

Submitted by
DHRUV SHAH (19IT425)

Guided by
DR. KEYUR N. BRAHMBHATT MR. MEKYUSH JARIWALA
IT Department, BVM Celonis India

Information Technology Department
Birla Vishvakarma Mahavidyalaya Engineering College
(An Autonomous Institution)
Vallabh Vidyanagar – 388120
Gujarat, INDIA



**Birla Vishvakarma Mahavidyalaya Engineering
College**

(An Autonomous Institution)

Information Technology Department

AY: 2022-23, Semester II

CERTIFICATE

This is to certify that the project work entitled Accounts Receivable has been successfully carried out by Dhruv Shah(19IT425) for the subject **Major Project (4IT33)** during the academic year 2022-23, Semester-II for partial fulfilment of Bachelor of Technology in Information Technology. The work carried out during the semester is satisfactory.

Dr. Keyur Brahmbhatt
IT Department
BVM

Mr. Mekyush Jariwala
Celonis India

Dr. Keyur Brahmbhatt
Head, IT Department
BVM

**BIRLA VISHVAKARMA MAHAVIDYALAYA ENGINEERING
COLLEGE (AN AUTONOMOUS INSTITUTION)
INFORMATION TECHNOLOGY DEPARTMENT**

4IT33 – MAJOR PROJECT

**UNDERTAKING FOR SUBMISSION OF INDUSTRY TRAINING
COMPLETION CERTIFICATE**

I, Dhruv Vikram Shah, ID No. 19IT425, Group No. 28 hereby give assurance to submit the industry training completion certificate before the semester end.

I am aware of the instruction that if I fail to submit the said certificate, my 8th semester result will be on hold.

Sign of the Student

Sign of Faculty Guide

Acknowledgement

In this page I would like to say thank you to a number of people who supported me while preparing this Project work .

My heartfelt gratitude to my project guide **Dr. Keyur Brahmbhatt**, Head of the Department of Information Technology, for his valuable suggestions and guidance in the preparation of the report and implementation of project.

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Last but not the least, I am very much thankful to my parents who guided me in every step which I took.

Abstract

Accounts Receivable (A/R) is the money owed to a business by its clients. The main objective in Accounts Receivable management is to minimise the Days Sales Outstanding (DSO) and processing costs whilst maintaining good customer relations. Accounts receivable is often the biggest current asset on the balance sheet. Indeed in many small and medium-sized businesses receivables represents the majority of working capital. The other key objective in A/R management is to use systems and processes that ensure that the financing potential of the company's receivables can be maximised. Before any invoice or bill can be sent out companies need to determine how to charge for the product or service they provide, Americans call this Relationship Monetization. As products and services become more and more complex, this has become much more difficult. Furthermore, there increasing number of regulations and rules requiring companies to be able to fully itemise and justify their invoices/bills. Today invoices need to show how the full charge is built up. And the multiple parties involved in delivering the service, and each require their share of the income generated. There are now companies and software packages specifically designed to monetize relationships and manage these complex billing arrangements.

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Chapter 1: Introduction

1.1 Brief overview of the work:

Accounts Receivable (A/R) is the money owed to a business by its clients.. Accounts receivable management directly impacts the profitability of a company. Firstly, the purpose of the empirical part of the study is to analyze accounts receivable and to demonstrate a correlation between the accounts receivable level and profitability expressed in terms of Return on Assets (ROA) of sample companies.

1.2 Objective:

- The main objective in Accounts Receivable management is to minimize the Days Sales Outstanding (DSO) and processing costs whilst maintaining good customer relations.
- Accounts receivable is often the biggest current asset on the balance sheet. Indeed in many small and medium-sized businesses receivables represents the majority of working capital. The other key objective in A/R management is to use systems and processes that ensure that the financing potential of the company's receivables can be maximized.

1.3 Scope:

This project can be implemented at various places such as:

- An example of accounts receivable includes an electric company that bills its clients after the clients received the electricity. The electric company records an account receivable for unpaid invoices as it waits for its customers to pay their bills.

- Most companies operate by allowing a portion of their sales to be on credit. Sometimes, businesses offer this credit to frequent or special customers that receive periodic invoices. The practice allows customers to avoid the hassle of physically making payments as each transaction occurs. In other cases, businesses routinely offer all of their clients the ability to pay after receiving the service.

1.4 Project Modules:

1. Steering View

provides get full visibility into the current accounts receivable state with key metrics and performance indicators

- Total A/R
- A/R Due
- Days Sales Outstanding(DSO)
- Collection Amount
- Risk Exposure
- Execution Gaps

2. Action View

Complete list of customers with some of the key AR KPIs listed at the top.

3. Customer or Account Detail View

Shows customer details, contact details and last activity details at the top

Complete Account Information

Account Summary showing the current aging, contact details and activities and notes

4. Transaction Detail View

Shows additional details of an invoice/transaction and take relevant actions.

- Capture Promise To Pay
- Create Dispute
- Add comments on the transaction

1.5 Project Hardware/Software Requirements:

1.5.1 Software Requirement:

- Google Chrome
- Microsoft Visual Studio
- Celonis EMS Studio



Figure 1: Celonis Logo

Celonis Studio's low-code development environment lets anyone combine analytics and execution capabilities. Build apps and views that you can share with colleagues or publish to the Celonis Marketplace. Build, publish and deploy expertise in days, not weeks using the Celonis Studio.

The following are the minimum versions of libraries that are required:-

- Python- 3.11.1
- Numpy 1.21.0
- @celonis/emotion: 4.1.0
- Angular: ^14.0.0
- exceljs: ^4.3.0

1.5.2 Hardware Requirement

- A stable vpn connection
- i7 Processor based Computer (preferably Macbook Pro)

Chapter 2: Literature Review

2.1 Impact of accounts receivable management on the profitability during the financial crisis : Evidence from Serbia

Accounts receivable management can have a significant impact on the profitability of a company during a financial crisis, and this impact can vary depending on the specific circumstances and strategies employed. In the case of Serbia, which has experienced several financial crises in recent decades, effective management of accounts receivable can be particularly important for companies to maintain profitability and avoid insolvency. One key factor in accounts receivable management is the length of the collection period. During a financial crisis, it may be more difficult for companies to collect payments from customers, which can lead to an increase in the average collection period. This, in turn, can have a negative impact on the company's cash flow and profitability. Another factor is the credit policy of the company. In a financial crisis, companies may be more hesitant to extend credit to customers, which can reduce sales and revenue. However, being too lenient with credit policies can also increase the risk of bad debts and non-payment. Finding the right balance is crucial for maintaining profitability. Overall, effective accounts receivable management can be a key factor in maintaining profitability during a financial crisis, and companies in Serbia should prioritize strategies that optimize their cash flow while minimizing the risk of bad debts.

2.2 Management of accounts receivable and financial performance of manufacturing firms listed in nairobi stock exchange, Kenya

In this Paper written by Muthoni, Jane Gitahi, Kiprotich Isaac Naibei, Kipyego, Livingstone, The management of accounts receivable can have a significant impact on the financial performance of manufacturing firms listed on the Nairobi Stock Exchange in Kenya. Efficient management of accounts receivable can improve cash flow, reduce bad debts, and increase profitability. One important aspect of accounts receivable management is the collection period. The collection period is the amount of time it takes a firm to collect payments from its customers. A shorter collection period can improve cash flow and reduce the risk of bad debts. Manufacturing firms can implement various strategies to reduce the collection period, such as offering discounts for early payment, outsourcing collections to third-party agencies, and improving communication with customers. Another aspect of accounts receivable management is the credit policy. A firm's credit policy determines the terms and conditions under which it extends credit to customers. A firm that is too lenient in its credit policy may face a higher risk of bad debts, while a firm that is too strict may lose out on potential sales. Manufacturing firms can strike a balance by implementing a credit policy that considers the creditworthiness of customers and the risks associated with extending credit. Studies have shown that efficient accounts receivable management can have a positive impact on the financial performance of manufacturing firms listed on the Nairobi Stock Exchange in Kenya. For example, a study published in the International Journal of Business and Commerce found that firms with a lower collection period and a stricter credit policy had higher profitability and better liquidity ratios. In conclusion, efficient management of accounts receivable is crucial for manufacturing firms listed on the Nairobi Stock Exchange in Kenya. By implementing strategies to reduce the collection period and maintain a balanced credit policy, firms can improve cash flow, reduce bad debts, and increase profitability.

2.3 The management of account receivable and its impact on the performance of business organization in Nigeria (A case study of Enugu Home Ownership Company)

In this Paper published on AZ Research Consult , The management of accounts receivable can have a significant impact on the performance of business organizations in Nigeria, including Enugu Home Ownership Company. Efficient accounts receivable management can improve cash flow, reduce bad debts, and increase profitability. One important aspect of accounts receivable management is the collection period. The collection period is the amount of time it takes a company to collect payments from its customers. A shorter collection period can improve cash flow and reduce the risk of bad debts. Business organizations can implement various strategies to reduce the collection period, such as offering discounts for early payment, improving invoicing processes, and outsourcing collections to third-party agencies. Another aspect of accounts receivable management is the credit policy. A company's credit policy determines the terms and conditions under which it extends credit to customers. A company that is too lenient in its credit policy may face a higher risk of bad debts, while a company that is too strict may lose out on potential sales. Enugu Home Ownership Company can strike a balance by implementing a credit policy that considers the creditworthiness of customers and the risks associated with extending credit. Research on the impact of accounts receivable management on the performance of business organizations in Nigeria is limited, but studies in similar contexts have found that efficient accounts receivable management can have a positive impact on profitability and liquidity. For example, a study published in the International Journal of Accounting and Financial Management found that firms in Ghana with a lower collection period and a stricter credit policy had higher profitability and better liquidity ratios. In conclusion, efficient management of accounts receivable is crucial for the performance of Enugu Home Ownership Company and other business organizations in Nigeria. By implementing strategies to reduce the collection period and maintain a balanced credit policy, companies can improve cash flow, reduce bad debts, and increase profitability.

2.4 Python for finance - analysing account receivables

Python is a popular programming language for finance due to its flexibility, scalability, and open-source nature. Analyzing accounts receivable using Python can provide valuable insights into a company's financial performance and help identify areas for improvement in accounts receivable management. Overall, Python provides a powerful set of tools for analyzing accounts receivable and improving accounts receivable management. By leveraging the flexibility and scalability of Python, companies can gain valuable insights into their financial performance and make data-driven decisions to improve profitability and reduce the risk of bad debts. Here are some ways Python can be used for accounts receivable:

- **Data analysis:** Python can be used to analyze accounts receivable data and generate reports, visualizations, and statistical analysis. This can help companies understand trends in accounts receivable and identify areas where they can improve their collections.
- **Data visualization:** Python libraries such as Matplotlib or Seaborn can be used to create visualizations that show trends in accounts receivable over time, such as aging reports or accounts receivable turnover ratios.
- **Predictive modeling:** Python can be used to build predictive models that can forecast future accounts receivable levels based on historical data. This can help companies plan and manage their cash flow more effectively.
- **Automation:** Python can be used to automate accounts receivable processes, such as generating invoices or sending payment reminders. This can help companies save time and reduce errors.

2.5 Predicting account receivables with machine learning

In this research paper written by Ana Paula Appel, Gabriel Louzada Malfatti, Renato Luiz de Freitas Cunha, Bruno Lima, Rogerio de Paula, Predicting account receivables with machine learning can help companies anticipate future cash flow and identify potential issues with collections before they become a problem. Overall, predicting accounts receivable with machine learning can provide valuable insights into a company's financial performance and help identify areas for improvement in accounts receivable management. By leveraging the power of machine learning, companies can make more accurate and data-driven decisions to improve profitability and reduce the risk of bad debts. Here are some steps to get started with predicting accounts receivable using machine learning:

- **Data preparation:** Gather historical accounts receivable data from the company's accounting system, usually in the form of an Excel or CSV file. Clean and structure the data, making sure to remove any duplicates or errors.
- **Feature engineering:** Extract features from the accounts receivable data that can be used to train a machine learning model. These features could include the age of the account, the creditworthiness of the customer, and the payment history of the customer.
- **Model selection:** Choose a machine learning model that is well-suited for predicting accounts receivable, such as a linear regression model or a decision tree model. Use Python libraries such as Scikit-learn or TensorFlow to build and train the model.
- **Model evaluation:** Evaluate the performance of the machine learning model using metrics such as mean absolute error or root mean squared error. Adjust the model as needed to improve its performance.
- **Prediction:** Use the trained machine learning model to predict future accounts receivable levels based on current and historical data. These predictions can help companies anticipate future cash flow and identify potential issues with collections before they become a problem.

Chapter 3: System Analysis & Design

3.1 Comparison of Existing Applications with your Project with merits and demerits:

The project when compared with other projects identified three of the biggest challenges facing Accounts Receivable, and they hold true now, just as they did in then:

- **Managing risk in a time of crisis:** Risk management during times of economic uncertainty means AR leaders need to de-risk their AR processes and “reduce the number of unrecovered Accounts Receivable.”
- **Evolving from reactive to proactive:** Waiting for customer invoices to go unpaid before taking action prevents Accounts Receivable from operating at peak performance and costs your business money. To ensure optimal AR operations, the report’s authors insist that AR teams “make better use of their data to change the way they prioritize accounts before they ever become overdue, taking a proactive approach to collections.”
- **Identifying the customers most likely to pay:** Optimizing collections means going beyond basic AR KPIs like DSO and developing a more comprehensive picture of likelihood to pay. Leading AR departments are using technologies like process mining, artificial intelligence and machine learning to better identify which customers are likely to pay and thus target collectors time more effectively.

3.2 Project Feasibility Study

The detailed report of feasibility analysis is as follows:

3.2.1. Technical Feasibility:

- This project is feasible only for big companies
- This project will require a strong VPN Connection

3.2.2. Economic Feasibility:

This project is made using Angular libraries and Python libraries, but will require a big Processing computer like Macbook Pro , which is not Feasible for everyone to pay , so this project is most likely to used by companies.

3.2.3. Organizational Feasibility:

This Project is perfectly suitable for big companies who deal in huge volumes of data and can handle multiple customer's data and it is also one of the biggest assets in balance sheet and also plays a key role in how companies manage their cash flow and working capital. Organizational feasibility refers to the ability of an organization to effectively implement and manage a new initiative or project. In the context of accounts receivable management, organizational feasibility refers to the ability of a company to implement and manage an efficient and effective accounts receivable management system. Effective accounts receivable management requires a well-defined process that includes procedures for customer credit checks, invoicing, payment processing, and collections. It also requires a team with the appropriate skills and resources to manage the accounts receivable process and ensure that collections are made on a timely basis

3.3 Project Timeline Chart:

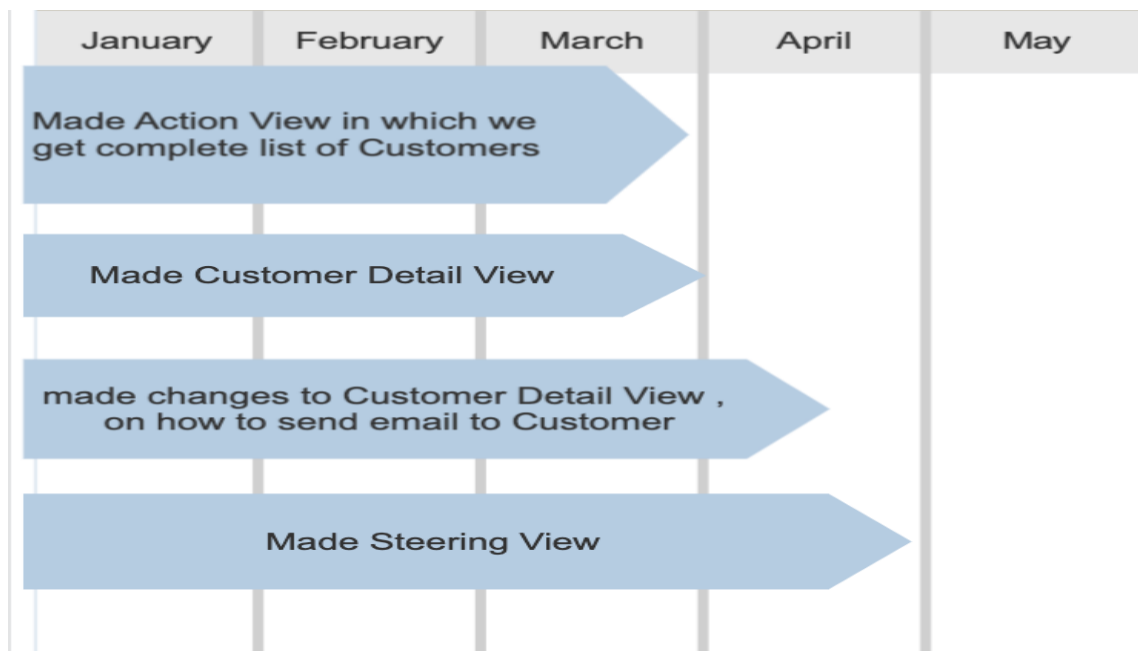


Figure 2: Timeline Chart

3.4 Detailed Module Description:

3.4.1 Steering View

Provides get full visibility into the current accounts receivable state with key metrics and performance indicators

- Total Accounts Receivable (Total A/R) information across different aging buckets, region, company codes, payment terms and also show the priority list of customers
- A/R Due: shows total percentage of the receivables that is overdue and distribution of that data by country, company code and collector. Drill down capability to look into specific company code
- Days Sales Outstanding (DSO): shows monthly trend of Sales data along with DSO and Best Possible DSO (BPDSO), Trend of Average Days Deliquent (ADD)

- Collection Amount: shows amount collected on daily basis in current month and projection of the amount likely to be collected present month and quarter.
- Risk Exposure: shows accounts that are delinquent and at high risk of defaulting. Data points available related to disputes, broken promise to pay.
- Execution gaps: highlights the key problem areas and allow user to take prompt actions.

3.4.2 Action View

- Complete list of customers with some of the key AR KPIs listed at the top.
- Filters related to collector, customer ID, company code and switch to view data in group currency and local currency. This allow users to narrow down data under analysis.
- Data grid showing list of customers arranged in descending order based on their priority score
- Each customer row showing the key details associated with the customer such as Status, Open AR, AR due, aging buckets, Credit limit.

3.4.3. Customer or Account Detail View

- Shows customer details, contact details and last activity details at the top
- Key KPIs are shown on the RHS
- Tasks associated with this account.
- Key actions that collector can perform for this account

1. Send Email: Send an email to customer
2. Send Statement: Send account statement over email with attachments (PDF, excel) and filter criterias for the invoices to be included (for example . Open only, Disputed) and create follow-up task if needed
3. Snooze: lowers the priority of this customer
4. Log a call: Add summary after call with customer, create follow-up task and assign it to appropriate owner.
5. Add Note: Capture notes at account level

Complete Account Information

- Account Summary showing the current aging, contact details and activities and notes
- Transaction showing list of open and closed invoices/transactions
- Associated with the account. Different filters related to duration, invoice ID and invoice status are available to the user. Different actions that user can take related to one or more selected transactions includes
 1. Set Promise to Pay
 2. Create Dispute
 3. Create task
 4. Change Dunning block
 5. Send Email
- Disputes shows the list of disputes recorded against this customer
- Tasks and Notes showing the history of tasks and notes added for this customer, and also a timeline of all the collection activities performed on this customer

3.4.4 Transaction Detail View

Shows additional details of an invoice/transaction and take relevant actions. List of tasks associated with the invoice along with a timeline of different actions/activities performed on the invoice is visible to the users

- Capture Promise To Pay: This allows user to capture the promise amount, promised date add a note and create a follow-up task
- Create Dispute: This allows user to record dispute and add details such as dispute type, subtype, amount, select dispute owner, add notes and create a task if needed
- Add comments on the transaction

3.5. Project SRS

3.5.1. Use Case Diagram

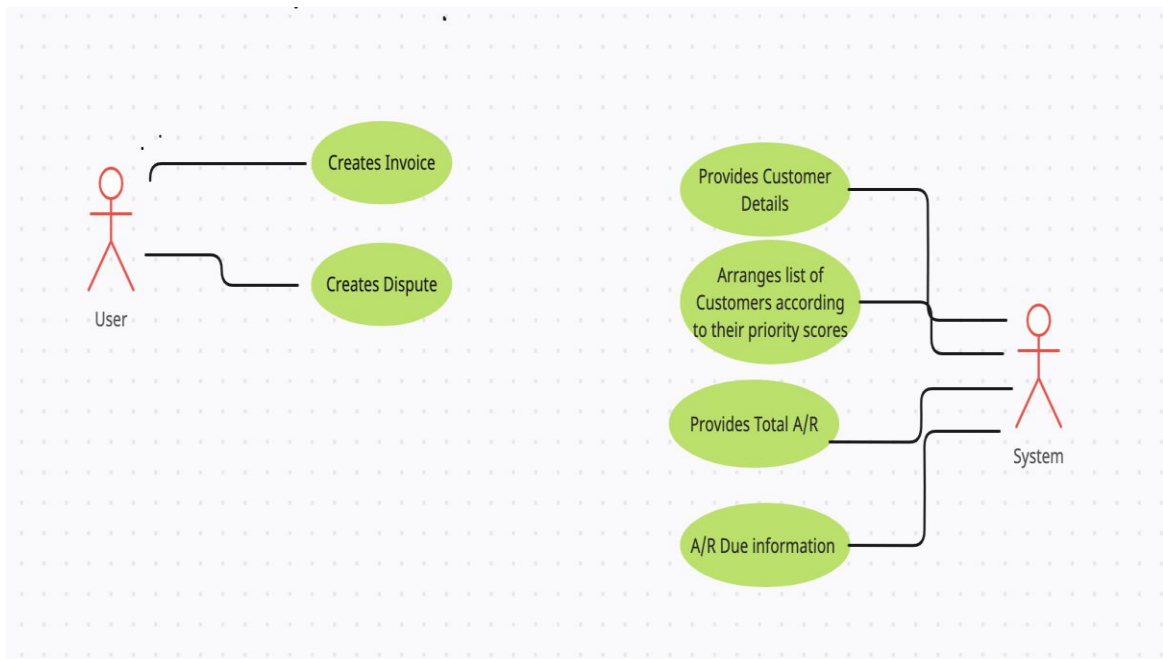


Figure 3: Use Case Diagram

3.5.2. ER Diagram

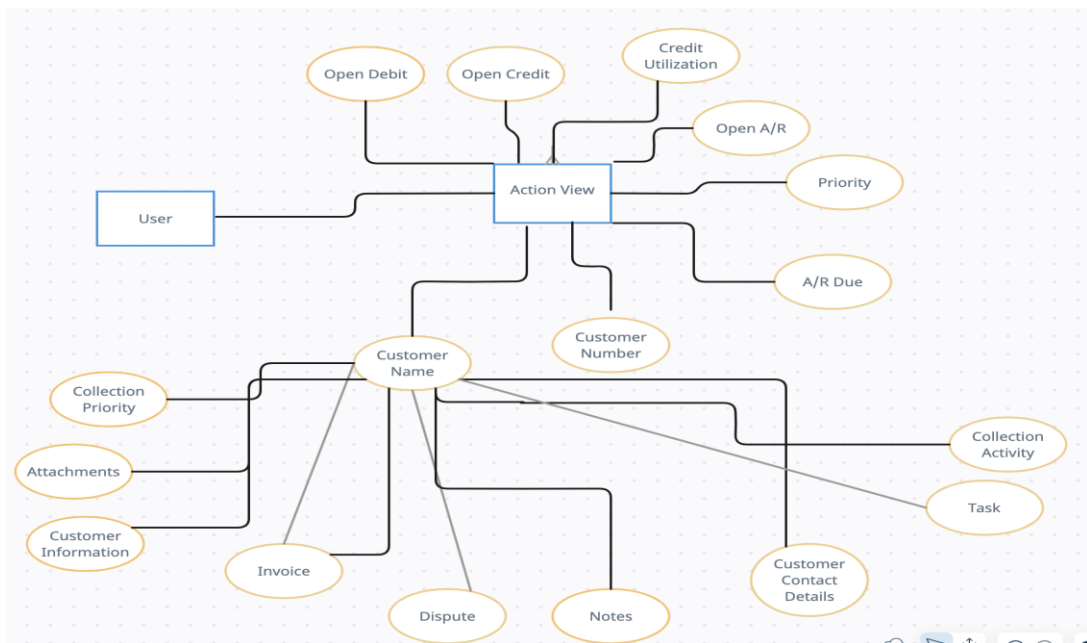


Figure 4: ER Diagram

3.5.3. Class Diagram (Knowledge Model Data)

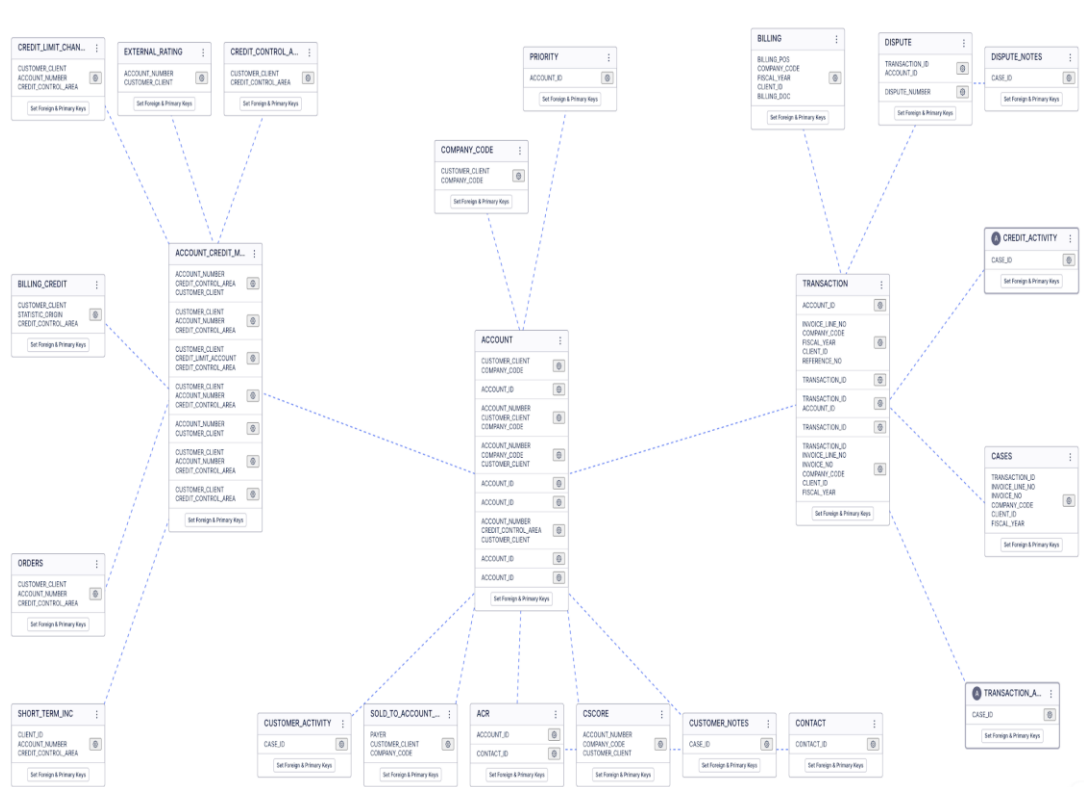


Figure 5: Class Diagram

3.6 Data Dictionary:

The knowledge model being used in this project is given by the company. It has company's data which they used it for training purpose . There are :

- 82 Records
- 209 KPIs
- 36 Filters
- 10 Actions
- 4 Flags
- 10 Variables
- 2 Event logs, 16 Custom Objects

Chapter 4: Implementation and Testing

4.1 User Interface and Snapshot:

1. Steering View:



Figure 6: Steering View

2. Steering View(Top Priority Customer)



Figure 7: Steering View(Top Priority Customer)

3. Action View:

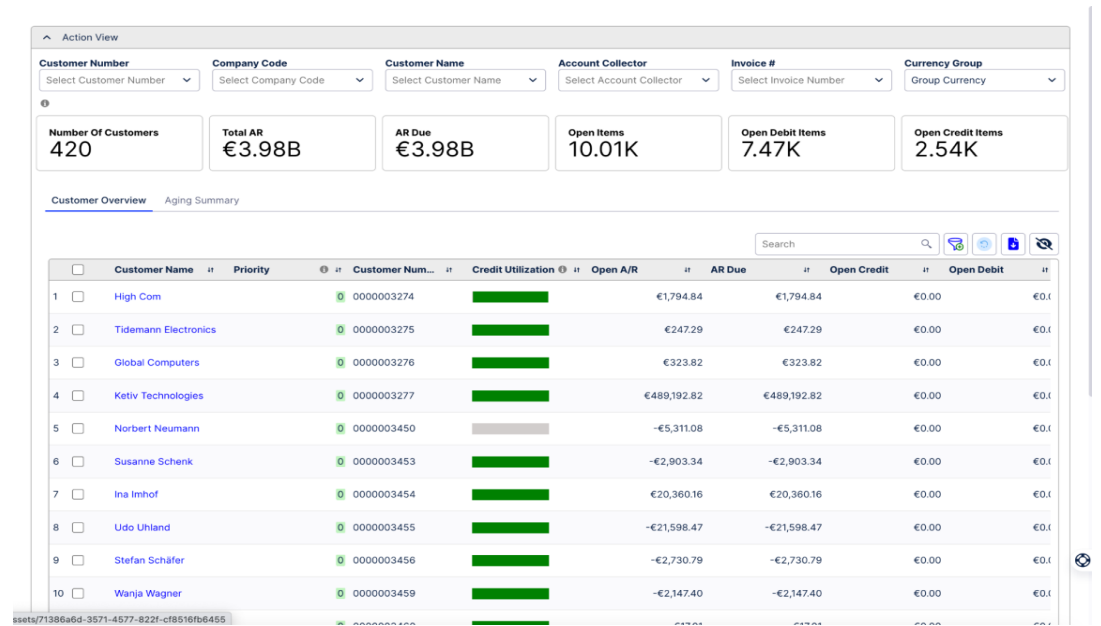


Figure 8: Action View

4. Customer Information Page:

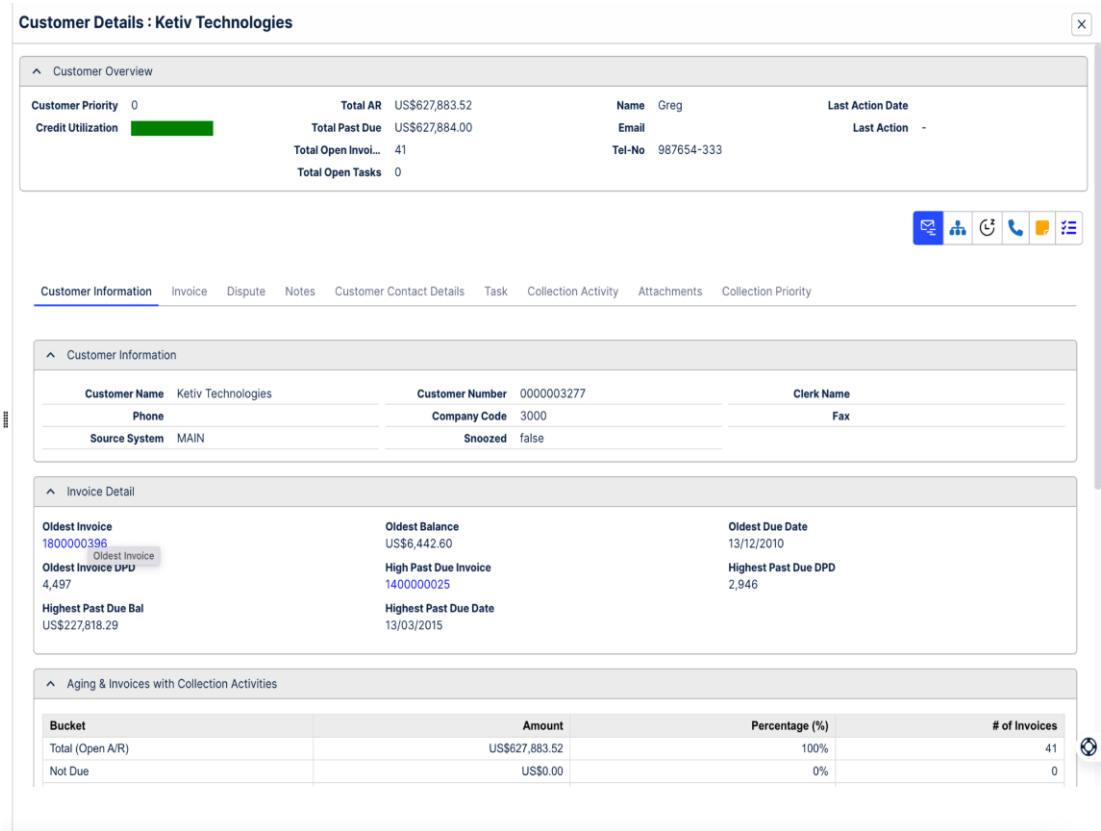


Figure 9: Customer Information Page

5. How to send email to Customer and how to log a call:

Send statement for customer 0000003277 ✕

Quick Filters
All Open ⌵ ⚙️

Attach Excel? ☐

Email Details ⌵

To Cc Bcc

Template Billing Statement ⌵ Clear

Subject Billing Statement For Account

Rich Text Editor: B I U H₁ H₂ X₁ X₂ Normal ⌵ Normal ⌵ Sans Serif ⌵

celonis

Good morning ,

We appreciate and value your business. Thank you for allowing Celonis the opportunity to serve your needs.

A review of our records indicates there is an open balance for services regarding the assignments below.

Billing Address: E Bucknell Pl 7860
Denver, 12345
Germany

(transactions.summary)
Total : (transactions.totalBalance)

Follow-Up Task ☐

Submit

Figure 10: Send Email to Customer

Log a call for customer 0000003277 ✕

Customer Number
0000003277

Customer Name
Ketiv Technologies

Call Details ⌵

***Note**

Follow Up Task
☐

Cancel Submit

Figure 11: Log a Call to Customer

6. How to add snooze for Customer and note for Customer :

Snooze for customer 0000003277

Customer Number
0000003277

Customer Name
Kativ Technologies

^ Snooze Details

* Snooze Until

dd/mm/yyyy

* Reason

Select

* Note

Cancel

Submit

Figure 12: How to add Snooze for Customer

Add note for customer 0000003277

X

^ Note Details

Customer Number

0000003277

Customer Name

Ketiv Technologies

*Note

^ Files

Choose a file...

File Name	Size	Create Date
No file found		

Cancel

Submit

Figure 13: `How to add note for Customer

7. Invoice Details:

Promise To Pay
 Create Dispute
 Snooze
 Add Note

[Invoice Information](#)
[Dispute](#)
[Billing Items](#)
[Collection Activity](#)
[Tasks](#)
[Notes](#)
[Attachments](#)

^ Information

Invoice No	1800000002	Customer Num...	0000003277
Document Type	DR	Customer Name	Ketiv Technologies
Invoice Date	16/09/2011	Company Code	3000
Close Date		Amount	US\$21.00
Dispute Amount	0	Balance	US\$21.00
Days Past Due	4220		

^ Recent Activity

Last Action	Last Action Date	Last Note	Date
-		-	

Figure 14: Invoice Details

8. Set Promise to Pay:

Create promise for invoice 1800000002

^ Invoice Details

Invoice No	Customer Number	Customer Name
1800000002	0000003277	Ketiv Technologies
Invoice Date	Due Date	Amount
9/16/11	9/16/11	\$21.00

^ Promise Details

*** Promise Date**

10/05/2023

*** Promised Amount**

\$
21.00

Notes

Notify? ☐

Cancel
Submit

Figure 15: Set Promise to Pay for Custome

4.2 Testing using Use Cases:

After Logging into Action View , the User/Admin will see Customer's Name and if he selects any

Customer Name (For Example High Com, the first name) by clicking on the blue link , he will directly get his entire information , invoices and his mail address , everything , etc. We can get data after selecting any particular Customer Name, Company Code , Customer Number , Account Collector, Invoice, Currency Group

^ Action View

Customer Number	Company Code	Customer Name	Account Collector	Invoice #	Currency Group
Select Customer Number	Select Company Code	Select Customer Name	Select Account Collector	Select Invoice Number	Group Currency

Number Of Customers 420	Total AR €3.98B	AR Due €3.98B	Open Items 10.01K	Open Debit Items 7.47K	Open Credit Items 2.54K
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Customer Overview Aging Summary

Search

	Customer Name	Priority	Customer Num...	Credit Utilization	Open A/R	AR Due	Open Credit	Open Debit
1	High Com		0000003274			€1,794.84	€1,794.84	€0.00
2	Tidemann Electronics		0000003275			€247.29	€247.29	€0.00
3	Global Computers		0000003276			€323.82	€323.82	€0.00
4	Kativ Technologies		0000003277			€489,192.82	€489,192.82	€0.00
5	Norbert Neumann		0000003450			-€5,311.08	-€5,311.08	€0.00
6	Susanne Schenk		0000003453			-€2,903.34	-€2,903.34	€0.00
7	Ina Imhof		0000003454			€20,360.16	€20,360.16	€0.00
8	Udo Uhland		0000003455			-€21,598.47	-€21,598.47	€0.00
9	Stefan Schäfer		0000003456			-€2,730.79	-€2,730.79	€0.00
10	Wanja Wagner		0000003459			-€2,147.40	-€2,147.40	€0.00

sssets/71386a6d-3571-4577-822f-cf8516fb6455

Figure 16: Action View(Use Case)

Customer Details : High Com X

Customer Overview

Customer Priority 0	Total AR US\$1,890.00	Name Jeffery	Last Action Date
Credit Utilization <div style="width: 100%; height: 10px; background-color: green;"></div>	Total Past Due US\$1,890.00	Email	Last Action -
	Total Open Invoi... 1	Tel-No 617-5369112	
	Total Open Tasks 0		

Customer Information Invoice Dispute Notes Customer Contact Details Task Collection Activity Attachments Collection Priority

Customer Information

Customer Name High Com	Customer Number 0000003274	Clerk Name
Phone	Company Code 3000	Fax
Source System MAIN	Snoozed false	

Invoice Detail

Oldest Invoice 1400000013	Oldest Balance US\$1,890.00	Oldest Due Date 24/07/2012
Oldest Invoice DPD 3,908	High Past Due Invoice 1400000013	Highest Past Due DPD 3,908
Highest Past Due Bal US\$1,890.00	Highest Past Due Date 24/07/2012	

Aging & Invoices with Collection Activities

Bucket	Amount	Percentage (%)	# of Invoices
Total (Open A/R)	US\$1,890.00	100%	1

Figure 17: Customer Information of High Com(Use Case)

Here You Get High Coms's entire information by just clicking on his name , what is his company code , Number , Total Invoices ,etc

In Figure No :17 , You would see that in the Customer Information Page, you would see the companies Total A/R remaining and how many invoices have been generated

Similarly In Figure No : 18 , The User can send an email to the Customer , even he can log a call , snooze him , and also give him a due date to clear his dues , and if he even not pays it , a dispute will be generated

Figure 18: A/R Information For High Com

Figure 19: Send Statement

Aging & Invoices with Collection Activities

Bucket	Amount	Percentage (%)	# of Invoices
Total (Open A/R)	US\$1,813,889,521.08	100%	204
Not Due	US\$0.00	0%	0
1 - 30 days	US\$0.00	0%	0
31 - 60 days	US\$0.00	0%	0
61 - 90 days	US\$0.00	0%	0
91 - 180 days	US\$0.00	0%	0
181 - 360 days	US\$0.00	0%	0
Over 360	US\$1,813,889,521.08	100%	204

Category	Amount	Percentage (%)	# of Invoices
Disputed	US\$0.00	0%	0
Promised	US\$222,695.00	0%	53
Broken Promise to Pay	US\$0.00	0%	0

Address Information

Billing Address

Springfield62701United States

Shipping Address

Latest Note

Note Date

20/04/2023, 07:20

Notes

Create dispute for customer CMS0000033

Figure 20: He will try to Contact the Customer through email

There are multiple business use cases :

- Ensure on-time payment.** Customers often pay after the invoice due date. Unfortunately, it can be difficult to anticipate payment issues, non-payments or late payments. If you only react after the payment is missed, you could be leaving money on the table in that accounting cycle. With the right processes and technology however, companies can accelerate customer payments by more intelligently targeting dunning. Using an execution management system, organizations can engage customers through data-driven prioritization, more effectively resolve disputes and impose late payment penalties for non-strategic customers.
- Increase touchless collections.** The Accounts Receivable process often involves a range of manual tasks, those manual actions both create costs and decrease collector effectiveness. By automating more of the AR process and thus reducing manual effort, companies can improve collector effectiveness and accelerate collections. Process mining, execution management and automation technologies enable businesses to monitor the automation rate of individual activities, enact automated dunning strategies and automatically resolve root cases that lead to manual activity such as missing invoice details or invoice errors.

- **Track payment term compliance.** Too often invoices don't use the best available payment terms from the sales order, master data or historic invoices. It's also not uncommon for invoices to be sent with incorrect terms, e.g. failing to include contract changes. Accounts Payable departments should ensure that invoices always use the best possible payment terms. With execution management technology, organizations can identify the root causes for suboptimal payment terms, such as outdated master data. An EMS can then flag invoices with incorrect terms and automatically suggest and set a better payment term within an invoice.
- **Prevent underpayments.** When customers pay less than what they owe, receive a cash discount they aren't entitled to or receive a higher cash discount than they should, you have an underpayments problem. Part of Accounts Receivable's job is to ensure that customers always pay the full invoice amount and stop customers from receiving incorrect cash discounts. An EMS gives AR organizations full visibility into which customers aren't paying their full invoices and allows them to reclaim missing payments and unjustified cash discounts.
- **Improve credit utilization.** Manually tracking credit utilization is a cumbersome process, requiring involvement from multiple stakeholders. Credit reviews are time consuming, and unnecessary credit holds cause function and risk lost revenue. Risk assessments can be labor-intensive and create blind spots for the AR team. With the right systems however, companies can track credit utilization efficiently across their customer base and intelligently assess risk and update credit limits. Using EMS, Accounts Receivable staff can assess credit risk in real-time and design limits to adjust automatically. They can leverage intelligent credit limit suggestions and access all relevant data in a single place, while using automation to accelerate the approval process. An EMS can pull data from across your underlying systems, including your accounting software, as well as integrate third-party and custom data from standard credit bureaus and a company's own scorecards.

Chapter 5 : Conclusion & Future work

5.1 Conclusion:

- In this Project , we have understood that minimize the Days Sales Outstanding (DSO) and processing costs whilst maintaining good customer relations.
- Accounts receivable is often the biggest current asset on the balance sheet. Indeed in many small and medium-sized businesses receivables represents the majority of working capital.
- Analyzing a company's accounts receivable will help investors gain a better sense of a company's overall financial stability and liquidity.
- AR departments exist to ensure that customers pay for the goods and services that are delivered, that the company actually receives those incoming payments and that the payments are processed quickly and accurately.

5.2 Future work:

- AR staff can improve cash control by focusing on the following business objectives:
 1. Revenue Protection
 2. Working Capital Optimization
 3. Labor Productivity
 4. Compliance and Risk Management
- Companies are improving working capital, mitigating risk and reducing costs by using technologies like Process mining, artificial intelligence, machine learning and automation to transform their accounts receivable process.
- By reducing underpayments and uncollectible invoices, AR teams can improve revenue protection. They can optimize working capital by reducing late billings and late payments. Labor productivity can be improved by reducing invoice errors, disputes and rejections. And, AR staff can ensure compliance and mitigate risk through better fraud detection and maintaining internal controls.

Chapter 6: References

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