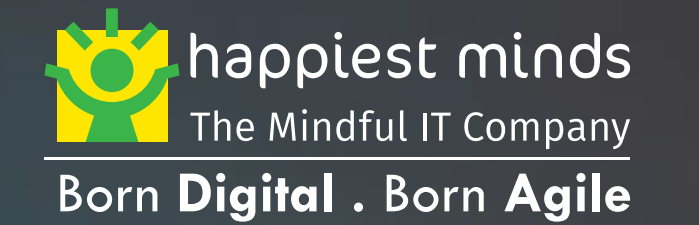


co-authored by



**FREIGHT AUDIT  
AUTOMATION  
DRIVING COST  
EFFICIENCY  
AND ACCURACY  
THROUGH ARTIFICIAL  
INTELLIGENCE**



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# DO YOU KNOW

That on an average, organizations pay 7% to 10% more in freight expenses than they should due to billing errors.



The freight ecosystem is vast and complex with many interconnected functions starting from sourcing, manufacturing to bringing products to the consumer. Any organization dealing with movement or purchase of freight (goods) needs a control mechanism to ensure accuracy of dealing with freight invoices received from carriers.

Organizations today are dealing with manual, inefficient processes of auditing freight invoices. With multiple freight invoice handoffs through the journey, the manual effort that goes into auditing voluminous invoices on an ongoing basis consumes both time and money. Discrepancies and errors in the invoicing process causes a direct impact on costs for retailers, consumer goods companies, manufacturers, construction companies, healthcare organizations and any other industry that is dependent on 3PL services, thus significantly affecting the bottom line. For example, in US, auditing helped an entertainment retailer in saving around \$35,000 from an incorrect monthly invoice charge which further substantiates the need of proper auditing.

Without an automated system in place to audit the complete spend coverage of an organization, the overall accuracy of manually approving and certifying the correctness of spend remains an educated guess. The industry is moving towards exploring applications of RPA, AI and ML in automating the verification of spend coverage. RPA can bring about huge benefits in terms of completeness of coverage, contract terms validation, proactive audit prior to invoice approval, duplication, fraud detection, verification of taxes, discounts, and many other areas.

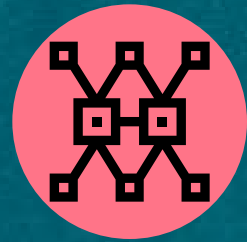
This Whitepaper aims to showcase how intelligent automation using RPA in Freight Audit can help in increase the accuracy of invoice certification and prevent losses due to excessive incorrect spend.

**The world of automation has changed in the past year. Just six months ago, tech and business leaders would lightly suggest automation ideas, jockey for budget, and get nods and smiles for their efforts but little commitment. Now, automation has moved to heated board-level discussions that often end with statements such as “If we don’t automate everything we can, we may not survive.”**

**Craig Le Clair, Forrester**



# CURRENT CHALLENGES IN FREIGHT AUDIT



## COMPLEX PRICING OF MULTI-MODAL TRANSPORTATION

Freight invoices span multiple modes of transportation including air, ocean, road and rail, each of which have their own hand-offs and interdependencies. Dealing with multiple pricing types and rates add to the complexity of manual approvals. An invoice could have multiple discount levels, varying price based on Shipment types – inbound, outbound, varying pricing basis eg: flat, distance based, commodity based etc. or accessorial charges by customer and carrier.



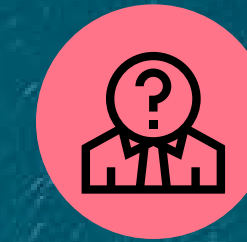
## DEALING WITH MULTI-VENDOR AND MULTIPLE FORMATS

In the overall supply chain, an organization can be associated with multiple vendors with various invoice formats and contract obligations. Dealing with such complex audit process for every invoice can get overwhelming, leading to inefficient and untimely reporting of audit results. Also, each vendor will have their own process for dealing with disputes, creating delays in payments.



## HUMAN DEPENDENCIES AND ERRORS

Traditional auditing methods continue to invest in manpower with little technology aid thus leaving room for incorrect judgements and continuous errors. With thousands of invoices being processed every month, if variances are not captured and addressed systematically and in real time, these errors add up and lead to never ending cycles of auditing and overhead.



## LACK OF INSIGHTS AND FORECASTING

Traditional methods do not effectively capture insights from systems and sources across the enterprise and beyond. Sources of data include both centralized and structured data and extends to unstructured data available outside of the traditional environment which business is unable to tap effectively to get actionable insights. for example:

How many times has the carrier delivered on time?

How many carriers are meeting their contractual obligations and guidelines?

Are there any carriers who are consistently sending incorrect invoices that had to be rejected?

How do the current contracts measure against prevailing market rates and conditions?



# WHY AUTOMATION?

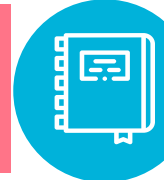
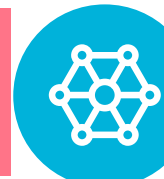


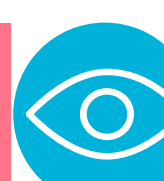

## DATA-DRIVEN DECISION MAKING IN FREIGHT AUDITING

Errors and overcharges  
account for...

# 3.5%

... of a total shipping bill.




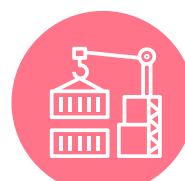

### Traditional Freight Audit Process

- Manual Processing 
- Multiple Data Sources 
- High Risk for Errors 
- Slow Turnaround 
- Lack of visibility between billing and the supplychain 
- Fixes mistakes based on past information 

According to a research, 15% of all carrier invoices are incorrect and almost 80% of logistics companies overpay for freight services and that is why a freight audit becomes necessary but since the process is tedious and has a high potential for error and this is where automation comes into the picture.

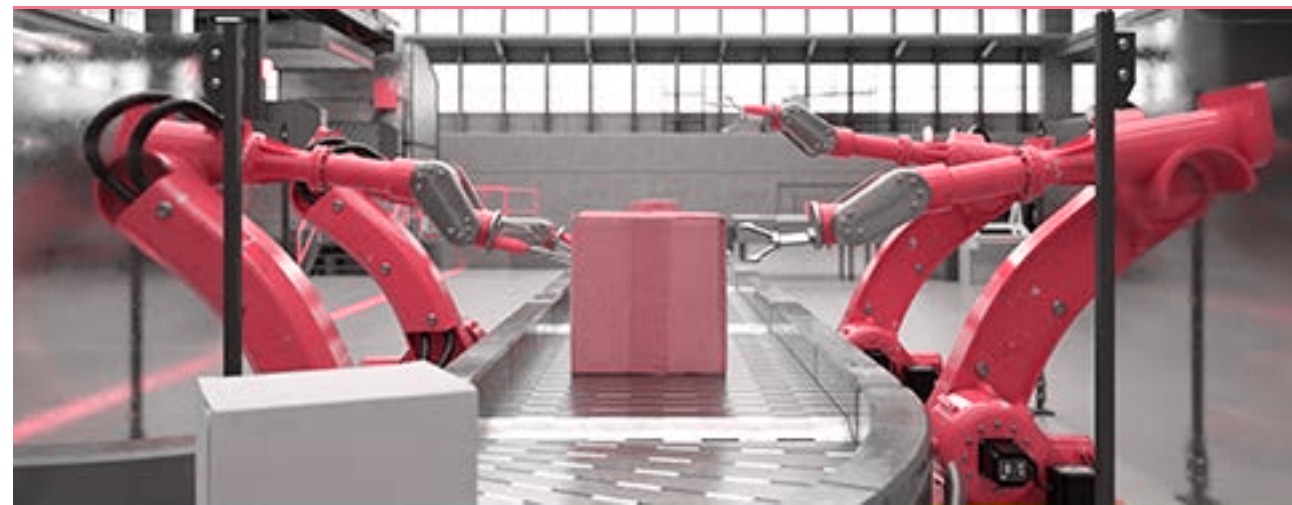
Automation has been instrumental in enhancing business processes, saving costs, and optimising workflows across the world. It ensures that all possible chances of human errors are eliminated and the process is completed as soon as possible with utmost precision. All the workforce involved in this process could be redirected in improving operations in other parts of the organisation.

### The Solution: Automation

-  Improves Visibility
-  Single Source of Clean Data
-  Allows predictive insights for better decision making
-  Includes data across TMS/carriers, shipment tenders, and track-and-trace
-  Standardizes and monitors data streams and removes exceptions

# TRENDS IN FREIGHT AUDITING

Some of the trends in freight invoice auditing reported by Cerasis (a GlobalTranz Company), have been mentioned below:



## Robotic Process Automation Will Drive The Trends In Freight Invoice Auditing

Leveraging automation, AI and ML to continuously improve supply chain systems have huge potential. This so-called robot worker or RPA (Robotic Process Automation) bots, within the machine has the potential to replace repetitive processes transforming freight invoice auditing. Since auditing is a complicated process that involves matching data between invoices and appropriate documentation, it is a logical choice to use RPA.



## Technology Providers Will Continue to Enhance Services for Freight Invoice Auditing

In all aspects of both RPA and auditing throughout the supply chain, technology will become the primary factor. Moreover, consider the compliance effects of freight invoice auditing. Shippers may reduce risk without actually raising a finger. There are capabilities of analytics; reduction in cases of over-billing, under-billing, inaccurate classification of freight, under-standard reporting by carriers of freight status, and numerous other data points.



## Third-Party Invoice Auditing Will Be The New Normal for Small Shippers

Third-party auditing firms can manage requirements throughout the supply chain, including requests for replenishment, requests for freight quoting, data aggregation, and information dissemination across the enterprise. As a result, invoice accuracy, timeliness, and disbursement of payments are done more efficiently, enhancing coordination across the supply chain. Therefore, for small to mid-size shippers, third-party invoice auditing tools and capabilities will become the new normal.



# TRENDS IN FREIGHT AUDITING



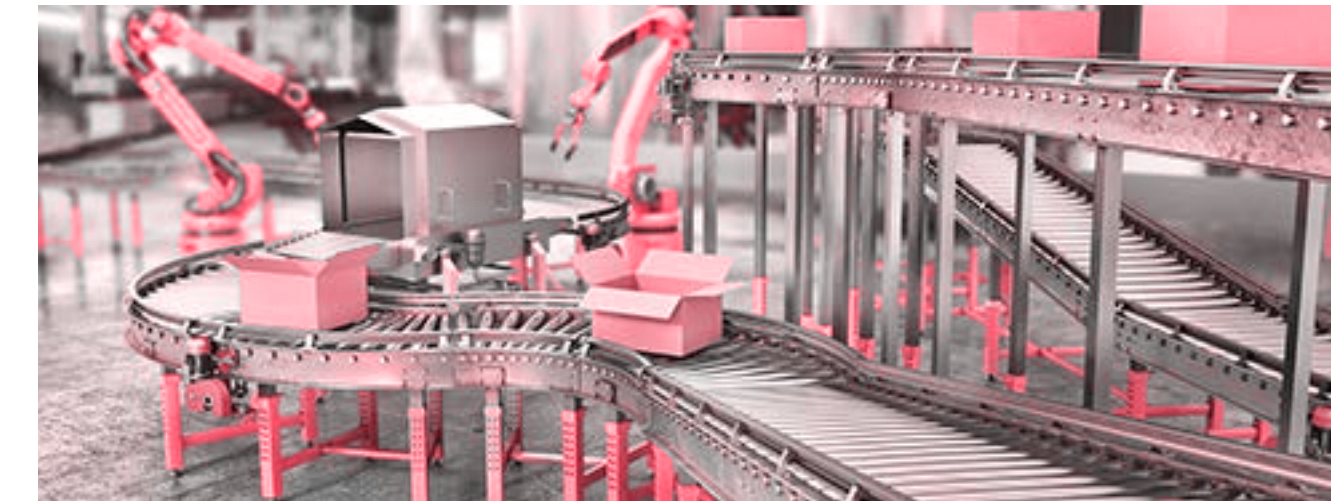
## Shippers that realise lower labour costs can reinvest in logistics management through automated auditing

Savings made from the synchronisation of trends within the enterprise through freight invoice auditing can be reinvested within the company to take advantage of additional types of automation, including robotic picking, packing, marking, and even shipping. In a way, the road to freight invoice auditing would automatically be an integral prerequisite for the supply chain to be completely automated.



## While completing payments, automated systems can perform real-time audits, minimizing costs along the way.

Ability to audit a freight quote in real-time, ensure that the freight is correctly billed as soon as the carrier site changes, full verification payment, and even run a second check to ensure accuracy later. It is a performance model that is highly required by the supply chain to survive and keep costs under control.



## Freight Invoice Auditing Trends will continue to search for opportunities across technology for improvement

While the advancements in technology primarily revolve around the automation of freight invoice auditing, the possible use cases for auditing to benefit the supply chain continue to grow. Invoice auditing is no longer just a market differentiator; it must become the standard to maintain cost control of freight expenditure.



# MANUAL VS. AUTOMATED SHIPMENT AUDIT

## ROI

Resource onboarding, orientation and knowledge transition yeilds diminishing returns



Ease of deployment and immediate shipping cost optimization

## Business Scalability

Additional resources acquisition as the business scales



Enables scalability with ability to handle complex data monitoring

## Precision in Error Detection

Prone to lapses in finding errors and service failures



Identifies upto 50+ shipping invoice errors and service failures by capturing upto 130 data points

## Delivery Exception Notification

Cumbersome process of data combing to identify exceptions



Aids management by exception by flagging the shipments that need attention

## Shipping Cost Optimization

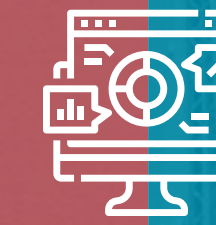
Draw conclusions for the shipments only within their purview



Comparision and benchmarking performances acrosses businesses for better carrier rate negotiation

## Last Mile Intelligence

Time intensive activity of report creation for every business requirement



Intuitive and predictive shipment delivery reports to make smarter logistic decision

## Internationalization

Dedicated resource for every carrier and different geographies



Manage and analyze shipments from 16+ carriers on a centralized platform

## Shipping Rate Updation

Need to be manually updated for every rate fluctuation



Automatic carrier rate change updates to the in-built rating systems

## Supply Chain Visibility

Data silos resulting in inefficient management



Visibility into shipment delivery information across organization

## Ease of Compliance

Track and manage compliance manually



Automatic compliance check based on contractual agreement



# INTRODUCING ENATE ROBOTIC PROCESS ORCHESTRATION (RPO)

## Furthering Intelligent Automation in Freight Audit by connecting humans with bots

The Freight Audit process involves information flow between multiple stakeholders

**1**

RPA bots which are automating tasks such as processing invoices, checking for duplicate entries, and volume discounts

**2**

Human employees involved in monitoring and error validation (exception handling) during the process.



It becomes crucial to have smooth work handoffs between humans and bot stakeholders involved in this process to run it efficiently and accurately. It is also necessary to ensure that the audit trail of the workflow is maintained, and SLAs are adhered to by these stakeholders.

This is where technologies such as Enate's Robotic Process Orchestration (RPO) puts forward process efficiencies.

RPO is a Lite Workflow, BPM, and Work Management platform that acts as a common thread to bind together all human team members &/or automation technologies into one framework. It features cutting edge case management, ticket management, email management, and workforce management capabilities in a single stack, that is light & fast to deploy, and brings in instant governance & control.

If you have implemented automation technologies (RPA, OCR, AI/ML, etc.) into your operations, Enate will help your automation program by ensuring better human-bot collaboration, governance, and integration and ensure the end-to-end customer journey is automated.





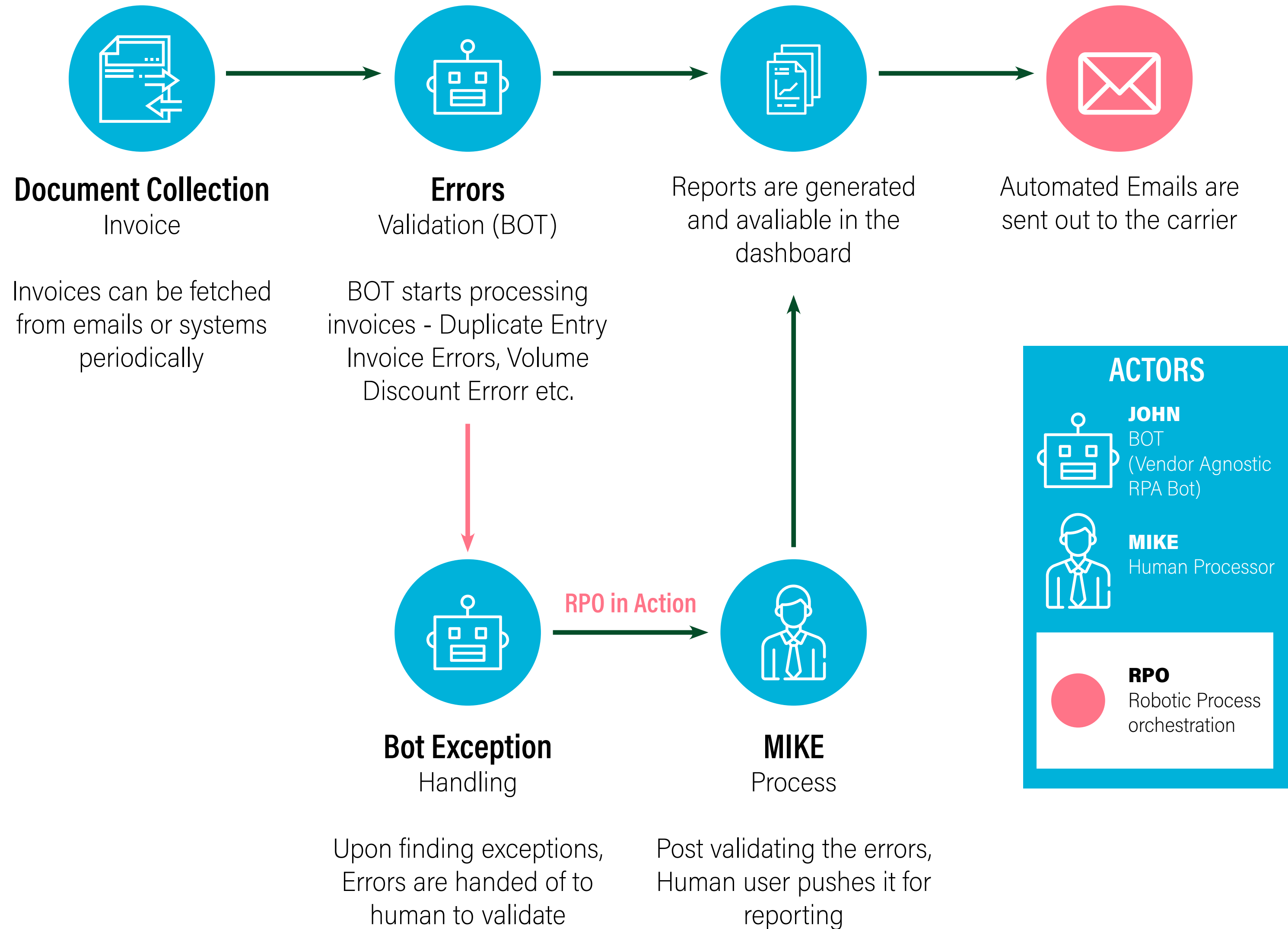
# FREIGHT AUDIT PROCESS FLOW USING INTELLIGENT AUTOMATION

## Duplicate Invoice and invoice error/ mismatch

Dealing with Duplicate invoices remain a common problem, sometimes sent by vendors by mistake or in certain cases with an intent to defraud. These invoices if not identified will result in huge loses. Automation can detect duplicate invoices at the early stage and raise an alert and also do a risk assessment for vendors based on how often these kinds of issues are happening either intentionally or otherwise.

Below is an orchestrated process overview of intelligent automation in the invoice audit process depicting multiple bots and human actors and how these handoffs can be managed automatically through Robotic Process Orchestration with minimum interventions.

John is a one of the bots who performs a particular task of collecting invoices to identify any duplicate invoices and generating reports to measure the risk profile of a particular vendor.



**High Level Orchestration Process view**



# HOW INTELLIGENT AUTOMATION CAN DRIVE VALUE IN FREIGHT AUDIT

Managing your organization's transportation costs in today's competitive environment is critical to controlling the impact on profitability. Adopting Intelligent Automation across the Freight Audit value chain can bring about consistency and accuracy across the following areas:

## COMPLETE SPEND COVERAGE



Automatic Audit of 100% of spend, not fraction, flag high risk items for manual review

## DUPLICATE INVOICES



Duplicate invoices Double billing due to counting one shipment as two or using different options for invoice receipt and payment; discrepancy between carrier and Freight bill numbers

## CORRECTNESS OF CHARGES AND CLASSIFICATION



### Accessorial

Ensure that any accessorial services (Services rendered by carriers in addition to transportation like crating, packing, and handling; storage, etc.) were actually received and any discounts applied.

### Base Rate

The base rate ensure that the bill begins with the accurate rate, whether it's a negotiated or spot market rate.

### Classification

Ensure that freight is assigned to its appropriate National Motor Freight Classification and charged appropriately. Misclassification can lead to millions in overcharges.

### Taxes/Fees

Ensure all state and local taxes, and the customs fees, tariffs, and international taxes are applied as suitable.

### Volume Discounts

RPA can validate invoices against contract terms for discounts, keep track of purchase volumes, flag an invoice for review when it does not comply with the price for the current volume

## CONTRACT TERMS



Validate invoices against contract terms, use semantic analysis to understand business context; trained ML models to look for discrepancies and non-compliant invoices

## FRAUD ELIMINATION



Eliminate fake invoices, vendor impersonation and shell companies, unscrupulous practices



**“The cost of manual freight invoice processing is estimated to be in the range of \$15 - \$50 per invoice. Document handling constitutes the bulk of that cost, and when an error is detected, that cost can increase dramatically.”**

**“Statistically, 15 percent of all carrier invoices are incorrect, and roughly 80 percent of logistics companies overpay for freight services.”**



# FREIGHT AUDIT AUTOMATION IMPROVES COMMUNICATION, BOTH INTERNALLY AND EXTERNALLY

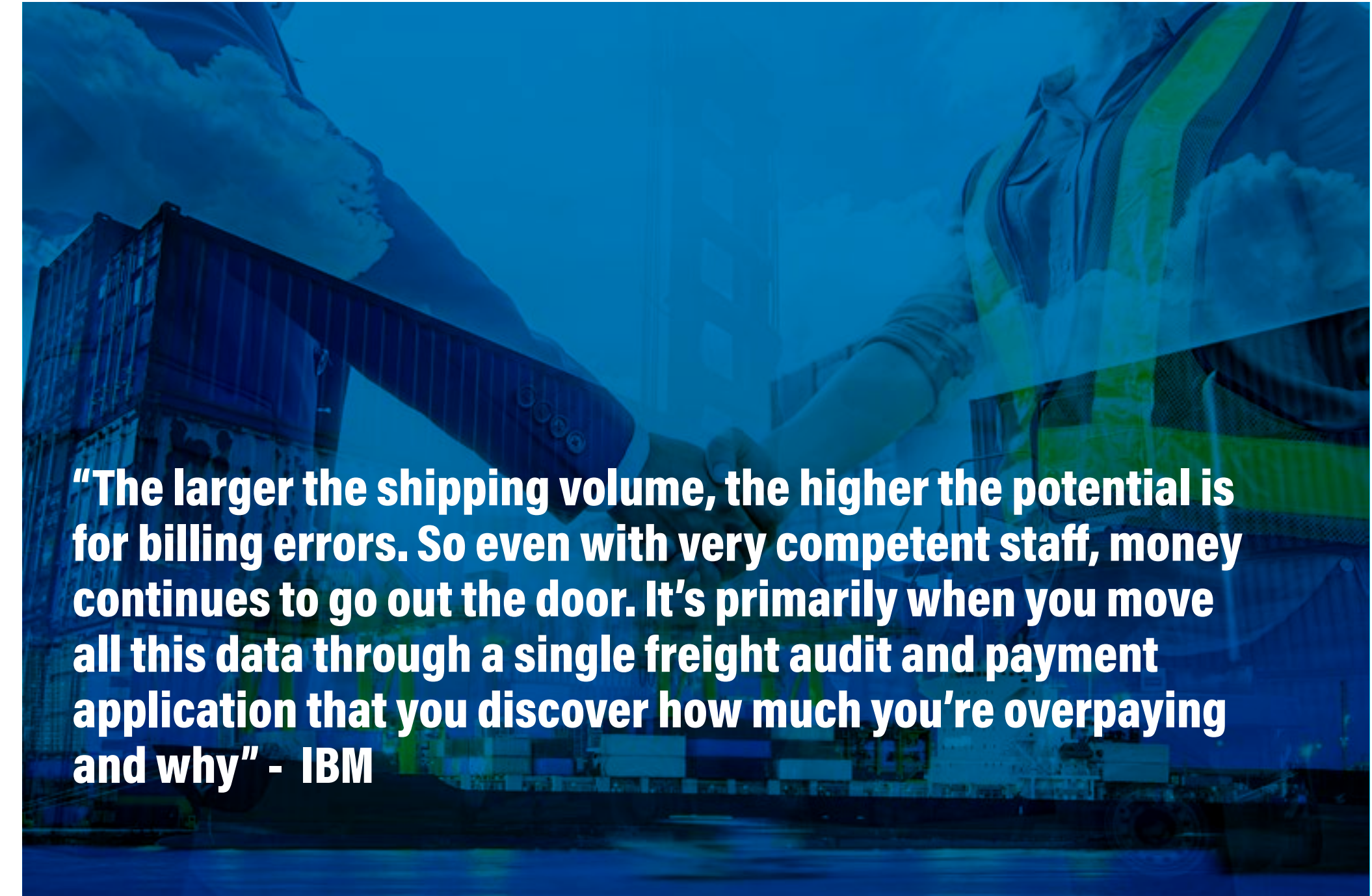
An automated system driven by concepts of AI, ML and cognitive intelligence provides centralized information that can be accessed by all departments, improving internal communication, and facilitating collaboration across the enterprise through a single source of truth. This eliminates internal informational silos and guarantees that all departments are looking at a single source of truth in terms of synchronized and seamless data.

Externally, communication is improved because stakeholders can access accurate data in real-time, affording them the ability to deal with problems as they arise, rather than waiting weeks or more for them to surface.

“

**Companies overpay for shipping not because carriers are dishonest but because high-volume, global shipping operations generate too much data for manual processes to absorb. The number of carrier invoices, the level of detail on each invoice, and the variance in charges, rates, services and billing practices create an impossible task to manage without automation.**

”



**“The larger the shipping volume, the higher the potential is for billing errors. So even with very competent staff, money continues to go out the door. It’s primarily when you move all this data through a single freight audit and payment application that you discover how much you’re overpaying and why” - IBM**

Automation can reduce the human dependency, reduce errors, and lets the team focus more on other core business. Decision on whether this is done in-house or outsourced to vendors who are experts in this area is also key.

While it may not be possible to achieve 100% automation owing to key human judgements to be taken, a balanced approach of automation and manual audit would be one of the right approaches.





## ABOUT ENATE

Enate is a UK headquartered Robotic Process Orchestration (RPO) platform with an APAC office in India. Enate was named a Hot Vendor 2019 by HFS Research. The platform's customers include the likes of Mizuho, a global banking major, Utmost (Generali Link) – an insurance major, and consulting and professional services organizations like Capgemini and a Big 4.



## ABOUT HAPPIEST MINDS

Happiest Minds enables Digital Transformation for enterprises and technology providers by delivering seamless customer experience, business efficiency and actionable insights through an integrated set of disruptive technologies: big data analytics, internet of things, mobility, cloud, security, unified communications, etc. Happiest Minds offers domain centric solutions, IPs in IT Services, Product Engineering, Infrastructure Management and Security. These services have applicability across industry sectors such as retail, CPG, e-commerce, banking, insurance, hi-tech, engineering R&D, manufacturing, automotive and travel/transportation/hospitality. As a Mindful IT Company, the focus is on 'Being Mindful' and 'Doing Mindful' which involves perceiving immersively, processing non-judgmentally and performing empathetically. 60 minutes in a week is committed towards inculcating a mindful approach within the organization, using a select set of tools and techniques. Headquartered in Bangalore, India, Happiest Minds has operations in the US, UK, The Netherlands, Australia, Middle East and Turkey.



## CONCLUSION

Looking at the above opportunities that exist in optimizing manpower and reducing costs, robotic process automation and orchestration is key to bringing in the transformation that organizations are looking forward.