

# Working Capital Optimization via Receivables Management



## Overview

One of the most critical aspects of any successful business is its working capital management. It refers to how a company manages its current assets and current liabilities to ensure enough cash to pay for obligations when needed. It shows the organization's overall efficiency and runs throughout the organization somehow, making it an inherent part of its finances and operations.

Among the three pillars of working capital, namely Receivables Management, Payables Management & Inventory Management, it is Receivables Management, which occupies a substantial share in most of the organization's working capital. Receivable management is undeniably the most sought-after business process that can be leveraged to boost profitability and advance working capital levels in the organization.

**The paper focuses on issues around Intelligent Account Receivables (AR) management in place of the organization's profitability and suggests possible solutions to enhance it.**

## Introduction

Efficient management of receivables has gained a lot of momentum in the recent past. Globalization, stiff competition, business expansion and the ability to face crises drive organizations to build robust receivables optimization systems. In today's world, where "drag" from the exigent unforeseen events like COVID-19 and its aftermath are leading to ever more outflows, it is imperative to "lift" the businesses with timely and optimal edge inflows they bring with them.

Receivables management is a business strategy designed to ensure that a company operates efficiently by monitoring and collecting its accounts receivables to the best effect. It means shortening the cycle time to collect receivables and ensuring that the outstanding dues are fully recovered. Management of accounts receivables is needed to provide sufficient cash to pay for obligations when required, reduce bad debts and costs of external funding, nurture healthy relations with buyers and suppliers and eventually contribute to a smooth operating cycle.

# Challenge

Receivables management has seldom been utilized to its fullest potential. With the need to adjust to a constantly dynamic business environment, shrinking timelines, and expanding requirements to improve inflows, organizations need to rethink & redesign their collections management systems. With **"rapid business changes"** being the only constant these days, it is rather a challenge to create an ideal AR management system that ignores the noise of business disruptions and yet delivers optimal collections with ease. Rising organizational complexity makes it even harder to tailor services around payments. Apart from these generic challenges, the collection policy holds the key to delivering premier collections.

Collection policies need to be robust and in line with the credit terms and conditions. Often the challenge lies in creating a collection policy that is neither too strict nor too lenient—having a lenient collection policy can increase sales. However, there will be a subsequent increase in the cost of holding these receivables in the form of risk of bad debts & cost of financing for these receivables apart from potential cash flow problems if not collected quickly.

On the other hand, having a strict collection policy may cause our customer base to shrink. The customers would want to go to someone who can offer them a better credit period with less stringent credit terms, eventually decreasing sales. Not to forget the inclusion of 5C's of credit, namely Character, Capacity, Capital, Collateral, and Conditions, which add to the complexity around collection policies.

Another critical issue in AR management is the lack of regular monitoring and follow-ups of customer accounts, leading to the potential risk of late, partial, or even non-payments. Given that AR management runs as a passive function in the working capital ecosystem, insights come in very late in the process resulting in high decision latency and hence inability to act pro-actively within the given time frame, leading to sub-optimal collections impacting profitability.

# Solution

The solution to optimizing collections hinges on a balanced AR Management System, which helps create an equilibrium between maximizing credit sales and minimizing the associated credit risk that comes along with it. With a focus on consumers, businesses in the B2C segment must ensure that the cost and the risk of extending credit must not, at any stage, surpass the benefits associated with offering credit sales. Whereas with a focus on partnerships, businesses in the B2B segment must ensure that negotiations during credit sales should not outdo the time, money, and resources saved during the product development.

Apart from this, organizations need to be vigilant about the financing costs required to finance the outstanding balance of receivables and the related staffing costs to process and collect the outstanding amounts. Below is a view of how a **Balanced AR Management System** can be developed:

	Maximizing Credit Sales	Minimizing Credit Risk
Risk Return trade-off in AR	<b>Collection Policy</b> <ul style="list-style-type: none"> <li>Customer centric &amp; market relevant policies</li> <li>Early settlement discounts</li> <li>Customer behavior profiling &amp; risk score cards</li> <li>Contract analysis</li> </ul>	<b>Credit Period</b> <ul style="list-style-type: none"> <li>Product specific factors including demand, nature, pricing, customer credit worthiness analysis</li> <li>Impact on working capital cycle</li> <li>Long term customer relationship management</li> </ul>
KPI reporting & scenario analysis, predictive insights	<b>Average Days to Pay</b> <ul style="list-style-type: none"> <li>ADP vs invoice impact, distribution analysis, control charts, float days</li> <li>Payment terms analysis</li> <li>Potential cash opportunity</li> </ul>	<b>Customer Behaviour</b> <ul style="list-style-type: none"> <li>End to End cycle analysis</li> <li>Compliant vs non-compliant payments vs unearned discounts</li> <li>Payments time trends across early/on-time/delayed payments</li> <li>Credit limit vs credit exposure</li> <li>Root cause analysis for customer late payment</li> </ul>
Outcomes	<ul style="list-style-type: none"> <li>Proactive collection mechanisms using collections prioritization insights</li> <li>Early action scenario planning to minimize losses to business</li> <li>Shortened cash conversion cycle</li> <li>Predictive analytics for long term strategies</li> <li>Cash optimization</li> <li>Effective decision support system for AR management resulting in optimized working capital management system</li> </ul>	

In addition to a balanced AR management system, the solution for optimal collections should also incorporate features from the below aspects:

### Average Days to Pay analysis

Distribution Analysis of Days to Pay (ADP) (difference between payment date & invoice date) will help identify when most of the payments are made in a period. ADP can further be categorized into weighted average ADP and weighted average pay terms to see the split between actual and term-based ADPs. Knowing the potential cash opportunity that can be encashed based on optimization of the associated ADP days can help pinpoint the critical areas of improvement in receivables management. This analysis can be done to get more focused insights on areas of improvement directly impacting the profitability.

### Customer profiling model

Analyzing customer behavior by primarily seeing what their payment time & terms pattern analysis is. The trend of payments split into categories of early, on time, and late payments, can help the user to understand more about closed invoices and predict what can be expected out of open invoices in the future.

The grace period can also be considered here to know the impact of float days on late payments turning into compliant payments. Comparative analysis of credit limit vs. credit exposure at the customer level can assist in identifying customers who are backlogging on high amounts and can turn into a potential source of financial risk for the company.

### Invoice risk modeling

Deriving from customer profiling, invoice risk modeling can help know more about customer payment behavior and problematic areas where the invoice is not moving as expected. Creating invoice process flow diagrams can analyze preferred sources & terms of payments, helping contract makers know more about how future invoices can be drafted to optimize payments with least resistance from customers. Analyzing unearned discounts (the amount claimed by the customer on account of early settlements, though the payment has come in late) alongside non-compliant and compliant payments can help establish a correlation between deductions and associated invoice risk. Below is an illustration of what areas can data be pulled from and how it can be distributed across the different dimensions to build a customized receivables risk profiling model.

## Sources for model development



# Features of model development

- Due Date period
- Invoice amount
- Total no. of invoices
- Fraction of late invoices
- Due dates at the start/end of FY
- Credit Limit
- Value by Product Categories
- Average delay in days
- Payment Mode
- Due dates at the start/middle/end of month
- Corporate Profits
- Insolvency
- Market Type
- Seasonality
- Fraction of delayed payment value

Studying collections across the above aspects can help us analyze and diagnose the problem areas as far as AR management is concerned. We can then take the necessary actions like prioritizing collections, adding float days to increase credit period, renegotiating terms of payment, holding back of the order, or any legal actions if necessary.

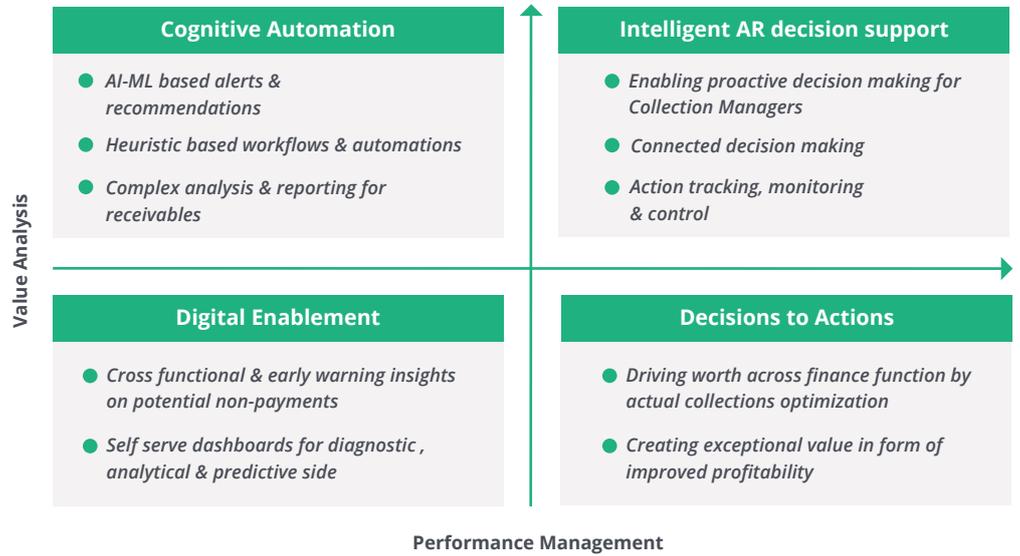
## The cutting edge AIML support

As is evident, AIML is today embedded across each function and sub-functions of all future-ready organizations, and finance is no different. Organizations looking to strengthen and revamp their finance functions are now banking on the latest technologies to assist them in this challenging turnaround. AI is leading the way in providing the most effective, efficient, and pragmatic solutions to multiple problems across finance. The power of AIML can be tapped to reap maximum benefits from improvements targeted around receivables management, thereby boosting profitability for the organizations.

With AIML running in the background, real-time reports can be provided to users by integrating multiple data sources into a unified and standardized database, using machine learning algorithms, advanced visualization tools, and simulators to derive intelligence from the consolidated data. The result is a seamless integration of analytics, diagnostics, and predictive intelligence to provide business users with an end-to-end view of the entire AR Management system. The predictive models work as early warning systems to flag off upcoming concerns to the users to prevent loss of collections by deductions or leakages. These models then give advanced automated insights to users to optimize collections, thereby contributing to the growth and profitability of the company.

# AIML supported AR analytics

The power of AIML when combined with strong business logics around AR can help the organisation with the much-needed fulcrum to be at an edge over its competitors by triggering automated insights around :



## Late payment prediction & risk assessments

- Risk of late payment / non-payment
- Defaulting & problematic customers
- Risk assessment & evaluation

## Deduction impact

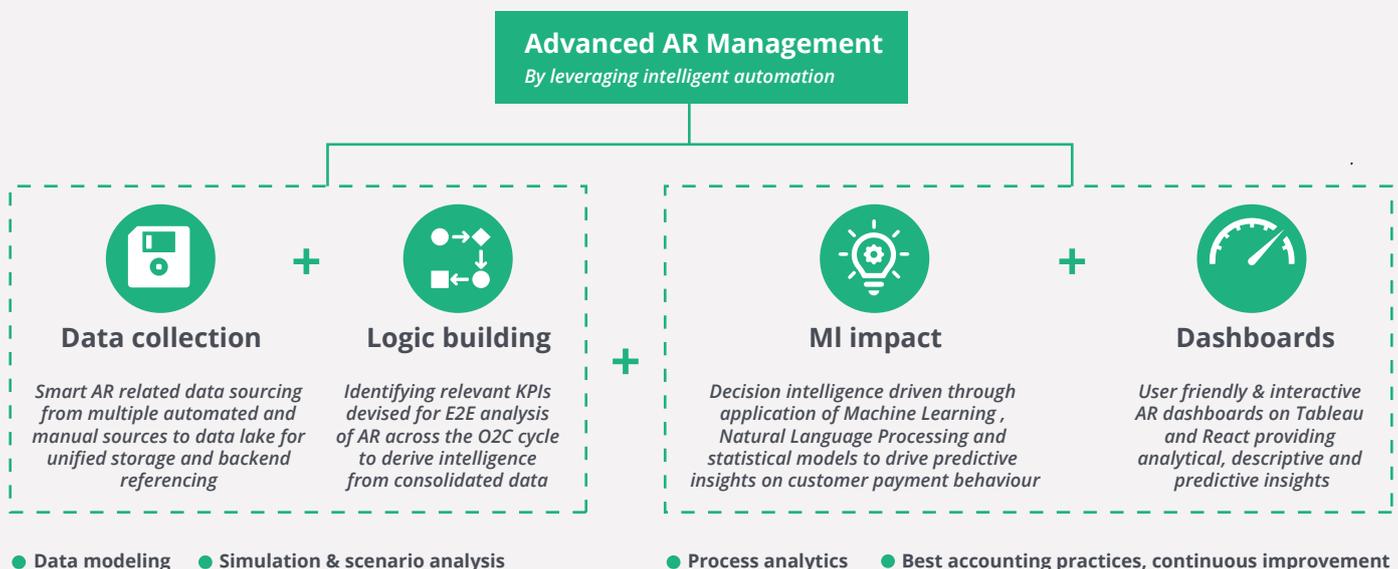
- Driver & impact analysis for deductions
- Valid vs invalid deductions
- Unchecked deductions

## Revenue leakage model

- Unsent invoices
- Incorrect data entries
- Unmonitored inflows

Using state-of-the-art technologies, collection agents can get much-needed insights & visibility at the right time in the process, making AR Management a forward-looking function. It also facilitates the interlinkage and inter-impact analysis amongst various sub-functions of AR management, removing the siloed manner of functioning. Using this digitized ecosystem delivers comprehensive and pragmatic solutions to complex problems associated with the collections.

## Digitized ecosystem for AR management



## Analytical solutions

- Visibility and self-service capabilities for better working capital management through accounts receivable
- Clean and standardized data through multiple systems
- Proactive & optimal collections with minimal deductions/leakages
- Future business value from working capital enhancements including cash flow & balance sheet boosts

With these digitized ecosystems in place, organizations can bask in the value addition from impeccable diagnostics and analytics. Comprehensive diagnostics can thus be achieved by getting to the root cause of the problems at hand via identifying patterns and trends, instilling comparative analysis across various hierarchies/personas, and serving to distinguish the key make/break factors. Advanced analytics can be achieved around a range of data using practical, convenient tables, charts, and 360-degree drill-downs to discover deeper insights (from enormous data) to make more informed business decisions.

Well-supported decisions can then guide organizations into action-based insights in optimizing collections qualitatively and quantitatively, delivering proactive solutions around even the most complex AR management problems.

## Conclusion

The solution framework discussed in the paper is built on internal and external drivers that help build an intelligent receivables management system and give a holistic view of the cash health of an organization. The methods are tried and tested and have delivered high business impact across multiple organizations by identifying cash opportunities, reducing write-off, and reducing cycle time. We firmly believe that by following the measures suggested in this paper, the user will be able to enhance their experience around receivables management by reducing the average collection period (days sales in receivables) and increasing the quality and quantity of future receivables. Further to these, the other focus areas could be:

- Working on the root cause of delayed payments via :
  - Order management
  - Billing incorrections
  - Customer disputes
- Moving towards best-in-class DSO by reducing revenue dilution across the receivables process flow,
- Self-optimization collections system integrating customer master, order management, cash management, and deductions management,
- Mapping all upstream and downstream processes and look for possible analytical interventions for intelligent AR management.

## Our Experts



**Shipra Sooden**  
Principal consultant, Fractal



**Shruti Sood**  
Senior consultant, Fractal

## Sources

Transforming order to cash using advanced analytics | Fractal

[https://www.researchgate.net/publication/228252601\\_Optimiing\\_Working\\_Capital\\_Management/link/5aae394da6fdcc1bc0bb40d0/download](https://www.researchgate.net/publication/228252601_Optimiing_Working_Capital_Management/link/5aae394da6fdcc1bc0bb40d0/download)

<https://www.invensis.net/blog/how-to-optimize-working-capital-for-your-business/>

[https://www.cimaglobal.com/Documents/Thought\\_leadership\\_docs/Management%20and%20financial%20accounting/using-analytics-to-reduce-dso.pdf](https://www.cimaglobal.com/Documents/Thought_leadership_docs/Management%20and%20financial%20accounting/using-analytics-to-reduce-dso.pdf)

# Enable better decisions with Fractal

**Fractal is one of the most prominent player in the Artificial Intelligence space. Fractal's mission is to power every human decision in the enterprise and bring AI, engineering and design to help the world's most admired Fortune 500® companies.**

Fractal product companies include Qure.ai, Crux Intelligence, Theremin.ai, Eugenie.ai & Samya.ai.

Fractal has more than 2,300 employees across 16 global locations, including United States, UK, Ukraine, India, and Australia. Fractal has consistently been rated as the india's best company to work for, by The Great Place to Work® Institute, a 'Leader' by Forrester Research in its Wave™ on Specialized Insights Services, Computer Vision & Customer Analytics and as an "Honorable Vendor" in 2021 Magic Quadrant™ for data & analytics by Gartner.



## **Corporate Headquarters**

Suite 76j,  
One World Trade Center, New York,  
NY 10007

[Get in touch](#)