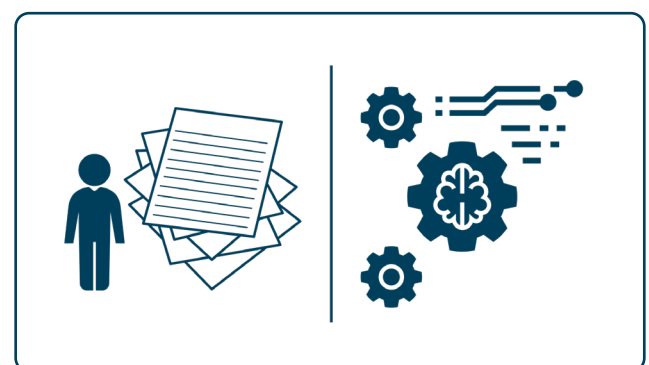
Enter, Intelligent Document Processing (IDP), a workflow automation technology capable of scanning, reading, extracting, categorizing, and organizing relevant information from a large mass of data existing in diverse formats and structures. The popularity of IDP solutions is reflected in their rise to significance in recent years. Valued at **USD 1.1 billion in 2021**, the IDP sector is currently growing at a stellar pace;

a 21.7% CAGR and expected to touch USD 7.4 billion by 2031.



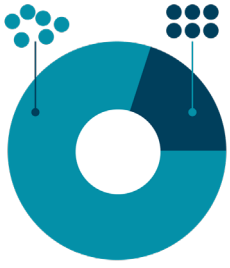
The origins of IDP can be traced back to the invention of Optical Character Recognition (OCR). While OCR was intended to read characters, the concept has since then evolved considerably, gaining in sophistication over the years, to now reach a point where the technology can identify, read, interpret, and analyze data from diverse documents and formats.

The significance of IDP lies in the fact that it can automate the processing and analysis of a variety of documents with the help of artificial intelligence (AI) and machine learning (ML) algorithms. This automation is particularly important for international trade and logistics, as it saves the organization resources and time involved in document preparation. And considering IDP removes possibilities of manual errors from creeping into documentation, companies can avoid delays, fines, and risks that cloud their reputation.



That said, the input data and documentation that is fed into the IDP system can come in a variety of formats and structures. Whether it's scanned paper documents, digitally generated PDFs, images, emails, or even faxes, IDP will have to contend with a diverse range of inputs.

To that effect, documents can be broadly categorized into structured, semi-structured,



and unstructured data forms. While humans can easily process and interpret structured data, semi-structured and unstructured data pose sizable challenges. According to certain estimates, 80% of

data is unstructured, in terms of the content (the way the information is updated) or in terms of the format (word documents, excel spreadsheets, pdf files, and images).

IDP, with its ability to constantly evolve and thus improve processing accuracy, can make the job of processing unstructured and semi-structured data much easier and faster, while also reducing the number of errors. Due to its AI capabilities, IDP can learn from historical context, to identify patterns in data and flag potentially wrong information for human review. This ensures that critical errors are caught and corrected, providing companies with reliable and trustworthy data for decision-making and compliance purposes.

Leveraging IDP in customs clearance processes

The document-intensive nature of the international transportation and forwarding industry makes it an excellent case study for the implementation of IDP. With a maze of documents and cumbersome procedures involved, the task of Customs clearance has traditionally compelled substantial investment in manpower, time, and resources. Moreover,

“the possibility of human errors, arising from acts of omission and commission, can never be fully eliminated.”

In case of errors or delays in the customs clearance process, the importer or shipper is exposed to the risk of financial fines and other legal penalties, delays in cargo delivery, and associated commercial losses. The implementation of an IDP solution can prove to be a game-changer, as the system will handle all documentation requirements and ensure compliance with stipulated procedures, resulting in tangible and intangible benefits to the business.

By adhering to the Customs Department's regulations, the organization can ensure customs clearance is handled optimally, to the mutual satisfaction of all parties. Importers

and shippers can reap a host of benefits by deploying a quality IDP solution, as explained below:



Faster processing times: Since the process is automated, the IDP solution can process vast amounts of data, structured and unstructured, in a very short span of time.



Higher Accuracy: With the human element minimized, accuracy levels demonstrate marked improvement, with minimal errors. Even the errors that do occur are fed back into the system, so the system learns to handle these instances in an appropriate manner in the future.



Better handling and interpretation of semi-structured and unstructured data: Using IDP, an organization can gather deeper insights from unstructured data, facilitating comprehensive analysis.



Reducing risks arising from non-compliance with Customs procedures: With better compliance levels and complete documentation, the risk of imposition of penalties is greatly reduced.



Boost Employee Morale:

Employees ground down by constant data entry can result in high staff turn-over and disgruntled workers. IDP takes the mundane out of the daily routine, releasing staff to focus on higher value adding and more rewarding tasks.



Reduced costs: The combined impact of lower manpower and higher accuracy levels helps reduce labor and compliance costs.



Enhanced security: IDP systems store data and digitized documents securely in the organization's servers, access to which is restricted, thereby enhancing data security.

Who should look to adopt IDP and why?

IDP software is by its nature most beneficial to industries and sectors where a large amount of paperwork is involved.

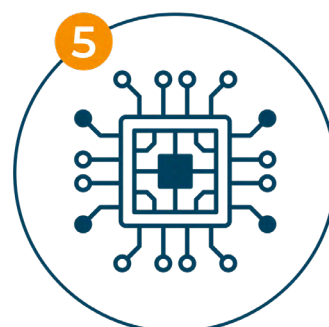
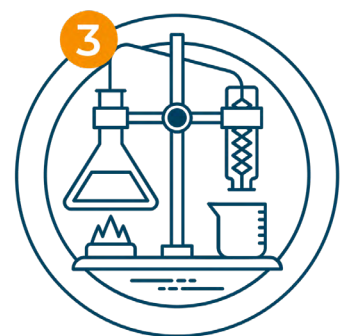
International shipping and logistics is one such sector, where numerous documentary requirements are prescribed at each stage, resulting in exporters and importers being obligated to maintain and furnish all necessary documents.

Therefore, businesses or manufacturers involved in the export and import of goods and products, or freight forwarders operating

on a global scale, will accrue significant gains from implementing an IDP solution.

Even within this sector, there are some sub-sectors, where documentary requirements are, for various reasons, more stringent than the general norm, for whom the imperative is even greater.

Shippers of high-value commodities and high-tech products are typical examples:



1. High-value food products: Since food products need to be fit for human consumption, countries have mandated strict documentary requirements, to certify the wholesomeness of the product, its contents, source, and origin. These are high-value products, transported in reefer containers, with the value of an average reefer container running into several hundred thousand US dollars. Considering the high value of the commodity, shippers are well advised to incorporate IDP.

2. Pharmaceuticals and other perishable products: Given the nature of the commodity, customs officials insist on a raft of certificates and other information in the case of pharmaceutical shipments. This is also high-value cargo, where mis-declarations or incomplete documentation can lead to rejection by Customs or delays in delivery shortening the product life.

This is also the case with other other perishable products such as flowers.

Therefore, manufacturers and importers of pharma products and other perishables can benefit from adopting IDP solutions.

3. Chemicals: The transport of chemicals is fraught with numerous risks, varying with the nature of the chemical involved. A lot of

chemicals are toxic or hazardous in nature, because of which Customs officials have mandated comprehensive documentary requirements therefor. Delays in customs clearance due to incomplete documentation or non-compliance with procedures will significantly increase the risk levels involved in transportation and lead to the incurrence of storage costs and safety precautions. In this case, importers can use IDP to reduce these associated costs.

4. Aerospace: The booming aerospace sector deals with high-value products, and has complex and comprehensive documentary requirements. Therefore, importers can face huge financial losses and stoppage of production lines in the event of delays due to issues arising from incomplete or inaccurate documentation. IDP software can help the sector mitigate these risks.

5. Automotive and other High-Tech products: Auto components and other high-tech products are of great strategic importance and comprise components for a number of other electronic and defense products. Delays in the delivery of these products can impact numerous other industries, holding up production lines and impairing product availability in key markets. Businesses dealing with these products can reduce the probability of delays by implementing IDP software.

Evaluation criteria to choose an IDP provider

Customs departments around the world classify goods and products at the most granular level possible, with different terms used for different classification systems, such as Harmonised Tariff Systems, Commodity Codes, HS Codes, and Combined Nomenclature.

The documentary requirements for each classification are different, as are the procedures. For a shipper or importer, the implication is that they need to be cognizant of the specific processes and documentary

requirements stipulated for each product they manufacture or import.

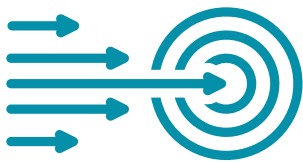
“ The sheer diversity of the classification of goods makes complying with customs requirements a complicated process.

In this situation, it is entirely conceivable that humans will make mistakes. IDP can help improve operations for shippers

by automating the process, whereunder documents are accurately prepared and submitted within stipulated timelines.

While there is no denying the benefits that a shipper or importer can derive from investing in an IDP solution, organizations need to select a solution that caters to their unique business requirements and with future needs in mind.

With the market replete with IDP solutions offering functionalities of varying degrees of sophistication, the decision is by no means an easy one. In order to assist shippers in this decision, here are some of the most critical factors that could conceivably influence the choice of an IDP solution:

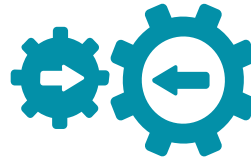


Accuracy and speed of performance:

The very purpose of an IDP system is to automate the processing of documents and data, wherefore the foremost criteria involves accuracy levels and speed of processing. A key point is that the accuracy levels are a function of the time that the system has been deployed, since the more data that is fed into the system, the more accurate the results are, with lesser human intervention required. IDP solutions offered by [KlearNow.ai](https://klearnow.ai), which has been in the market for five years, illustrate this point, with a 99% accuracy rate in transforming unstructured data into structured data.



Scalability and flexibility: As a business grows over time, so does its geographical scale and operational complexity. The organization will therefore need to ensure that any system they invest in is capable of catering to future requirements as well. Therefore, the ideal IDP system will need to be scalable as well as flexible.



Integration capabilities with existing systems:

While IDP systems can automate documentation processes, they need to synchronize with existing systems to be able to pick documents and unstructured data, which are then processed and analyzed. Also, the IDP systems output will form inputs for other systems, wherefore data will need to flow from the IDP system to other systems in the organization, to be able to utilize the information fully and disseminate it to relevant stakeholders. In essence, an IDP system needs to be capable of being integrated with existing systems.



Customization and additional support in special instances:

Industry-defined workflow standards determine processes at most importers and shippers, leading to a relatively high degree of standardization. Most businesses however do have unique requirements, arising from the commodities they trade in or the nature of their industry.

Ergo, while an off-the-shelf IDP solution might meet most of the organization's requirements, there do exist a significant number of exceptional cases, where requirements will diverge from company to company.

Companies evaluating the purchase of an IDP, therefore, need to map their specific requirements as well and look for solutions that can be customized accordingly. Additionally, since most industries have distinctive documentary requirements, the IDP solution should offer support for specific document types.

Additional Criteria for IDP Provider Evaluation

Apart from the essential parameters used to evaluate IDP solutions, there are certain other factors that are useful for facilitating a comparative overview of various IDP solutions.

The more prominent ones include:

1. Security and compliance measures implemented by the provider: With increasing focus on data security, governments the world over have introduced legislation mandating companies to have in place adequate safeguards to protect customer data. Shippers and importers therefore need to ensure that their commercial and customer data is secure, with this being one of the key features of the IDP solution.

2. User-friendly interface and ease of implementation: Since the IDP system will be used by employees across all levels, it is crucial to have their buy-in to ensure

successful implementation. In this scenario, a technological solution with a user-friendly interface that is also easy to implement will be more readily accepted by employees, thus increasing the probability of a successful implementation.

3. Customer support and training provided by the IDP provider: Since the IDP solution will necessitate employees learning a new system and also change existing processes, employees will need to be trained, and intensive customer support required from the vendor, during the initial phase. IDP providers who can arrange this will find greater acceptance.

4. Cost-effectiveness and return on investment considerations: As with any business decision and investment in technology, what will ultimately tip the scale in favor of a particular IDP solution will be the cost-effectiveness and the projected ROI.



Calculating ROI for IDP solutions

Calculating the ROI on an IDP solution is an endeavor fraught with uncertainty, given the difficulties in quantifying the benefits, which can be both tangible and intangible. This factor adds to the difficulty in comparing IDP providers and poses a dilemma for shippers and importers.

To make the decision easier for organizations that are evaluating procurement of an IDP solution, KlearNow has provided on its website an [ROI calculator](#) that also incorporates soft savings.

KlearNow's ROI calculator takes into account the savings from streamlining operations, as well as aspects like:

Time and effort saved in communicating (emails, phone calls, meetings, etc.) and in liaising with stakeholders:

With KlearNow's IDP solution, manual communication processes are streamlined, leading to reduced back-and-forth exchanges and quicker decision-making. This not only

saves valuable time for employees but also enhances collaboration and responsiveness with various stakeholders, such as customs officials, shipping partners, and customers.

Reducing the effort spent on tracking and status updates on the shipments:

By automating document processing and data extraction, KlearNow's IDP eliminates the need for manual tracking and updating of shipment statuses. This leads to real-

time access to critical information, enabling organizations to proactively address any issues and avoid delays, which in turn bolsters overall supply chain efficiency.

Cost savings - on document processing and archival:

Traditional manual document processing can incur significant costs related to labor, paper, storage, and physical archival. KlearNow's IDP not only reduces the need for manual data

entry but also digitizes and stores documents electronically, resulting in cost savings on printing, storage space, and archiving expenses.

Reducing the efforts spent on invoice processing:

With IDP, the time-consuming task of manually processing invoices is replaced with automated extraction and verification, reducing human errors and accelerating

invoice approval cycles. This efficiency improvement translates to faster payments, stronger supplier relationships, and a smoother cash flow for the organization.

Success stories

To facilitate an informed appreciation of the broad spectrum of the benefits afforded by IDP solutions, KlearNow has shared certain [case studies](#), which amply illustrate how organizations have succeeded in streamlining workflows and improving efficiency by automating document processing.

One notable case study involved an [exporter of automotive parts](#), with a presence spanning North America, Europe, and Asia. Faced with the challenges of timely customs clearance and exorbitant fees for onward clearance, the client leveraged KlearNow's Logitech solutions to reduce the speed of accurate customs declarations from 3 weeks to just a matter of minutes.

To schedule a demo and learn how KlearNow can help your business, [click here](#).



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