



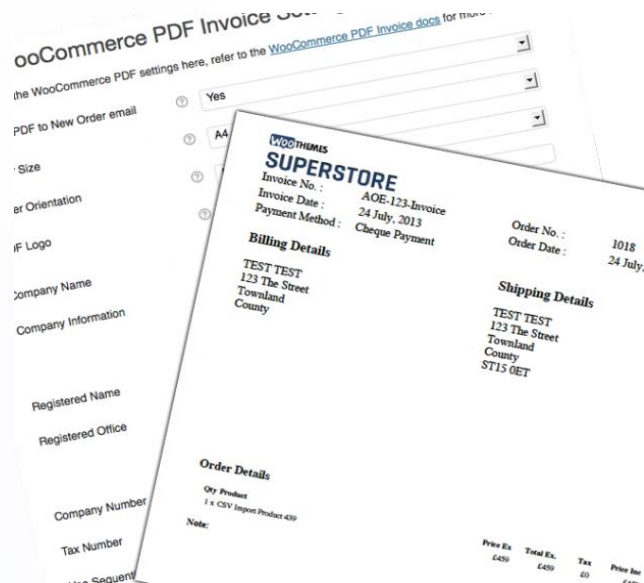
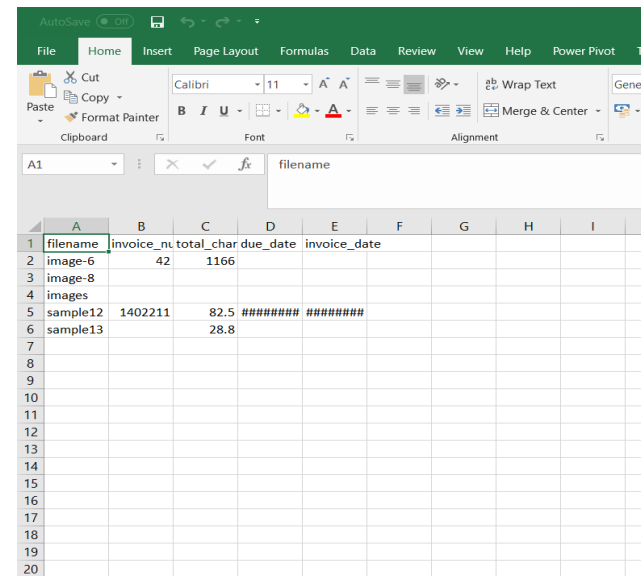
# AI POWERED BUSINESS SOLUTIONS

**((aress))**  
People and Technology that connect

*Aress Software and Education Technologies*

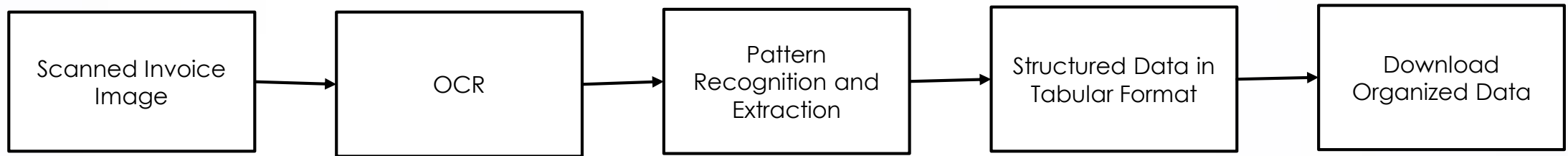
# AI Powered Optical Character Recognition for Invoices and Data Extraction

With Optical Character Recognition and Text mining using Conventional Neural Network and Recurrent Neural Network

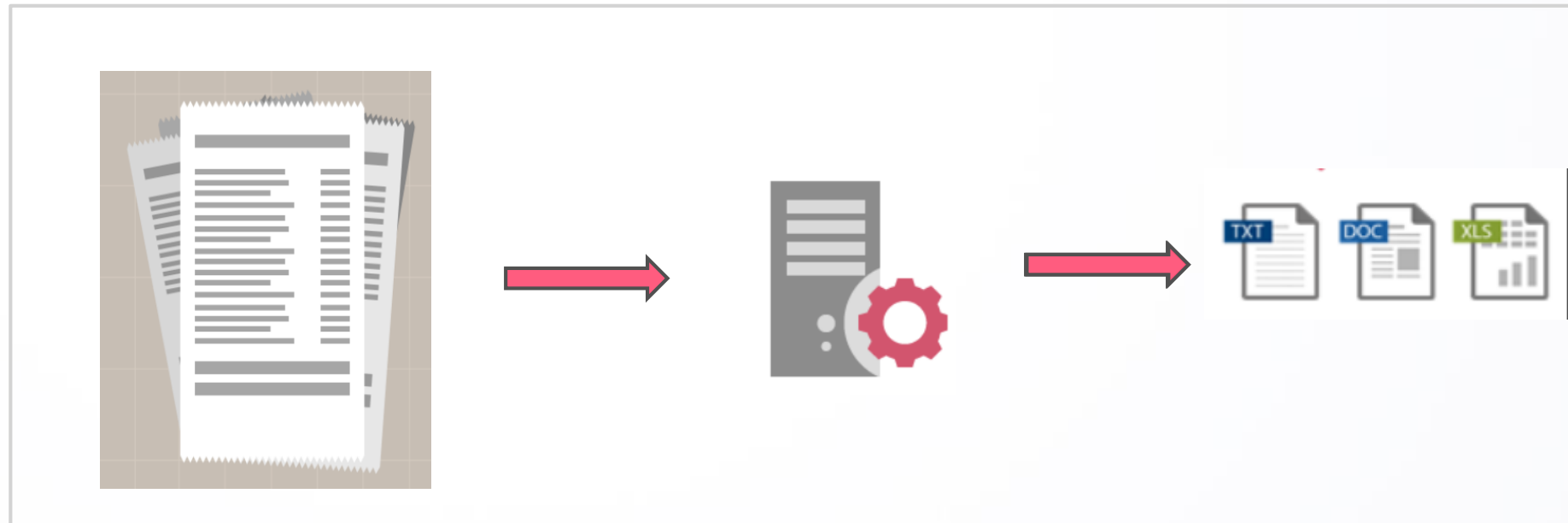
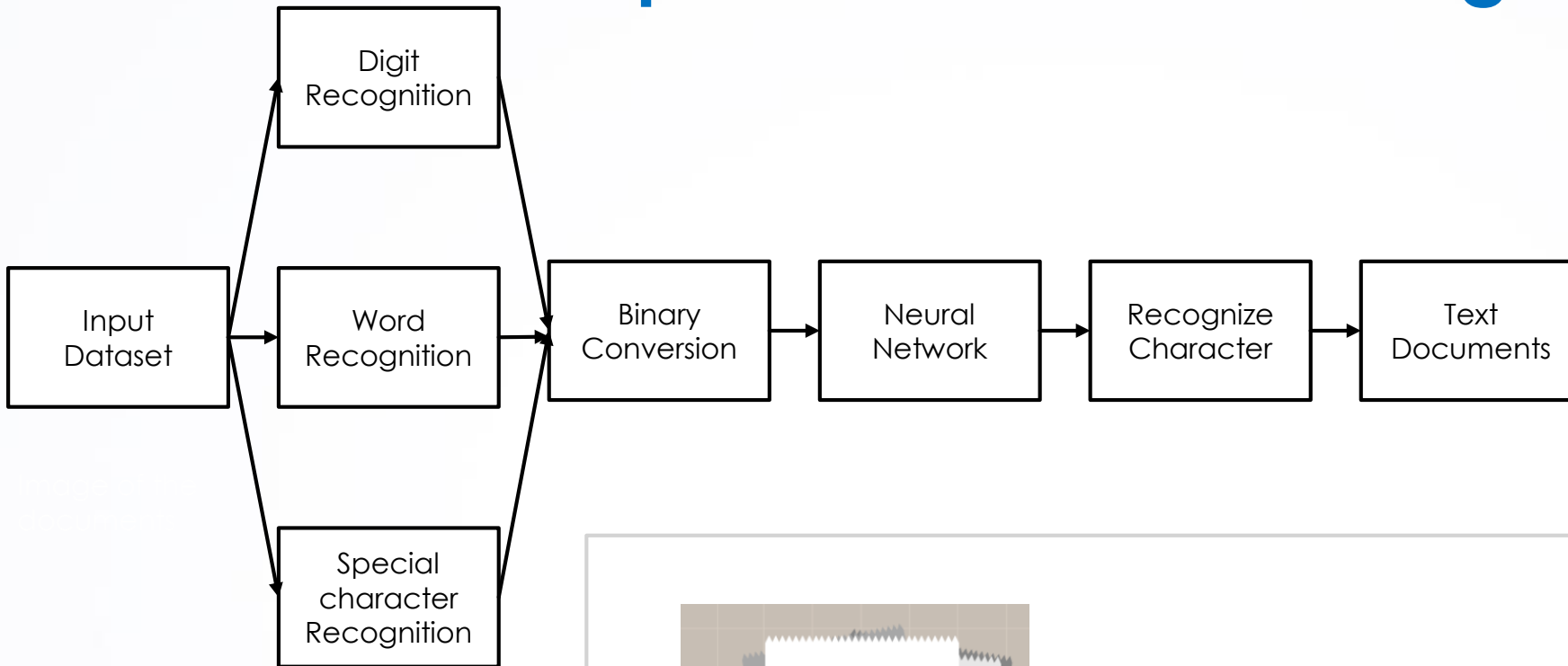



filename	invoice_no	total_char	due_date	invoice_date
image-6	42	1166		
image-8				
images				
sample12	1402211	82.5	#####	#####
sample13		28.8		

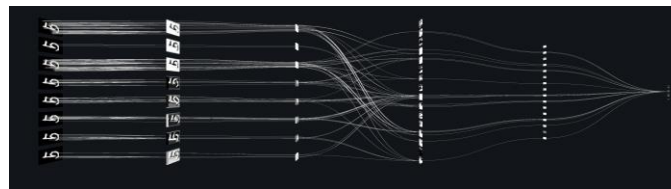
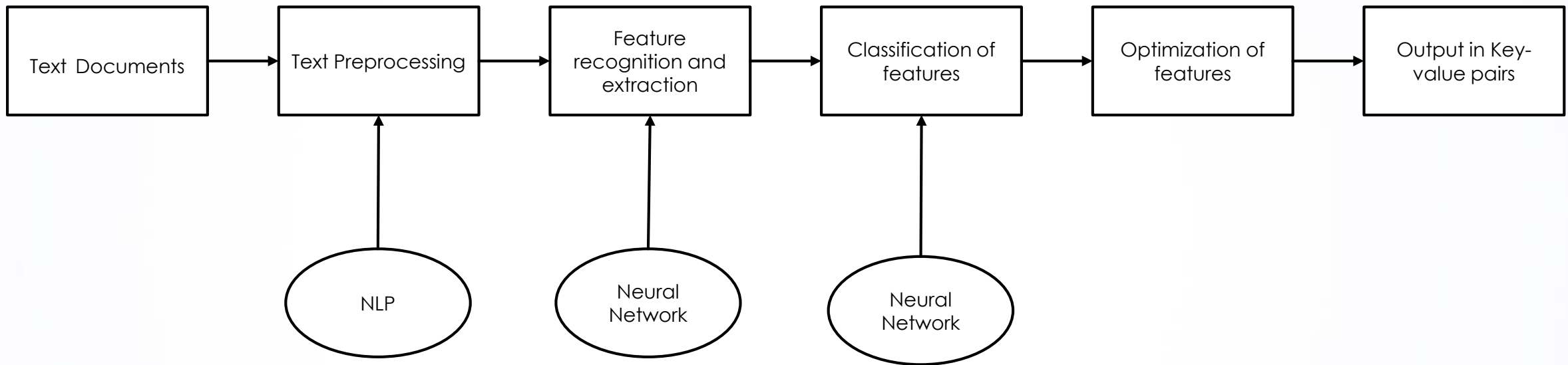
# Solution Architecture



# Optical Character Recognition



# Pattern Recognition and Extraction



# Input Sample



### INVOICE

Invoice # 351  
Invoice Date Jul 07, 2017  
Invoice Amount \$360.00 (USD)  
Customer ID IOpt5IQQOhCMkFBVC  
**PAID**

Walnut, California  
United States

<b>BILLED TO</b>	<b>SHIPPED TO</b>
California, 91789 United States	California, 91789 United States

DESCRIPTION	UNITS	UNIT PRICE	AMOUNT (USD)
Subscription ID IOpt5IQQOhCMkFBVC			
<b>Grow</b>	1	\$100.00	<b>\$100.00</b>
Subscription ID IOpt5IQQOhCU6WBhD			
<b>Blossom</b>	1	\$200.00	<b>\$200.00</b>
Sub Total			\$300.00
General Tax @ 20%			\$60.00
<b>Total</b>			<b>\$360.00</b>
Payments (\$360.00)			
Amount Due (USD)			<b>\$0.00</b>

**PAYMENTS**  
\$360.00 was paid on 07 Jul, 2017 12:48 UTC by Visa card ending 1111.

**NOTES**  
Thanks for your Business.

### INVOICE

New York, NY 1023

<b>Bill To</b>	<b>Ship To</b>	<b>Invoice #</b> 00234
Long Island City New York, NY 1120	6th Floor New York, NY 1022	<b>Invoice Date</b> 03/25/2014
		<b>P.O.#</b> 1742/2014
		<b>Due Date</b> 04/09/2014

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
1	Front and rear brake cables & Throttle cable	56.00	56.00
1	New set of pedal arms	182.00	182.00
3	Labor 3hrs	25.00	75.00
Subtotal			313.00
Sales Tax 5.0%			15.65
<b>TOTAL</b>			<b>\$328.65</b>

**Terms & Conditions**  
Payment is due within 15 days

Citibank, N.A.  
Account number:  
Routing:

Note – References to sensitive information have been removed from these documents

# OCR Output

```
image-3 - Notepad
File Edit Format View Help

Walnut California
Unked Slates

llllLD'O SHWED TO

13405me Ave31537.Walnut 3405LmAv231537.Walml
California. 91789 California. 91789
Unked Slates United States

Subscription ID IOptStQQ0lmFBVC

Grow

Subscription ID Iomstoomuowaw

PAVMENTS

33601!) was paid on07 Jul. 2017 12:48 UTC by Visa card ending 11 1 1.

N013

Thanks for your Business

INVOICE

Invoices 351

Invoice Dale Jul07.2017
Invoice Amount $360.00 (USD)
CustomerID IOptSlQQ0hCWFBVC

PAID
```

```
sample2 - Notepad
File Edit Format View Help

New Yotk. NY 1023

Bill To

Long Island City
New York, NY 1120

Ship To

61h Floor

New York. NY 1022

QTY DESCRIPTION

1 Front and rear brake cabIes & Throttle cable

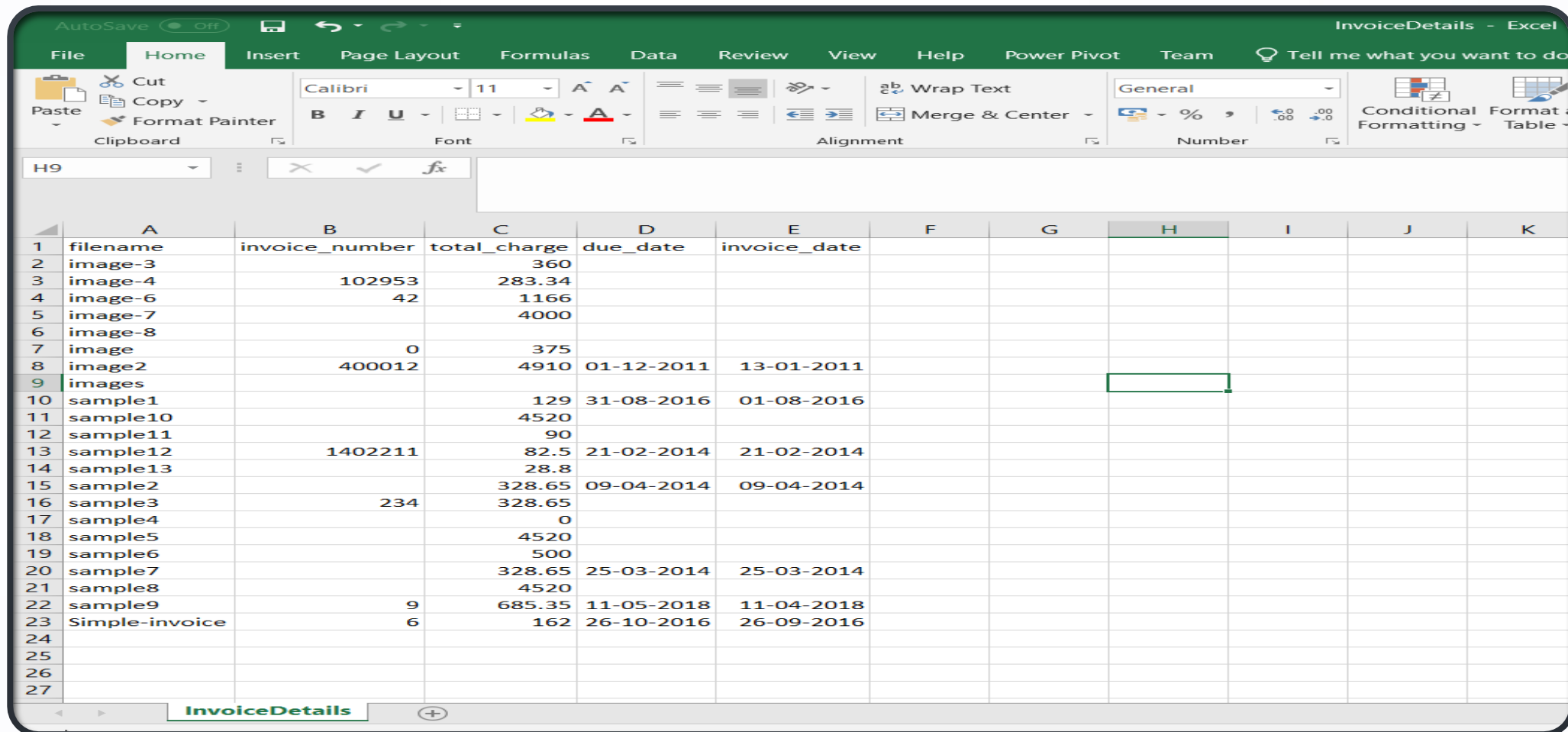
1 New set of pedal arms

3 Labor 3hr:

Term: & Condltlons
Payment is due within 15 days

Cilibank. N.A.
Account number:
Routing:
```

# Model Output



	A	B	C	D	E	F	G	H	I	J	K
1	filename	invoice_number	total_charge	due_date	invoice_date						
2	image-3		360								
3	image-4	102953	283.34								
4	image-6	42	1166								
5	image-7		4000								
6	image-8										
7	image	0	375								
8	image2	400012	4910	01-12-2011	13-01-2011						
9	images										
10	sample1		129	31-08-2016	01-08-2016						
11	sample10		4520								
12	sample11		90								
13	sample12	1402211	82.5	21-02-2014	21-02-2014						
14	sample13		28.8								
15	sample2		328.65	09-04-2014	09-04-2014						
16	sample3	234	328.65								
17	sample4		0								
18	sample5		4520								
19	sample6		500								
20	sample7		328.65	25-03-2014	25-03-2014						
21	sample8		4520								
22	sample9	9	685.35	11-05-2018	11-04-2018						
23	Simple-invoice	6	162	26-10-2016	26-09-2016						
24											
25											
26											
27											



# ***Thank you for viewing the presentation about AI powered optical character recognition for invoices and data extraction***

We request you to kindly share the invoices which you need to get processed by sending an email to [info@aress.ai](mailto:info@aress.ai) and we will get back to you with our analysis within 4 working hours.