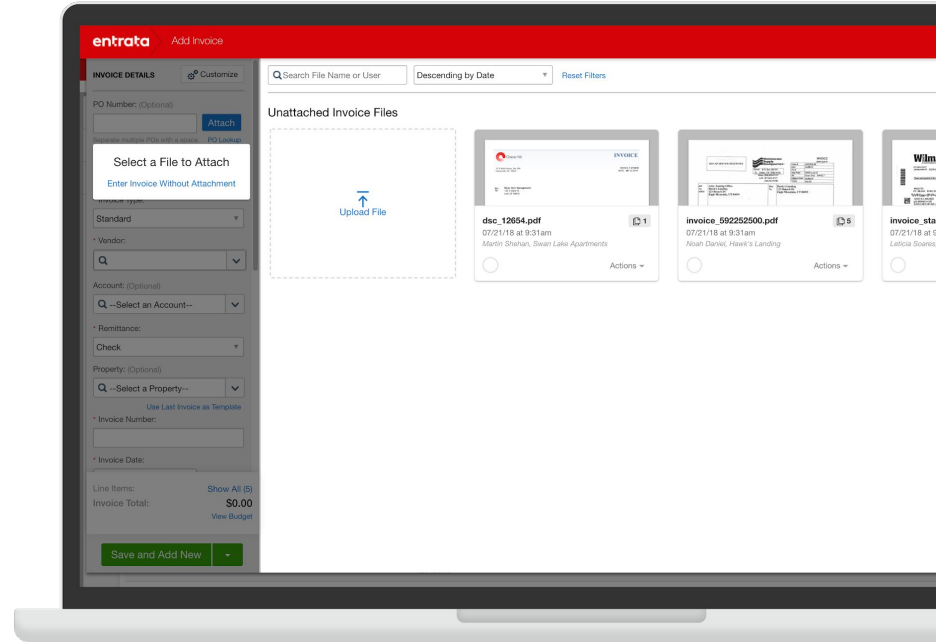


entrata

Invoice Entry 2.0

*Optimizing the invoice entry process
for accounting clerks*



THE TEAM

1 Senior UX Designer (myself)

1 UX Manager

1 Director of Engineering

1 Director of Product

1 Product Manager

MY RESPONSIBILITIES

User Research

Process Mapping

Wireframing

Prototyping

Facilitating Collaboration Sessions

Usability Testing

1 million+ invoices / year

**Clerks enter around 30-40
invoices per day**

It takes 3 minutes to enter

8.75 hours / week

455 hours / year

18+ days / year

**How might we reduce time
spent entering invoices?**



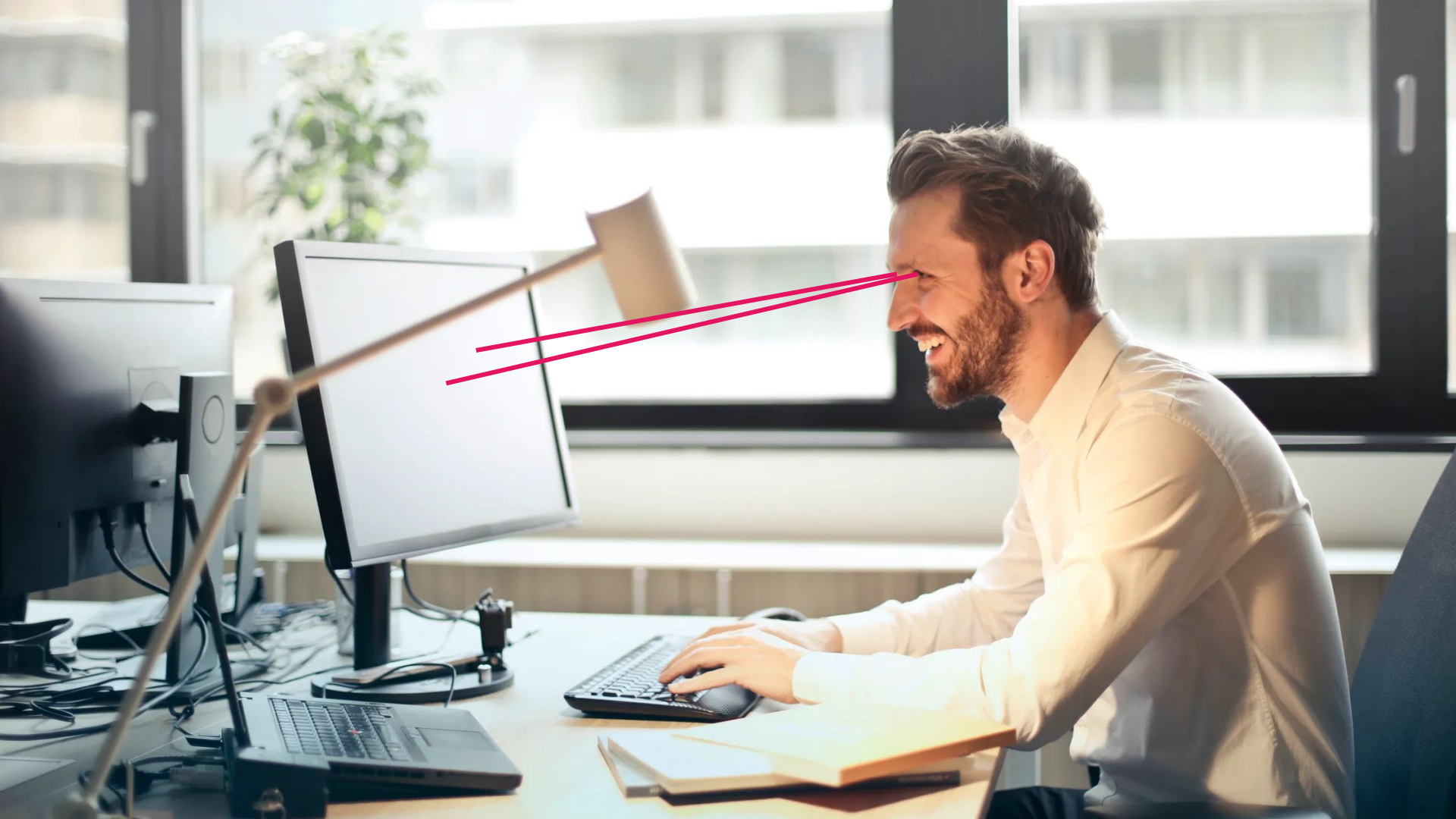


Dirk the Clerk

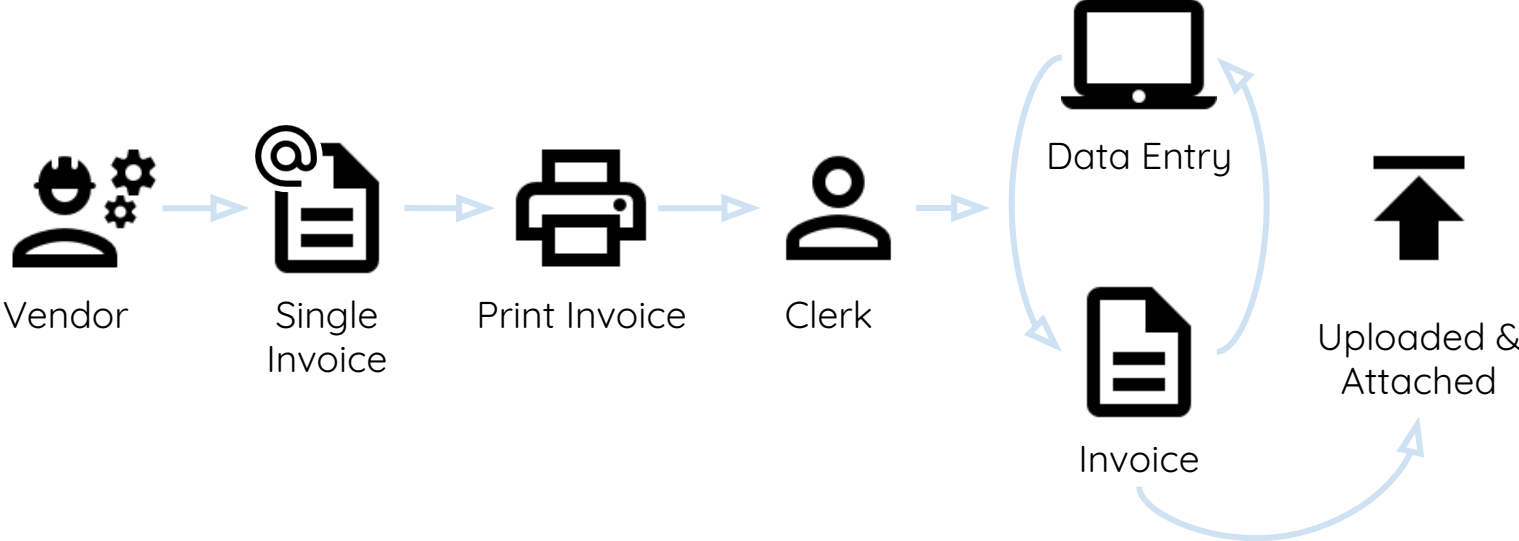
Entrata

Invoice

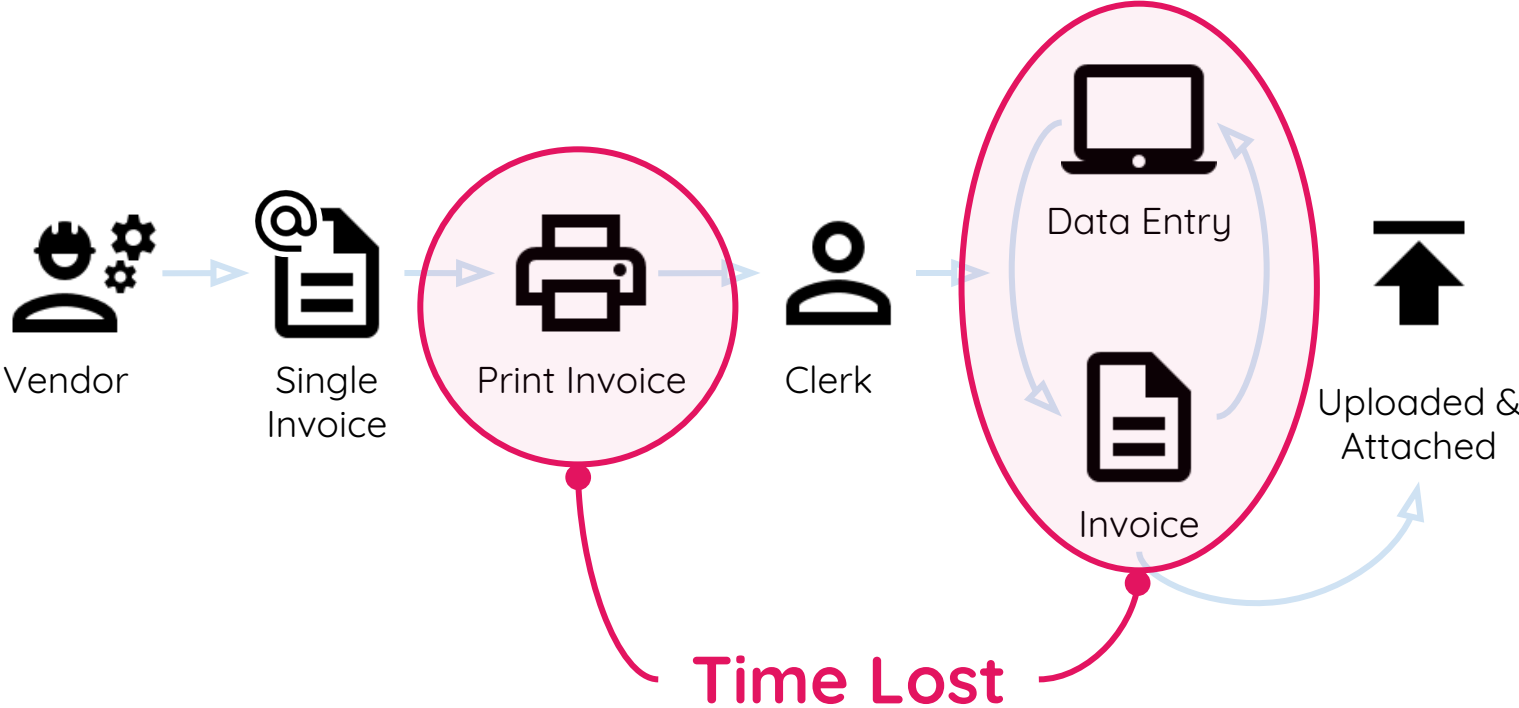




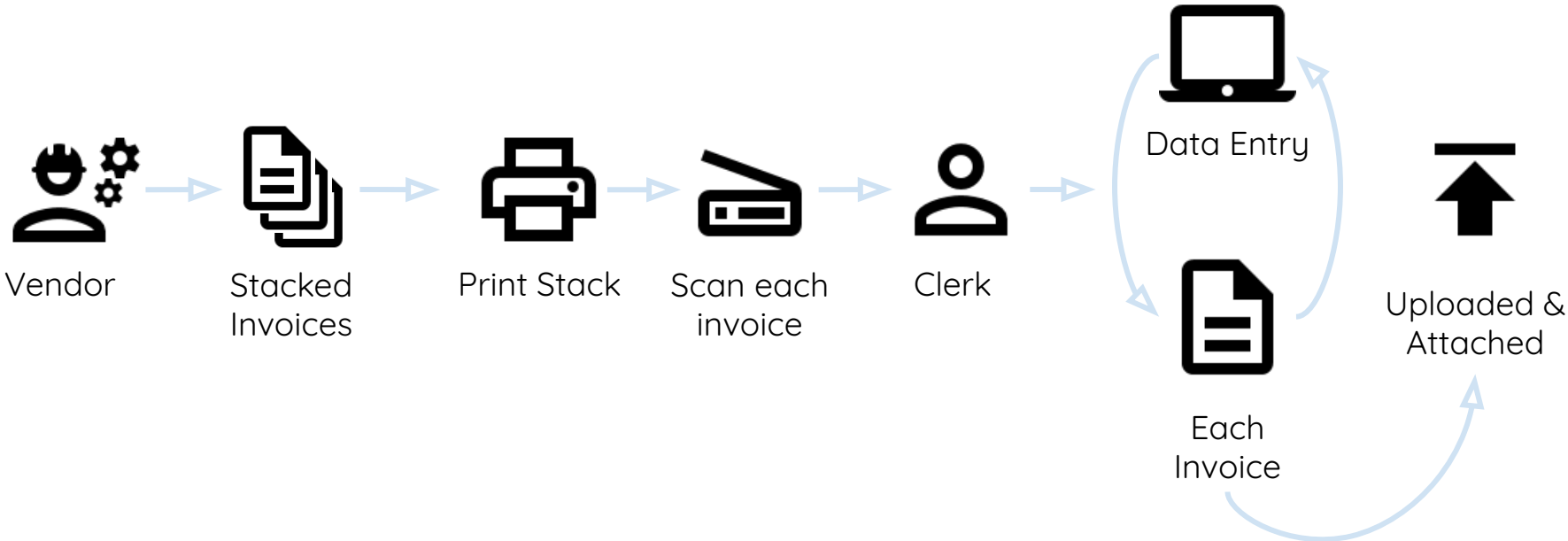
FIRST SCENARIO



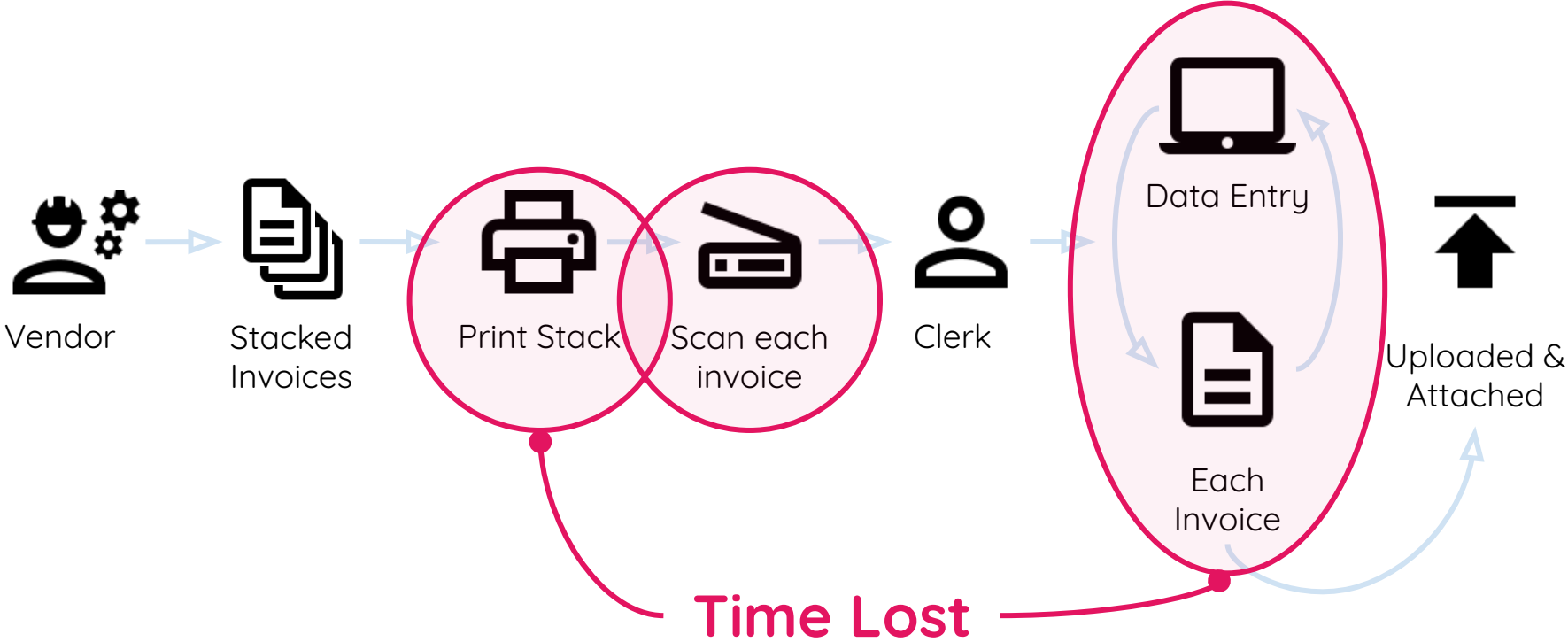
FIRST SCENARIO



SECOND SCENARIO



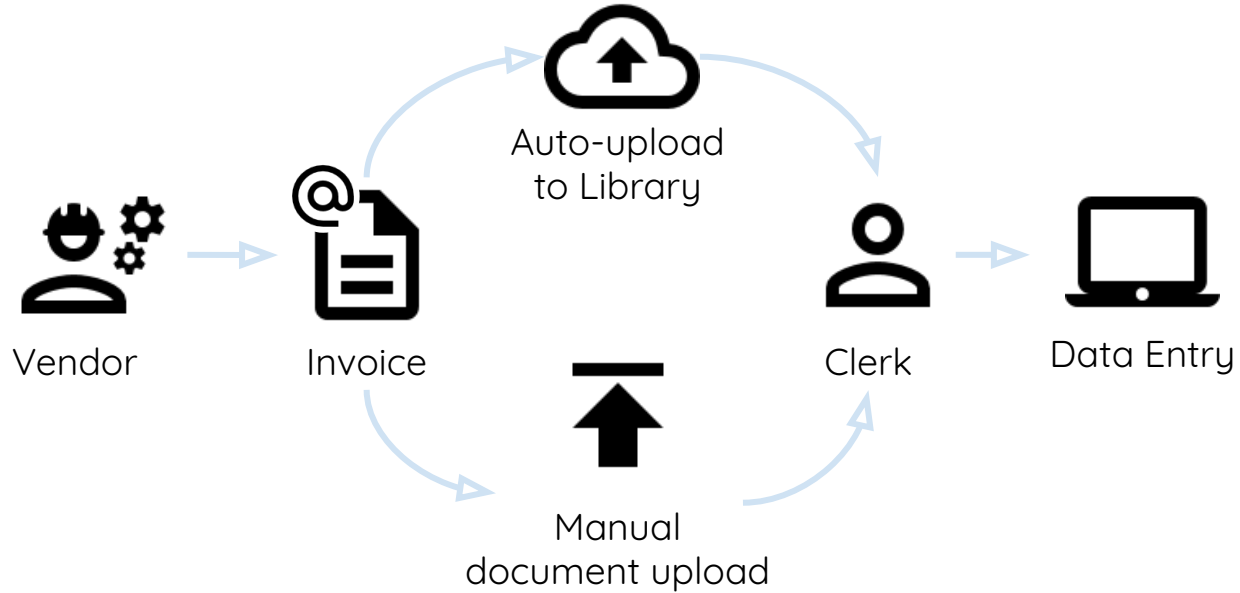
SECOND SCENARIO



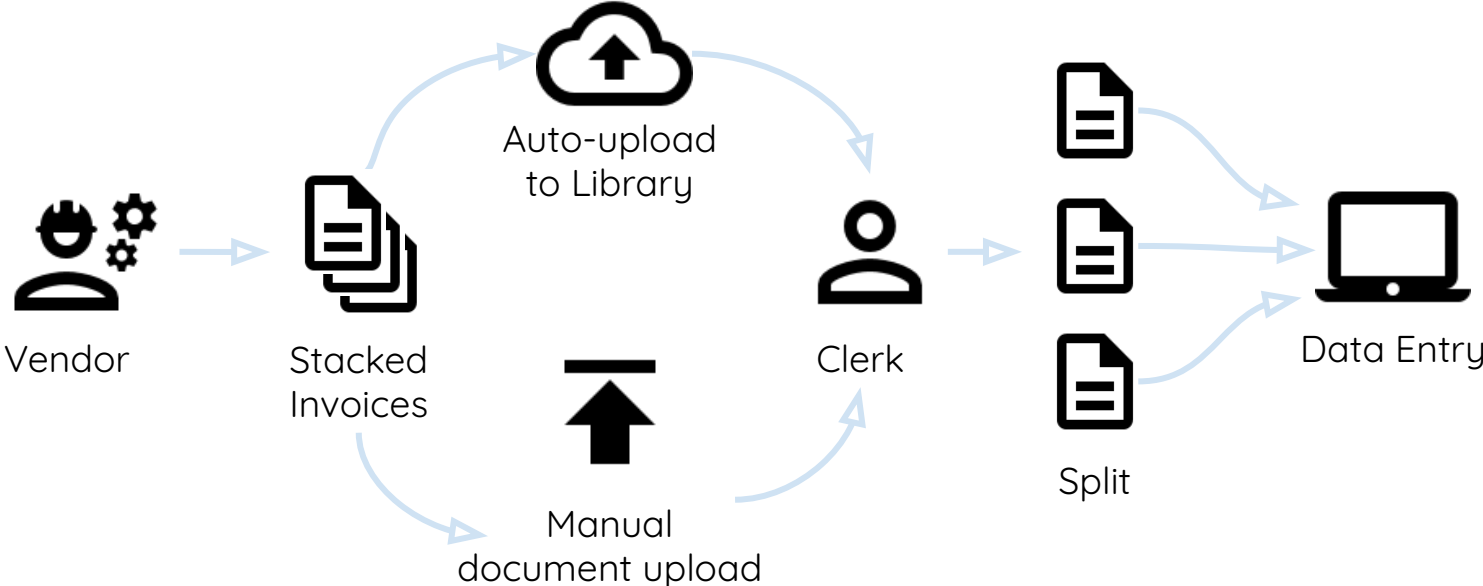
GOALS

- 1. When possible, automate invoice uploads**
- 2. Reduce average invoice entry time by 1 min**

NEW WORKFLOW – SINGLE INVOICES



NEW WORKFLOW – STACKED INVOICES



Invoice Library

UPLOAD FILE

INVOICE
THUMBNAIL

INVOICE
THUMBNAIL

INVOICE
THUMBNAIL

INVOICE
THUMBNAIL

SELECT

SELECT

SELECT

SELECT

INVOICE
THUMBNAIL

SELECT

SAVE & ADD NEW

ATTACH TO INVOICE

SAVE & ADD NEW

INVOICE

entrata Add Invoice Close

Invoice Details Q Search by Name or User Descending by Date 1 Uploaded Files

INVOICE DETAILS

Property:

Vendor/Account:

PO Number: Save

Invoice Number:

Invoice Total:

Bank Account:

Default Account:

Post Month:

Invoice Date:

Inv. / Est. / YYY:

Payment Terms:

Due Date:

Inv. / Est. / YYY:

ADD Line Item Defaults

Invoice Total: \$0.00

Total Line Items: 1

Submit Attach to Invoice (0)

file_12654.pdf

8/23/2019 10:30:36 AM: Walter Sturton

Select

Invoice_50222500.pdf

8/23/2019 10:31:30 AM: Russi Cooper

Select

Invoice_attached.pdf

8/23/2019 10:31:30 AM: Loretta Stover

Select

Quantity

Rate

Amount

Custom Tag:

Show on 1099:

Combinatorial:

GL Account:

Search:

7300 - Phone

7301 - Internet

7320 - Door Hardware

7321 - Hardware

7325 - Plumbing

ADD Line Item

ADD Tax / Discount / Shipping

Invoice Total: \$0.00

Total Line Items: 1

Submit Back to File Library

METLAN SERVICE REQUESTED

Maintenance Supply

INVOICE

Invoice # 101122166

Date 8/23/19

Header 7300-1099

Invoice To: Metlan, 123 Branch Dr, Eagle Mountain, UT 84005

Header 7300-1099

Invoice From: Metlan Supply, 1418 S. 1000 E, Suite 117, Eagle Mountain, UT 84005

Header 7300-1099

Invoice To: Metlan, 123 Branch Dr, Eagle Mountain, UT 84005

Header 7300-1099

Invoice From: Metlan Supply, 1418 S. 1000 E, Suite 117, Eagle Mountain, UT 84005

Line	Quantity	Unit	Rate	Amount	Extended Amount
1	4	Each	84.00	336.00	336.00
2	4	Each	9.45	37.80	37.80
3	10	Each	2.16	21.60	21.60
4	4	Each	26.92	107.68	107.68
5	10	Each	7.22	72.20	72.20
6	1	Each	20.00	20.00	20.00
7	4	Each	8.33	33.32	33.32

INPUT FOCUS STATES

Old Focus

* Invoice Number:

*Gray dashed border
Difficult to identify when indexing*

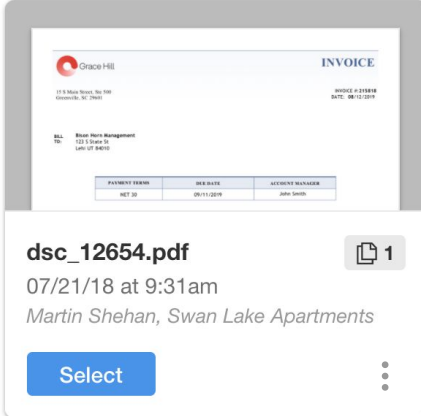
New Focus

* Invoice Number:


*Blue border & raised shadow
Decreased time spent scanning for input*


OLD CARD ANATOMY

Default

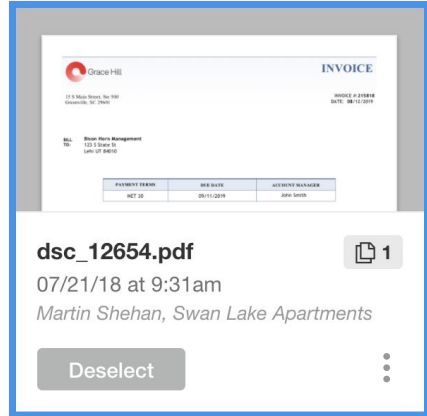


The card displays a preview of an invoice from Grace Hill. The invoice header includes the company logo and name, the word "INVOICE", and the invoice number (01888) and date (06/12/2019). The recipient information is "Blue Hill Management" at "123 S Swan St, Lake Of Bays". A table at the bottom of the preview shows payment terms: NET 30, due date 06/11/2019, and account manager John Smith.


dsc_12654.pdf  1
07/21/18 at 9:31am
Martin Shehan, Swan Lake Apartments


Select 

Selected



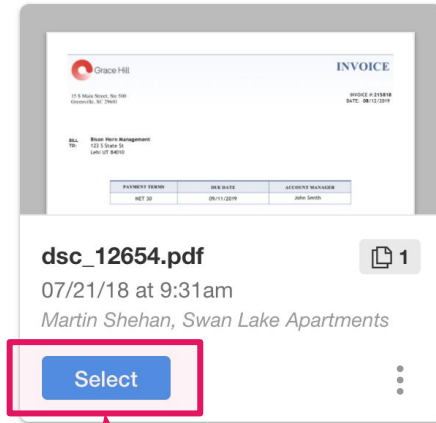
The card displays the same invoice preview as the default view. The card is highlighted with a blue border, and the "Deselect" button is visible.

dsc_12654.pdf  1
07/21/18 at 9:31am
Martin Shehan, Swan Lake Apartments

Deselect 

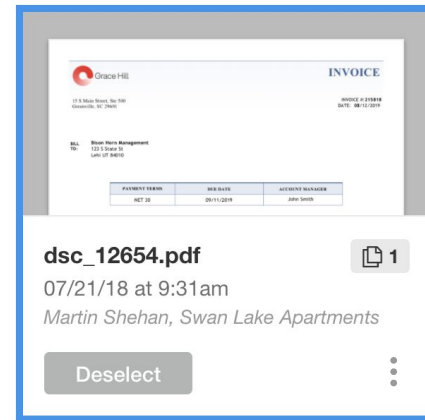
OLD CARD ANATOMY

Default



The card displays a preview of an invoice from Grace Hill. Below the preview, the filename **dsc_12654.pdf** is shown with a document icon and the number 1. The date and time are **07/21/18 at 9:31am**, and the sender is *Martin Shehan, Swan Lake Apartments*. A blue **Select** button is highlighted with a red box, and a vertical ellipsis menu is visible on the right side.

Selected

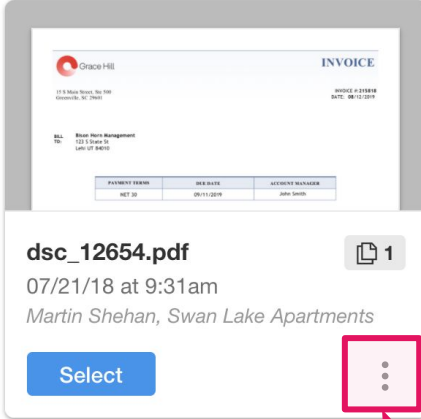


The card displays the same invoice preview. The filename **dsc_12654.pdf**, date **07/21/18 at 9:31am**, and sender *Martin Shehan, Swan Lake Apartments* are shown. A grey **Deselect** button is present, and a vertical ellipsis menu is on the right. The entire card is enclosed in a blue border.

Distracting

OLD CARD ANATOMY

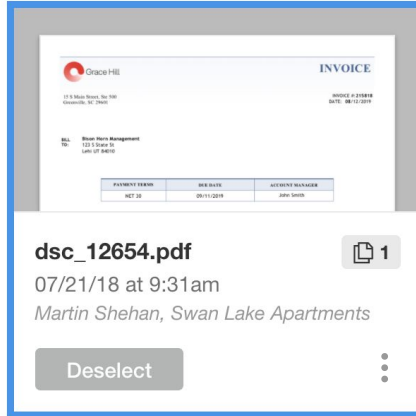
Default



The card displays a preview of an invoice from Grace Hill. Below the preview, the filename **dsc_12654.pdf** is shown with a copy icon and the number '1'. The date and time are '07/21/18 at 9:31am' and the sender is 'Martin Shehan, Swan Lake Apartments'. A blue 'Select' button is at the bottom left, and a three-dot menu icon is at the bottom right.

PAYMENT FROM	ISS DATE	ACCOUNT MANAGER
NET 30	06/11/2018	John Smith

Selected



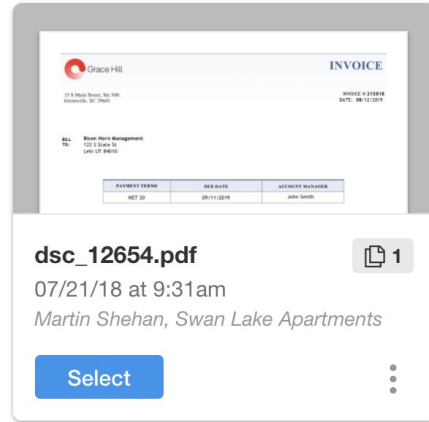
The card displays the same invoice preview as the default view. The filename **dsc_12654.pdf**, date, time, and sender information are identical. However, the 'Select' button is replaced by a grey 'Deselect' button, and the three-dot menu icon is now visible at the bottom right.

PAYMENT FROM	ISS DATE	ACCOUNT MANAGER
NET 30	06/11/2018	John Smith

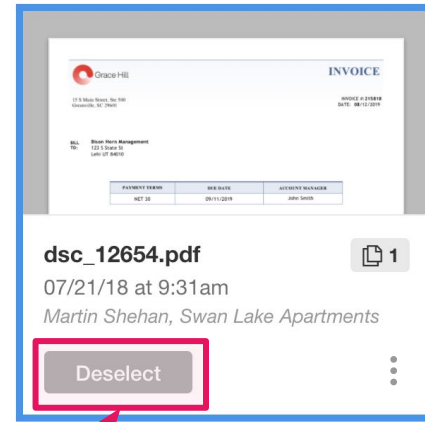
Unnoticeable

OLD CARD ANATOMY

Default



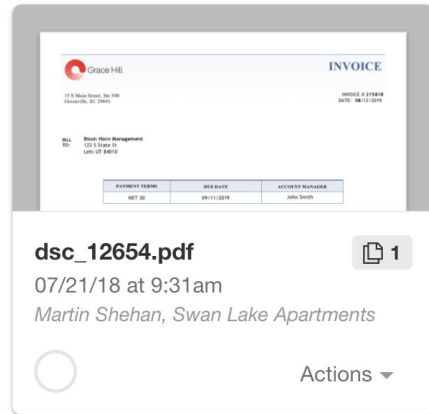
Selected



Confusing


NEW CARD ANATOMY

Default



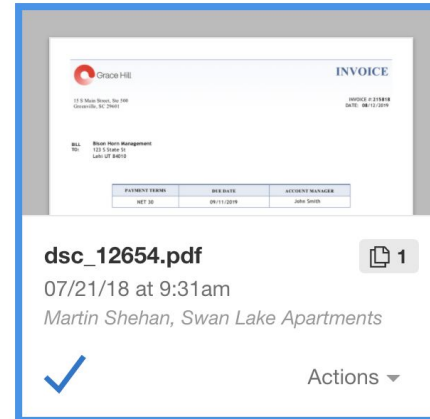
The card displays a preview of an invoice from Grace Hill. The invoice header includes the company logo and name, and the word "INVOICE". The body of the invoice contains the address "11 S. Main Street, Box 100, Swanton, VT 05491" and the invoice number "INVOICE # 212618" with date "DATE: 06/12/2018". Below this is the recipient information: "Bill: Blue Moon Management, 22 S. State St, Lark VT 05642". At the bottom of the preview is a table with three columns: "PAYMENT TERM", "DE DUE", and "ACCOUNT MANAGER".

PAYMENT TERM	DE DUE	ACCOUNT MANAGER
NET 30	06/11/2018	John Smith

dsc_12654.pdf  1
07/21/18 at 9:31am
Martin Shehan, Swan Lake Apartments


Actions ▾

Selected



The card displays the same invoice preview as the default view. The entire card is highlighted with a blue border. A blue checkmark is visible in the bottom left corner of the card's content area.

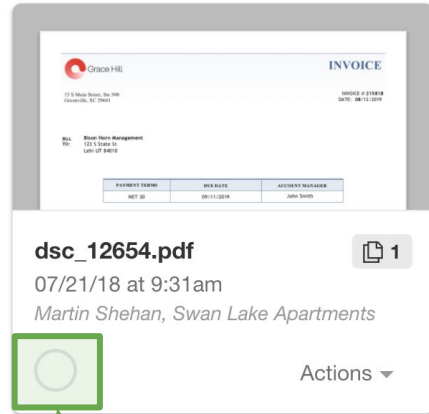
PAYMENT TERM	DE DUE	ACCOUNT MANAGER
NET 30	06/11/2018	John Smith

dsc_12654.pdf  1
07/21/18 at 9:31am
Martin Shehan, Swan Lake Apartments

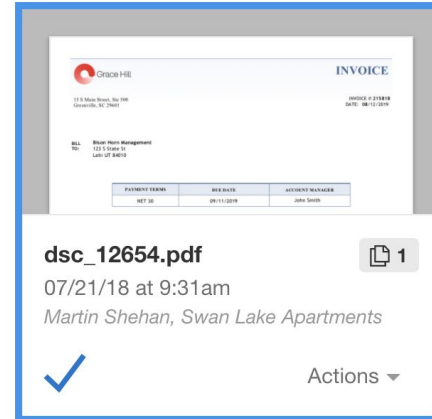
Actions ▾

NEW CARD ANATOMY

Default



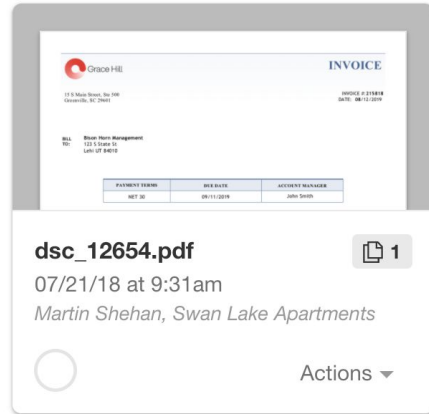
Selected



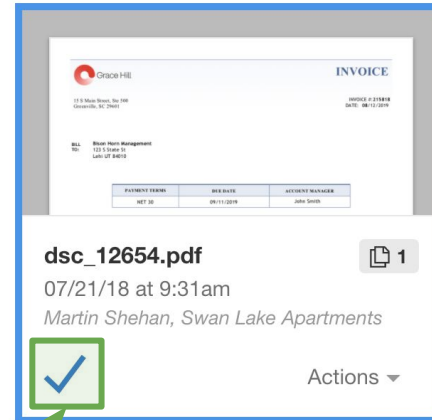
Subtle yet discoverable

NEW CARD ANATOMY

Default



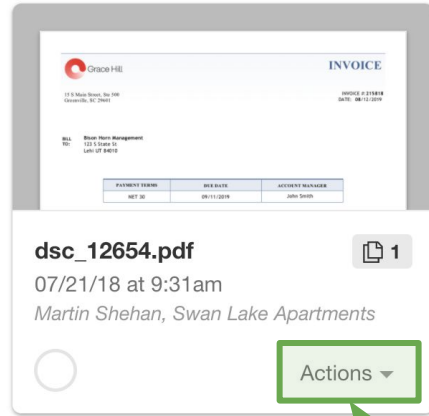
Selected



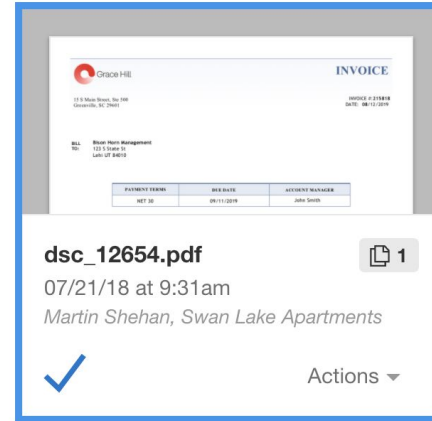
Selection indicator

NEW CARD ANATOMY

Default



Selected



Clarifying copy

INVOICE DETAILS

Customize

P.O. Number: (Optional)

Attachment input field

Attach

Multiple separated by a space

Lookup P.O.

Select a file to attach

Enter Invoice Without Attachment

Invoice Type:

Standard

Vendor:



Account: (Optional)

--Select an Account--

Remittance:

Check

Property: (Optional)

--Select a Property--

Invoice Number:

Line Items:

Show All (5)

Invoice Total:

\$0.00

View Budget

Save & Add New

Search File Name or User

Descending by Date

Reset Filters

Unentered Invoice Files

Upload file

Invoice card for dsc_12654.pdf

Invoice card for invoice_592252500.pdf

Invoice card for invoice_stacked.pdf

INVOICE DETAILS

Customize

P.O. Number: (Optional)

Attach

Multiple separated by a space.

Lookup P.O.

Begin Invoice Entry (3)

Enter Invoice Without Attachment

* Invoice Type:

Standard

* Vendor:

Account: (Optional)

--Select an Account--

* Remittance:

Check

Property: (Optional)

--Select a Property--

* Invoice Number:

Line Items:

Show All (5)

Invoice Total:

\$0.00

View Budget

Save & Add New


Search File Name or User


Descending by Date

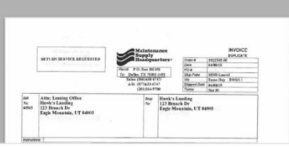
Reset Filters


Unentered Invoice Files


Upload file




dsc_12654.pdf  1
07/21/18 at 9:31am
Martin Shehan, Swan Lake Apartments
✓ Actions ▾



invoice_592252500.pdf  5
07/21/18 at 9:31am
Noah Daniel, Hawk's Landing
✓ Actions ▾



invoice_stacked.pdf  16
07/21/18 at 9:31am
Leticia Soares, Hawk's Landing
✓ Actions ▾

INVOICE DETAILS

Customize

P.O. Number: (Optional)

Attach

Multiple separated by a space. [Lookup P.O.](#)

Template: (Optional)

[Use Last Invoice as Template](#)

* Invoice Type:

Standard

* Vendor:

Account: (Optional)

Q --Select an Account--

* Remittance:

Check

Property: (Optional)

Q --Select a Property--

* Invoice Number:

Line Items: [Show All \(5\)](#)

Invoice Total: **\$0.00**

[View Budget](#)

Save & Add New

invoice_592252500.pdf

07/21/18 at 9:31am

[← Back to File Library](#)

RETURN SERVICE REQUESTED



Remit P.O. Box 301451
 To: Dallas, TX 75303-1451
 Sales: (866)630-6747/
 A/R: (877)633-6747
 (281)564-9700

**INVOICE
 DUPLICATE**

Order #	5922545-00
Date	04/08/19
PO #	
Ship Point	MSH-Laurel
Via	Same Day BW0/1 /
Shipped Date	04/08/19
Terms	Net 30

Bill To: 40565	Attn: Leasing Office Hawk's Landing 123 Branch Dr Eagle Mountain, UT 84005	Ship To:	Hawk's Landing 123 Branch Dr Eagle Mountain, UT 84005
--------------------------	--	-----------------	---

Instructions

Ln#	Bin Loc.	Product Description	Quantity Ordered	Qty. UM	Quantity Shipped	Unit Price (Net)	Extended Amount
1	/ B/ 05/1	60559 104x84 WH T VERT BLIND GL Code: Window Covering 56030	8	Each	8	46.89	375.12
2	/ B/ 09/1	MINI-BLIND 60x64 WHITE VINYL MINI-BLIND GL Code: Window Covering 23915	6	Each	6	9.15	54.90
3	/ C/ 06/1	BIFOLD TOP GUIDE PIN WITH SPRING 6-1/8" GL Code: Hardware 748278	10	Each	10	2.18	21.80
4	/ C/ 10/5	UNIVERSAL NUFIT CHROME DRAIN STOPPER WITH GRID GL Code: Plumbing 56033	6	Each	6	20.92	125.52
5	/ C/ 17/2	MINI-BLIND 48x64 WHITE	12	Each	12	7.22	86.64

PREVIOUS DESIGN

Data Entry Screen

Standard ▾ 📄 Templates

Property: ▾

Vendor/Account: ▾ ➕ Add Vendor ▾

[Use Last Invoice As Template](#)

P.O. Number: ▾

Invoice Number:

Invoice Total: \$

Post Month:

Invoice Date: 📅

Terms: ▾

Due Date: 📅

Routing Tag: ▾

Note/Attachment: 📎

▶ Line Item Defaults

ACCOUNT	SKU	DESCRIPTION	QTY	RATE	SUBTOTAL	TAX/DISC/SHP	AMOUNT
▶ <input type="text" value="Q"/> ▾	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="\$"/>	0.00	0.00	0.00 🛑
▶ <input type="text" value="Q"/> ▾	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="\$"/>	0.00	0.00	0.00 🛑
▶ <input type="text" value="Q"/> ▾	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="\$"/>	0.00	0.00	0.00 🛑
▶ <input type="text" value="Q"/> ▾	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="\$"/>	0.00	0.00	0.00 🛑

➕ Add Line Item

Sales Tax: \$


Discount: \$

Shipping: \$

[Distribute on Line Items](#) [Reset](#)

Real Invoice

RETURN SERVICE REQUESTED



Maintenance Supply Headquarters®

Remit P.O. Box 301451
To: Dallas, TX 75303-1451
Sales: (866)630-6747
A/R: (877)633-6747
(281)564-9700

INVOICE
DUPLICATE

Order #	5922545-00
Date	04/08/19
PO #	
Ship Point	MSH-Laurel
Via	Same Day BW0/1 /
Shipped Date	04/08/19
Terms	Net 30

Bill To: 40565	Attn: Leasing Office Hawk's Landing 123 Branch Dr Eagle Mountain, UT 84005	Ship To:	Hawk's Landing 123 Branch Dr Eagle Mountain, UT 84005
--------------------------	---	-----------------	--

Instructions

Ln#	Bin Loc.	Product Description	Quantity Ordered	Qty. U/M	Quantity Shipped	Unit Price (Net)	Extended Amount
1	/ B/ 05/1	60559 104x84 WHT VERT BLIND GL Code: Window Covering	8	Each	8	46.89	375.12
2	/ B/ 09/1	56030 MINI-BLIND 60x64 WHITE VINYL MINI-BLIND GL Code: Window Covering	6	Each	6	9.15	54.90
3	/ C/ 06/1	23915 BIFOLD TOP GUIDE PIN WITH SPRING 6-1/8" GL Code: Hardware	10	Each	10	2.18	21.80

PREVIOUS DESIGN

Data Entry Screen

Details

Real Invoice

Standard ▾ Templates

Property: Q ▾

Vendor/Account: Q ▾ Use Last Invoice As Template ⊕ Add Vendor ▾

P.O. Number: Q ▾

Invoice Number:

Invoice Total: \$

Post Month: mm/yyyy

Invoice Date: mm / dd / yyyy

Terms: Net 10 ▾

Due Date: mm / dd / yyyy

Routing Tag: Choose Tags ▾

Note/Attachment:

Line Item Defaults

ACCOUNT	SKU	DESCRIPTION	QTY	RATE	SUBTOTAL	TAX/DISC/SHP	AMOUNT
Q				\$	0.00	0.00	0.00
Q				\$	0.00	0.00	0.00
Q				\$	0.00	0.00	0.00
Q				\$	0.00	0.00	0.00

⊕ Add Line Item

RETURN SERVICE REQUESTED

Maintenance Supply Headquarters®

Remit P.O. Box 301451
To: Dallas, TX 75303-1451
Sales: (866)630-6747
A/R: (877)633-6747
(281)564-9700

INVOICE DUPLICATE

Order #	5922545-00
Date	04/08/19
PO #	
Ship Point	MSH-Laurel
Via	Same Day BW0/1 /
Shipped Date	04/08/19
Terms	Net 30

Bill To: 40565	Attn: Leasing Office Hawk's Landing 123 Branch Dr Eagle Mountain, UT 84005	Ship To: Hawk's Landing 123 Branch Dr Eagle Mountain, UT 84005
----------------	---	--

Instructions

Ln#	Bin Loc.	Product Description	Quantity Ordered	Qty. UM	Quantity Shipped	Unit Price (Net)	Extended Amount
1	/ B/ 05/1	60559 104x84 WHT VERT BLIND GL Code: Window Covering	8	Each	8	46.89	375.12
2	/ B/ 09/1	56030 MINI-BLIND 60x64 WHITE VINYL MINI-BLIND GL Code: Window Covering	6	Each	6	9.15	54.90
3	/ C/ 06/1	23915 BIFOLD TOP GUIDE PIN WITH SPRING 6-1/8"	10	Each	10	2.18	21.80

Line Items

invoice_592252500.pdf

07/21/18 at 9:31am

← Back to File Library

Taxable: Off

> Advanced

LINE ITEM 1 ⊗

* Line Item Type:
Standard

GL Account:
Q

Description:

Quantity: Rate: \$

Taxable: Off

> Advanced

+ Add Line Item

To: Dallas, TX 75303-1451
Sales: (866)630-6747/
A/R: (877)633-6747
(281)564-9700

Ship Point	MSH-Laurel
Via	Same Day BW01 /
Shipped Date	04/08/19
Terms	Net 30

B# To: 40565	Attn: Leasing Office Hawk's Landing 123 Branch Dr Eagle Mountain, UT 84005	Ship To:	Hawk's Landing 123 Branch Dr Eagle Mountain, UT 84005
--------------------	---	-------------	---

Ln#	Bin Loc.	Product Description	Quantity Ordered	Qty: UM	Quantity Shipped	Unit Price (Net)	Extended Amount
1	/ B/ 05/1	60559 104x84 WHT VERT BLIND GL Code: Window Covering	8	Each	8	46.89	375.12
2	/ B/ 09/1	56030 MINI-BLIND 60x64 WHITE VINYL MINI-BLIND GL Code: Window Covering	6	Each	6	9.15	54.90
3	/ C/ 06/1	23915 BIFOLD TOP GUIDE PIN WITH SPRING 6-1/8" GL Code: Hardware	10	Each	10	2.18	21.80
4	/ C/ 10/5	748278 UNIVERSAL NUFIT CHROME DRAIN STOPPER WITH GRID GL Code: Plumbing	6	Each	6	20.92	125.52
5	/ C/ 17/2	56033 MINI-BLIND 48x64 WHITE VINYL MINI-BLIND	12	Each	12	7.22	86.64

Line Items: [Show All \(5\)](#)

Invoice Total: **\$512.74**

[View Budget](#)

Save & Add New

	GL Account	Description	Tax	Discount	Shipping	Amount
1	Window Covering 56030	104x84 White vertical blinds	\$0.00	\$0.00	\$0.00	\$375.12
2	Window Covering 23915	Mini-blind 60x64 white vinyl mini-blind	\$0.00	\$0.00	\$0.00	\$54.90
3	GL Account	Hawk's description	\$0.00	\$0.00	\$0.00	\$12.00

invoice_592252500.pdf

07/21/18 at 9:31am

← Back to File Library

Taxable: Off

> Advanced

LINE ITEM 1 ⊗

* Line Item Type:
Standard

GL Account:
Q

Description:

Quantity: 1 Rate: \$

Taxable: Off

> Advanced

+ Add Line Item

Line Items: Show All (5)
Invoice Total: \$512.74
View Budget

Save & Add New

To: Dallas, TX 75303-1451
Sales: (866)630-6747
A/R: (877)633-6747
(281)564-9700

Ship Point	MSH-Laurel
Via	Same Day BW0/1 /
Shipped Date	04/08/19
Terms	Net 30

B# To: 40565	Attn: Leasing Office Hawk's Landing 123 Branch Dr Eagle Mountain, UT 84005	Ship To:	Hawk's Landing 123 Branch Dr Eagle Mountain, UT 84005
--------------------	---	-------------	---

Line Items

Ln#	Bin Loc.	Product Description	Quantity Ordered	Qty: UM	Quantity Shipped	Unit Price (Net)	Extended Amount	
1	/ B/ 05/1	60559 104x84 WHT VERT BLIND GL Code: Window Covering	8	Each	8	46.89	375.12	
2	/ B/ 09/1	56030 MINI-BLIND 60x64 WHITE VINYL MINI-BLIND GL Code: Window Covering	6	Each	6	9.15	54.90	
3	/ C/ 06/1	23915 BIFOLD TOP GUIDE PIN WITH SPRING 6-1/8" GL Code: Hardware	10	Each	10	2.18	21.80	
4	/ C/ 10/5	748278 UNIVERSAL NUFIT CHROME DRAIN STOPPER WITH GRID GL Code: Plumbing	6	Each	6	20.92	125.52	
5	/ C/ 17/2	5603 MINI-BLIND 48x64 WHITE VINYL MINI-BLIND	12	Each	12	7.22	86.64	
							20.32	20.32
1	Window Covering 56030	104x84 White vertical blinds	\$0.00	\$0.00	\$0.00	\$375.12	⊗	
2	Window Covering 23915	Mini-blind 60x64 white vinyl mini-blind	\$0.00	\$0.00	\$0.00	\$54.90	⊗	
3	GL Account	Hawk's description	\$0.00	\$0.00	\$0.00	\$12.00	⊗	
							6.32	37.92
							5.66	5.66

INVOICE DETAILS

Customize

P.O. Number: (Optional)

Attachment input field

Attach

Multiple separated by a space. [Lookup P.O.](#)

Select a file to attach

Enter Invoice Without Attachment

* Invoice Type:

Standard

* Vendor:

Search input for vendor

Account: (Optional)

--Select an Account--

* Remittance:

Check

Property: (Optional)

--Select a Property--

* Invoice Number:

Line Items: [Show All \(5\)](#)

Invoice Total: **\$0.00**

[View Budget](#)

Save & Add New

Search File Name or User

Descending by Date

[Reset Filters](#)

Unentered Invoice Files

Upload file

dsc_12654.pdf 1

07/21/18 at 9:31am

Martin Shehan, Swan Lake Apartments

Actions

invoice_592252500.pdf 5

07/21/18 at 9:31am

Noah Daniel, Hawk's Landing

Actions

invoice_stacked.pdf 16

07/21/18 at 9:31am

Leticia Soares, Hawk's Landing

Actions



invoice_592252500.pdf

5

07/21/18 at 9:31am

Noah Daniel, Hawk's Landing



Actions ▾

 Extract pages to new document

 Preview

 Rename

 Delete

INVOICE DETAILS ⚙️ Customize

P.O. Number: (Optional)
 Attach

Multiple separated by a space. Lookup P.O.

Select a file to attach
[Enter Invoice Without Attachment](#)

* Invoice Type:
Standard

* Vendor:

Account: (Optional)

* Remittance:
Check

Property: (Optional)

* Invoice Number:

Line Items: Show All (5)


Invoice Total: **\$0.00**
View Budget

Save & Add New

🔍 Search File Name or User Descending by Date [Reset Filters](#)

Unentered Invoice Files

Upload file



dsc_12654.pdf 📄 1

07/21/18 at 9:31am
Martin Shehan, Swan Lake Apartments

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invoice_592252500.pdf 📄 5

07/21/18 at 9:31am
Noah Daniel, Hawk's Landing


○ Actions ▾



invoice_stacked.pdf 📄 16

07/21/18 at 9:31am
Leticia Soares, Hawk's Landing

○ Actions ▾



invoice_stacked.pdf 📄 16

07/21/18 at 9:31am
Leticia Soares, Hawk's Landing

○ Actions ▾

← **Split Invoice**

RESULTS

**Reduced average invoice entry time
from 3 minutes to 2 minutes**

RESULTS

**Reduced time spent wrangling
paper invoices**

