



# Digital Time & Field Data Collection *is a Game Changer*



August 26, 2020



9:30 AM - 10:30 AM



**Robert Armbrister**

President, SPARK Business Works

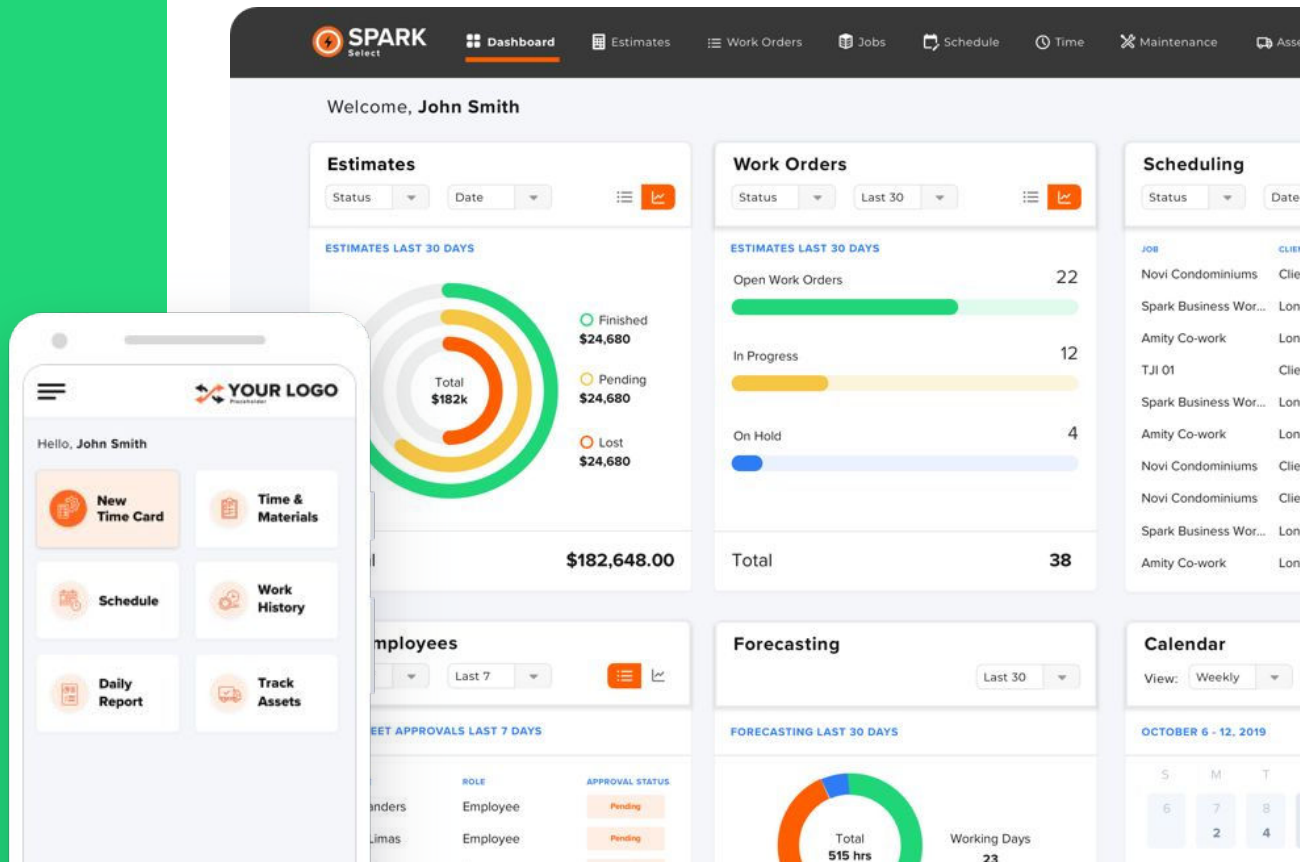


SPARK builds custom software that brings your team together where it matters.

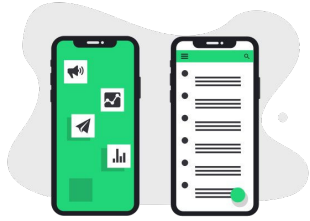
– 40% of SPARK's projects are for companies in construction & building trades.

– We execute projects in practical steps that make sense and reduce risk for our clients.

## Just Right for the Way You Work



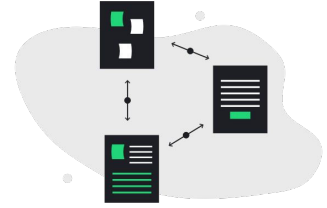




**Apps**



**Websites**



**Workflow**



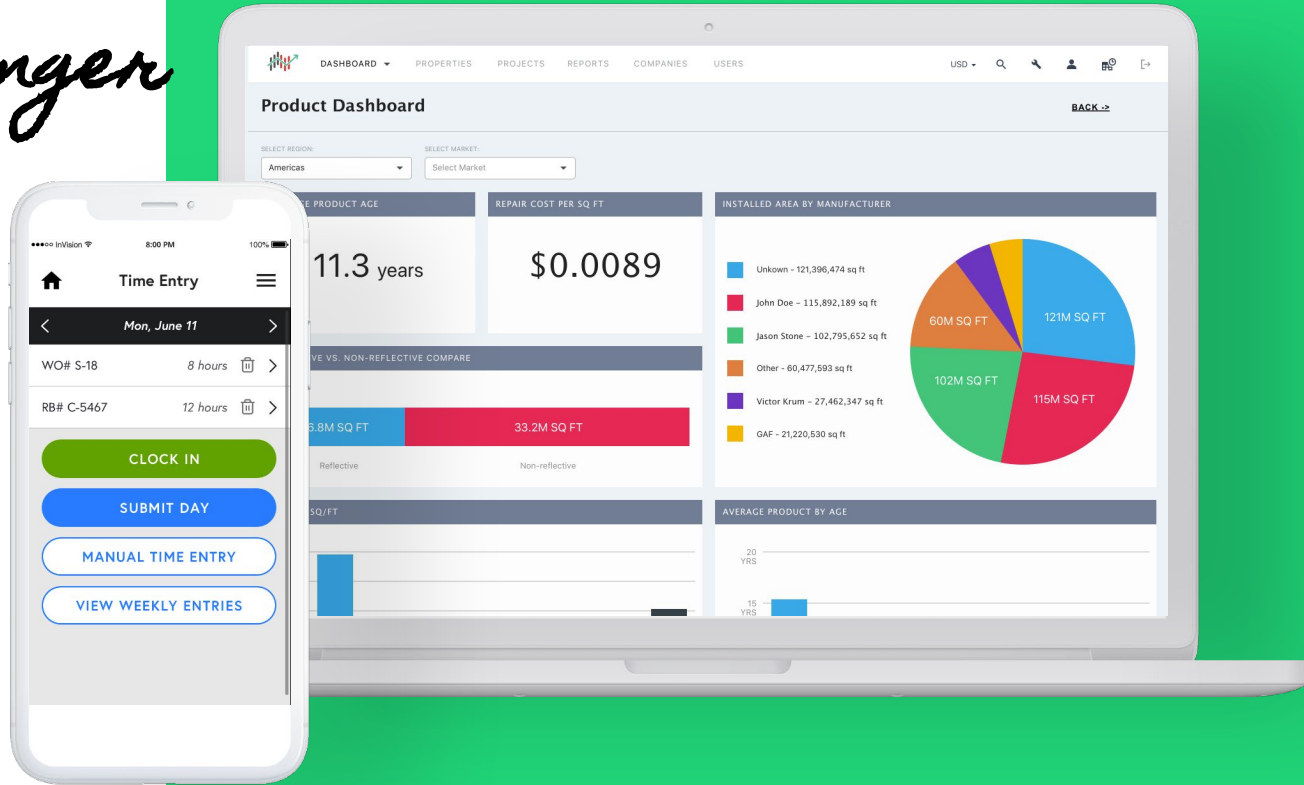
**SPARK**  
Business Works



# **CIO** 20 MOST PROMISING **CONSTRUCTION TECH** **Review** SOLUTION PROVIDERS



# Digital Time & Field Data Collection *is a Game Changer*





**Bob Armbrister**



**President/CEO**  
**SPARK Business Works**

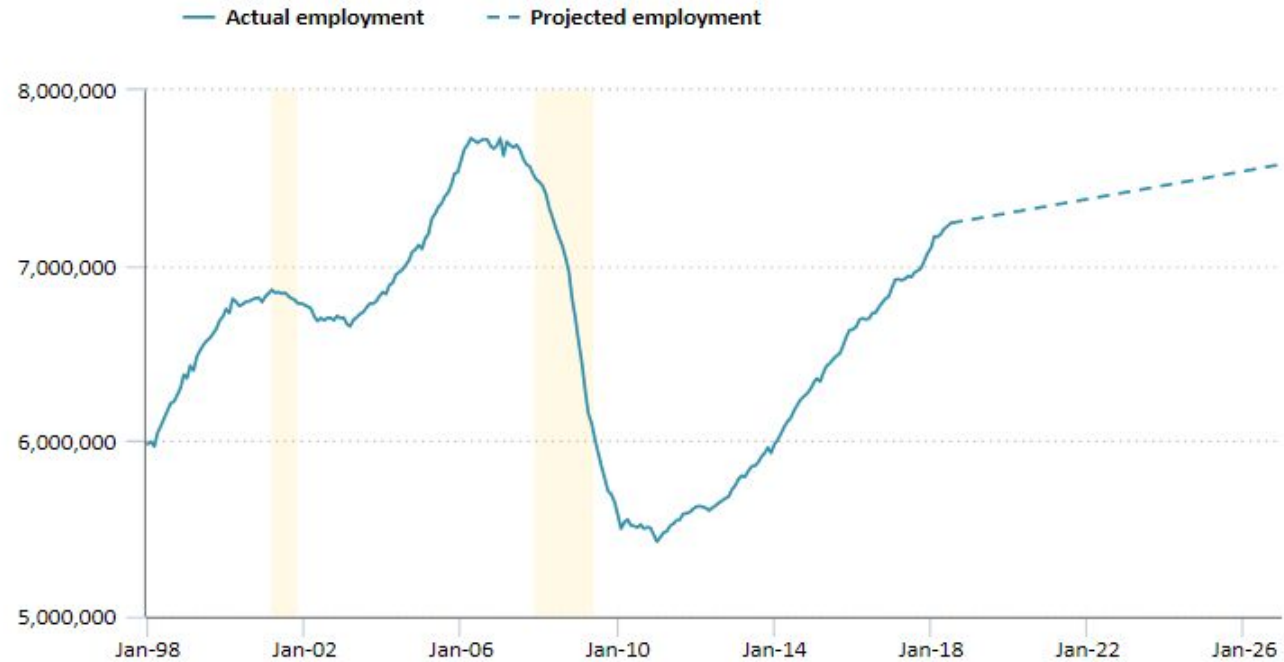
**It's 2020**

**Why are we talking about  
field data collection?**



**Because it's still a struggle for a lot of  
companies!**

Chart 1. Construction industry employment, January 1998–July 2018 (seasonally adjusted) and projected 2026



Note: BLS does not project specific data for each of the interim years to the 2026 projection point. These years are expressed as a dashed straight line. Data for June and July 2018 are preliminary.

Shaded areas denote Recession as determined by the National Bureau of Economic Research.

Source: U.S. Bureau of Labor Statistics, Current Employment Statistics survey (1998–2018 nonfarm wage and salary employment, seasonally adjusted) and Employment Projections program (2026 projected employment).



# What Are the Results of the Construction Labor Shortage?



# 44%

reported they have had to increase  
cost on projects

Post Fisher Inter  
1  
2  
3  
4

7 days?  
Post Dyer Rail  
Aug 20 - 4 00

1  
2  
3  
4  
5

Post Z-Lift June 30-31  
1  
2  
3  
4

White Cash  
Days 1. Nick Shufar  
Nights 1. Seba/Jam 15-25

WKKI 6-19 BUNGER REMOVAL  
1. Dave D  
2. Derek D  
3. Paul Guber

Post Rail Modification ASAP  
1  
2

Post July 10 Zushill problem 2908  
1  
2

Post shaker Pan 3 Building  
1  
2  
3

Post Jostill All Units June 25  
1  
2  
3  
4  
5  
6

Post Tuesday Setup A Frame 29 Building  
1  
2

1 See Davis  
2 Paul Guber  
3 Kurt Markin?

new Monday Supply Aug 6 (Estimate)

OK Paper June 11  
1 Rob Wolf  
2 Paul Guber  
3 Derek D  
4 Seba  
5 D. Dudley  
6 John Haley  
7 Steve Walkers

JAC 7-16-22  
1  
2 - Robert Anderson  
3  
4

9 days

MTI 6-30 Start Date

1 Bob Belter  
2) Garrett Sample  
3)

1) Dustin Morgan  
2) Charles Mank  
3) Dalton Bekins  
Fortister

D93 Epic  
1. Hayden Case  
2. Dave Case

Handy Sample

To: Laramie  
From: Laramie  
Date: Tuesday, June 5, 2018 1:43 PM  
Subject: Sample Request for Laramie

Project:

Dustin Morgan - Will be gone on an APN job 6-13-18 returning to AAA 6-13-18  
Duffy Austin  
Luke Anderson - In school this week  
Horton Lane  
David Case - In school this week  
Tyler Corcoran  
Maurice Rabman  
Andrea Lawrence - Working for P13 today and next Tuesday  
Mike Hefner - Not started back today  
Scott Wray - Working today then Friday and possibly the weekend. Not sure going forward  
Dusty James - Here for 92 Service vehicle. Scheduled for vehicles returned starting 7-9 and APC vehicle @ 11-1-18

Line Crew

Scott Hays  
Tom Hays

J. S. Laramie  
Project Management  
Shurlock Industrial Manufacturers and Contractors, Inc.  
Cell: 208-638-4020  
Cell: 208-962-5075 Fax: 208-962-8114  
3 Laramie Blvd. Rexburg, ID 83440  
www.shurlockinc.com

Multipal Machine Moves

1) Dustin Morgan  
2) Duffy Austin  
3) Luke Anderson  
4) Charlie James  
5) Hayden Case  
6) Dave Case

July 1  
Gene M

INTERNAL

**Job**

**Job**

**Name**

**Phase**

General

Defaults

Billing

Contracts

Date	Contract Type	Reference	Description	Amount
7/27/2002	Contract		Phase one of Air Conditioning	20,000.00

Billing Breakdown

Estimates

Cost Code	Cost Group	Description	Cost Distribution	Estimated Dollars	Estimated Qty	Unit of Meas
1000 Labor	10 Labor	All Labor	Labor	10,000.00	0.0000	Hr
2000 Materia	20 Material	Material	Material	4,000.00	0.0000	(None)
6001	60 G&A	General and Admin	Other	500.00	0.0000	(None)
7001	70 Warranty	Warranty - Labor	Other	300.00	0.0000	(None)

Total Estimated Dollars:

999,999,999.99

Total Estimated Qty:

999.999,999.99

Created: 7/26/2002 10:56:00 AM

Last Changed by: ernie

8/23/2002

11:20 AM



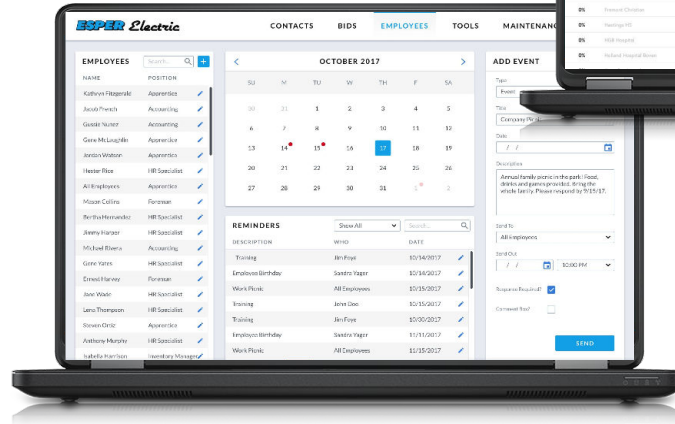
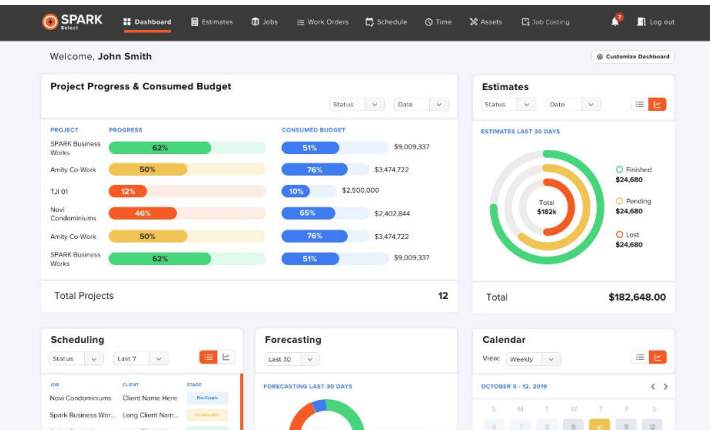
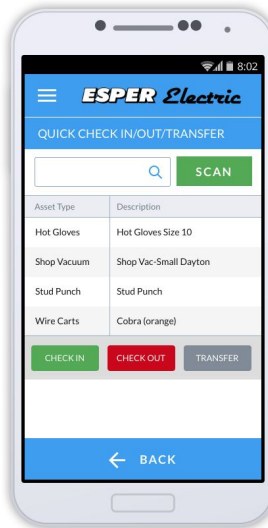
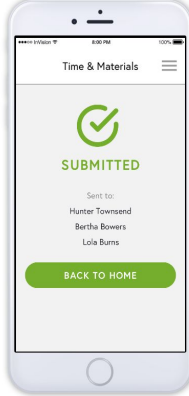
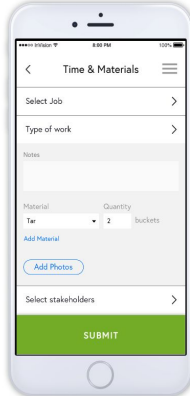
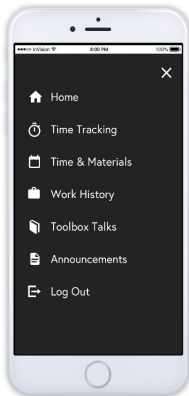
**SILVER  
LINING  
AHEAD**



EXTERNAL



INTERNAL







# 29%

are investing in technology to  
automate processes

Are you investing in automation?



Your crew is ready

How do we know this?

# COVID-19 Created an Opportunity



# Screening Form

Self-declaration and alert  
system for COVID-19.

[EasySafetyForms.com](https://EasySafetyForms.com)



Proudly built by:







Easy - Fast - Simple

[Watch video →](#)

# 1

## Scan Code



**All workers and visitors must  
complete a Health Screening  
before entry.**

*A todos los empleados, contratistas y  
visitantes deberán llenar el formulario de salud  
antes de ingresar.*

**Scan with your  
phone camera to view  
the screening form:**

*Or, visit the website to  
complete your screening.*



**Escanee con la cámara  
de su teléfono para  
ingresar al formulario:**

*O visite el sitio web para  
completar su evaluación.*

**SCAN ME**

[www.easysafetyforms.com/jobsite](http://www.easysafetyforms.com/jobsite)



**Acme Corp - Job Site Visitor Self Declaration Form**

Dear Visitor,

As part of our Novel Coronavirus (nCoV) safety measure, we seek your cooperation in completing the questionnaire below. This information will be maintained for a period of 3 months.

Querida Visitante,

Como parte de nuestra medida de seguridad de Novela Coronavirus (nCoV), buscamos su cooperación para completar el cuestionario a continuación. Esta información se mantendrá por un periodo de 3 meses.

**\* Required**

**First Name \***  
Primer Nombre

Your answer

**Last Name \***  
Apellido

Your answer

**Phone Number \***  
Número de teléfono

Your answer

**Company \***  
Empresa

Your answer

Have you traveled or been in contact with someone who has traveled outside your region in the past 14 days? \*

¿Ha viajado o ha estado en contacto con alguien que ha viajado fuera de su región en los últimos 14 días?




☐ Yes




☐ No

# 2


## Simple Submission

# Alerts and Data

11:37   

 **Inbox** Potential High Risk Visitor ...  

<[safety@sparkbusinessworks.com](mailto:safety@sparkbusinessworks.com)>  
Date: Tue, May 12, 2020 at 12:38 PM  
Subject: Potential High Risk Visitor




Please check your data source of your Job Site Visitor Self Declaration Form.





A recent visitor could be at risk of COVID-19.

You can view your responses [here](#).

Thank you,  
SPARK Safety

--  
SPARK Safety Team  
T: 855.277.2752  
E: [safety@sparkbusinessworks.com](mailto:safety@sparkbusinessworks.com)

 **SPARK**  
Safety

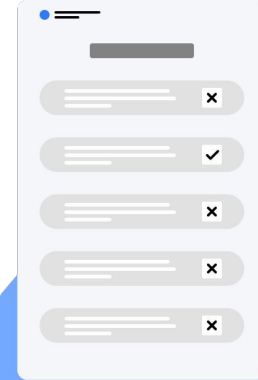
[illegible]



KINDEL



**SPARK**  
Safety



**500+ Job Sites & Facilities**

# What did we learn?

Technology adoption is getting **easier** in construction

Team members are willing to **use their own devices**

Data can be **entered daily**

It works when it is **Easy, Fast & Simple**

OK this is one example...what else is happening?

A close-up, slightly blurred image of a laptop screen. The screen shows a line graph with a blue line and a pie chart with a green slice. The background is dark, and the text is white. The text is centered and reads: "Does this sound familiar?"

**Does this sound familiar?**

**It is a Monday and...**

**Payroll is due...**

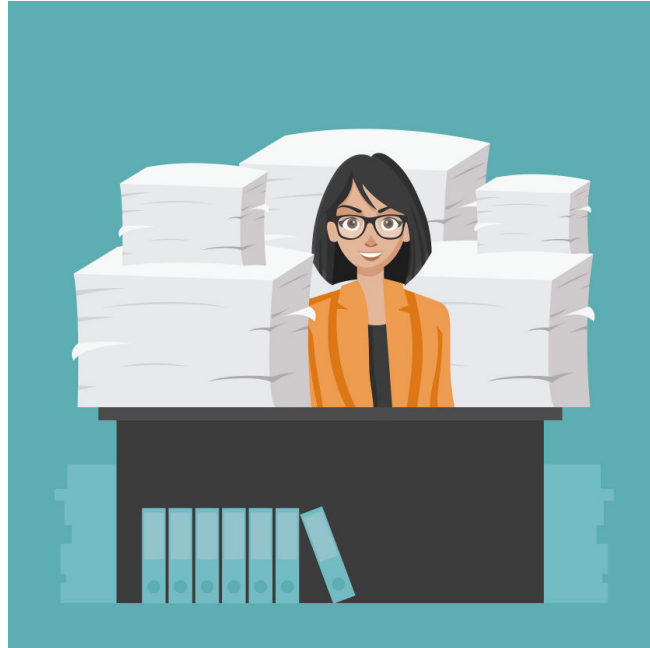




# Betty makes sure all crew time is reported...



# Betty checks a stack of time sheets and notices this...

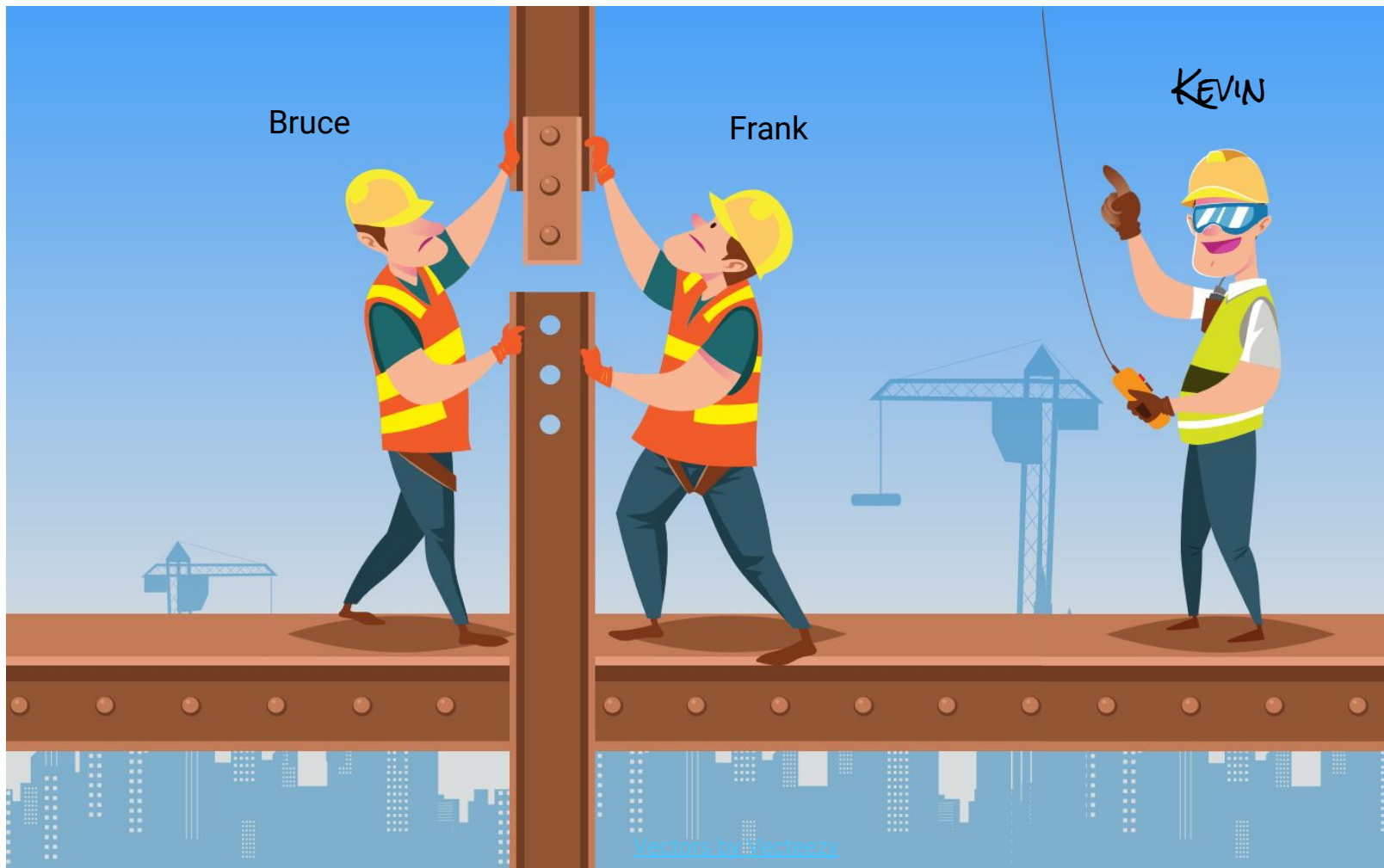


[illegible]

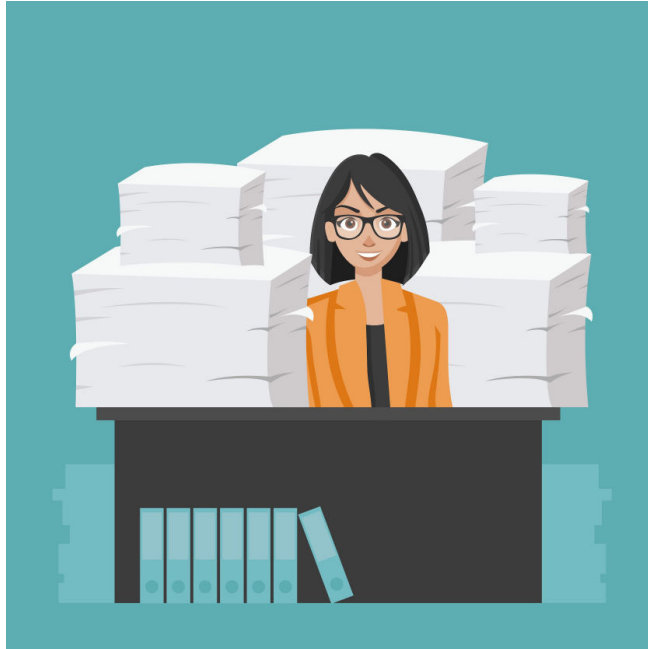
Bruce

Frank

KEVIN



# Betty checks her text messages and sees this...



●●●● Sprint LTE

8:32 AM

52% 

[← Messages](#)

**Kevin**

[Details](#)

Forgot to include my time on the time sheet. Here it is...

Did you use any equipment?

An electric power pack

You worked two days last week?

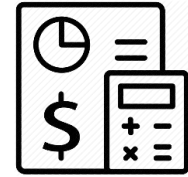
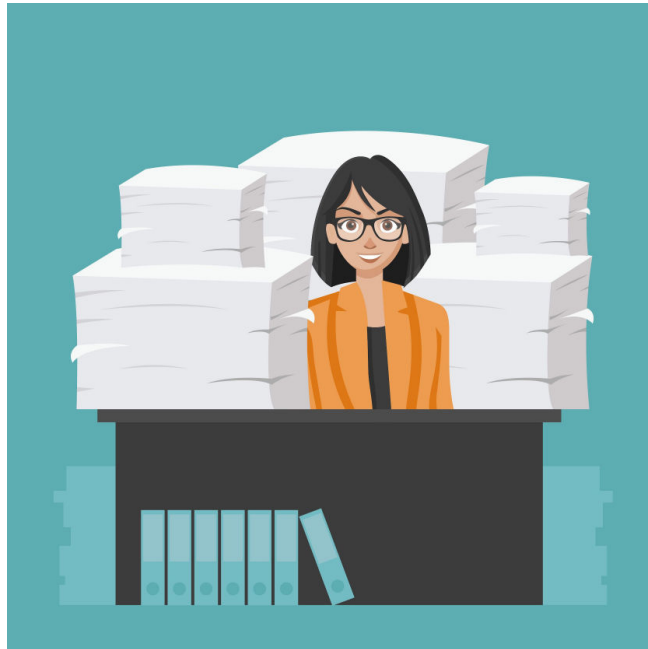
I also worked on Saturday for 2 hours.  
Thanks Betty



iFakeTextMessage.com



# Betty processes Kevin's time for payroll and job costing...



Payroll



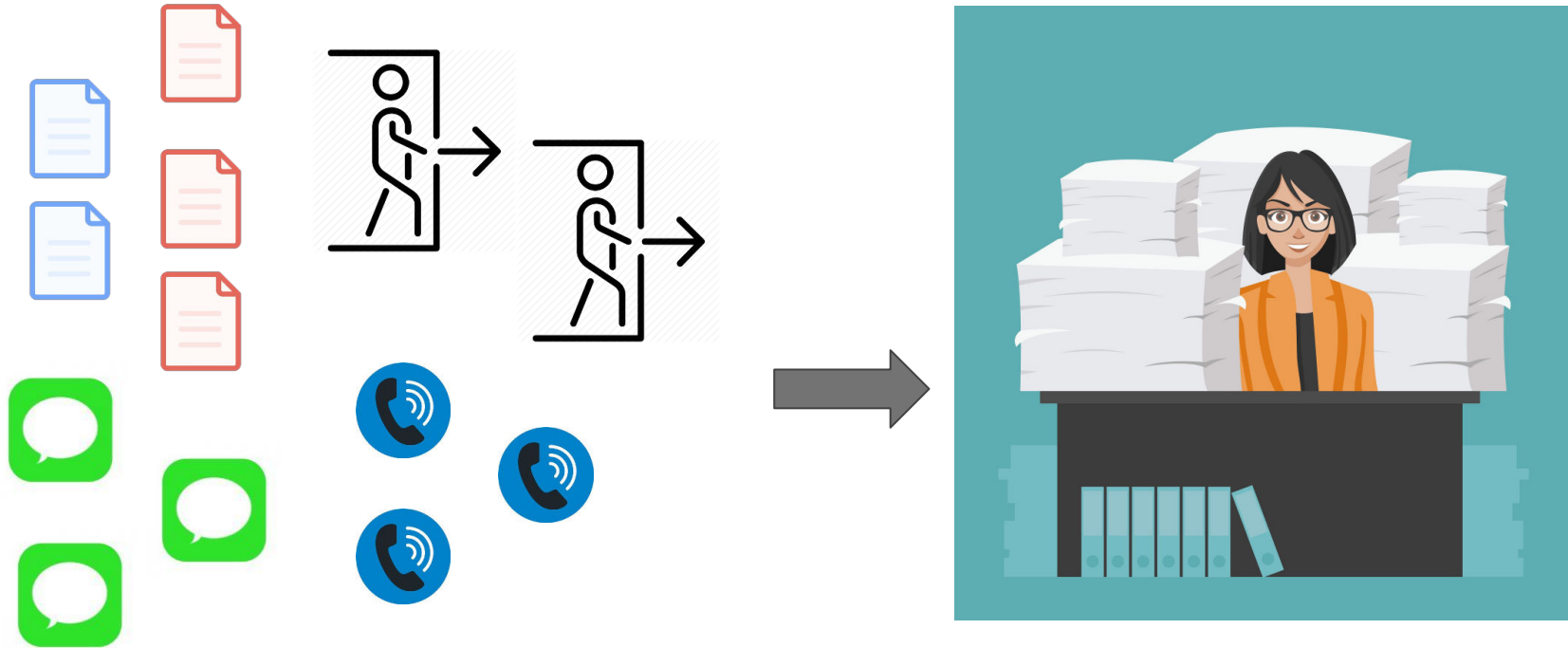
ComputerCase



Job Costing

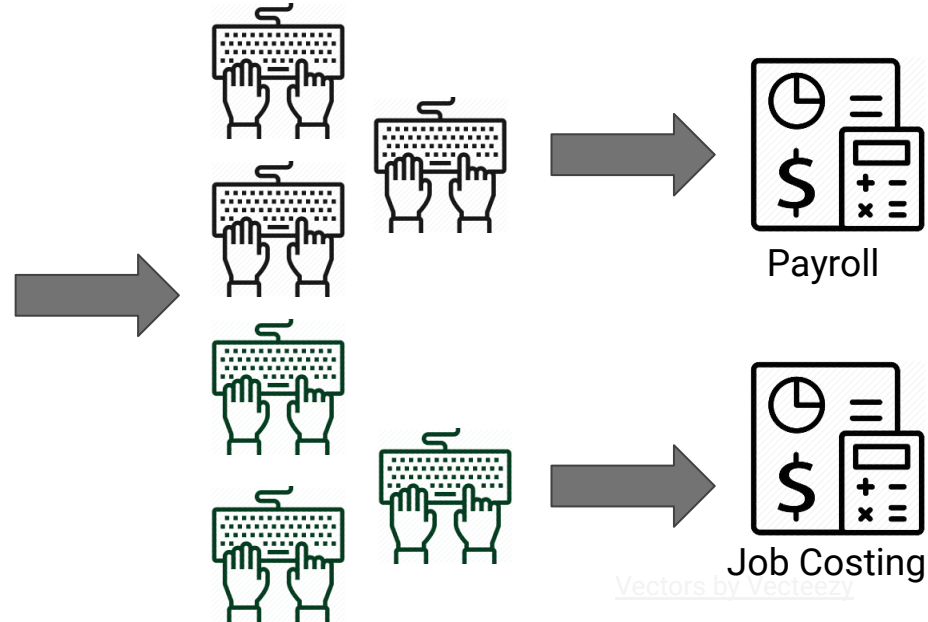
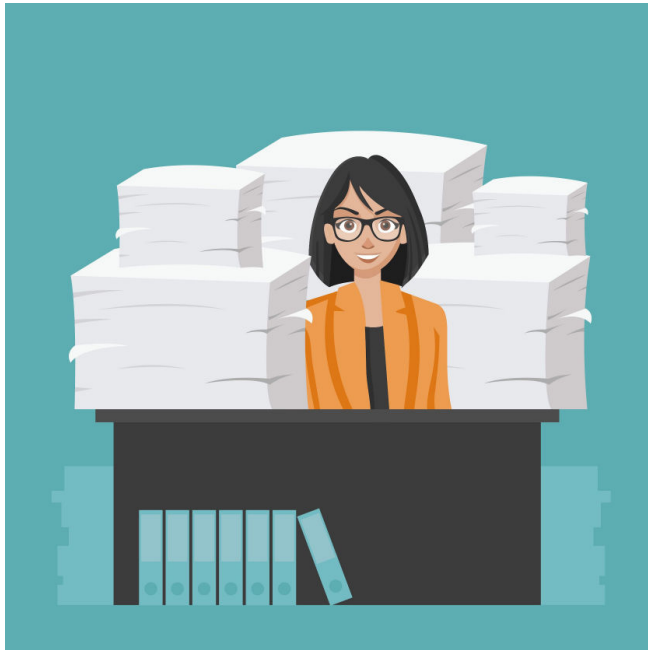
sage

# Helps everyone make sure their time entry is complete...






# She manually enters all payroll and job costing...



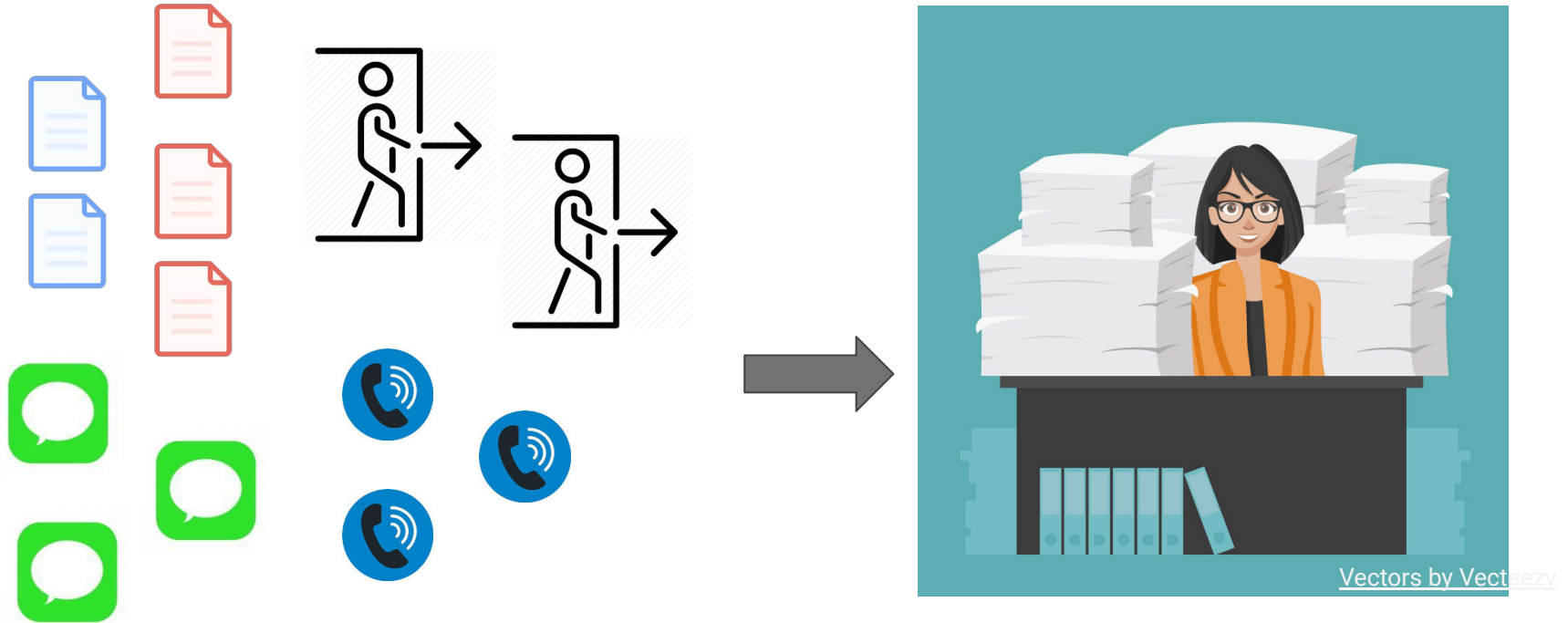
**Betty is frustrated.**

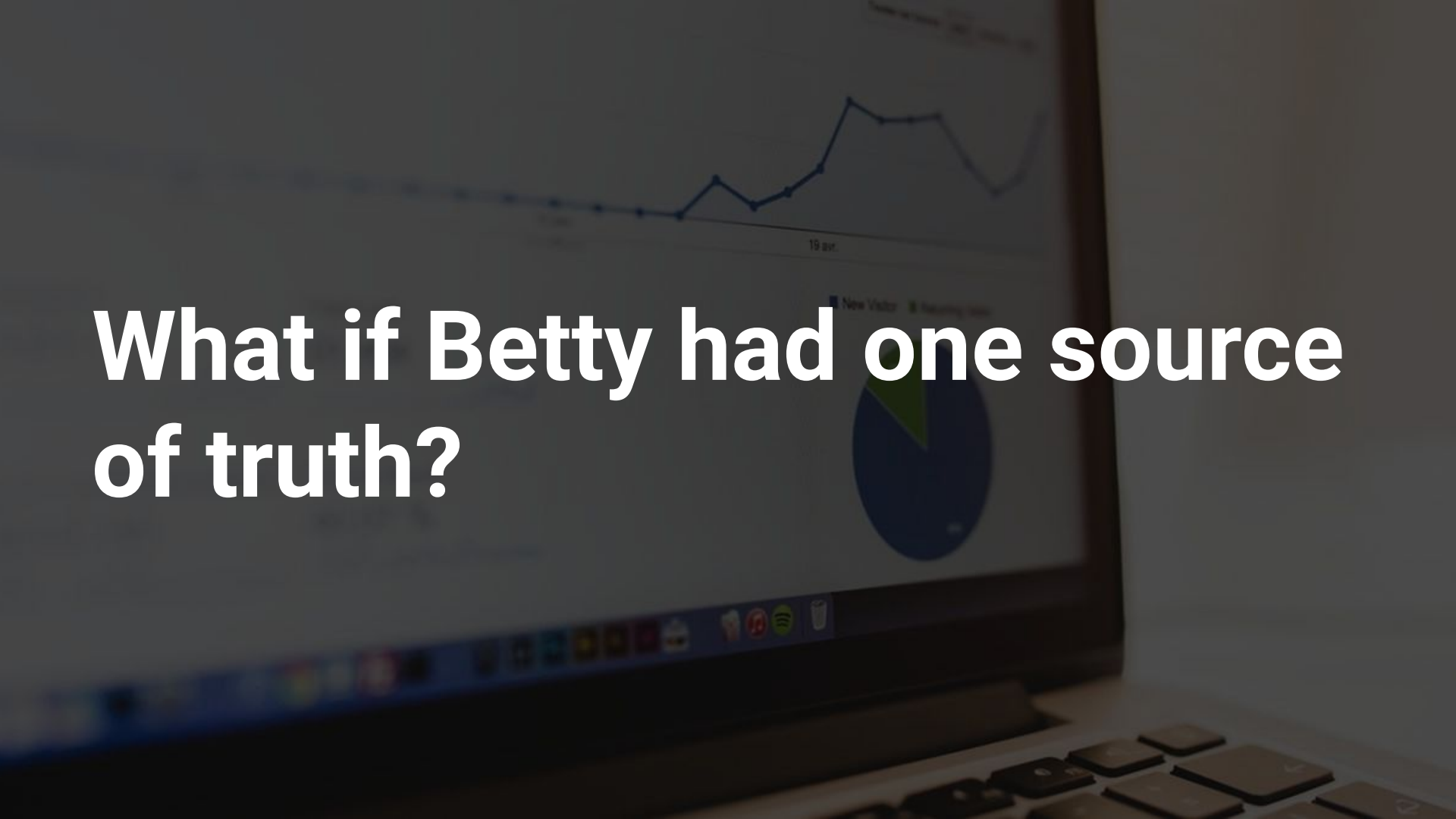
**It feels like she is  
babysitting to make sure  
crews are paid.**

A laptop screen is shown with a dark overlay. On the screen, there is a line graph with a blue line and a pie chart. The text "Time is wasted from double-entry and follow-up" is written in white, bold, sans-serif font across the center of the screen. The background is a blurred image of a laptop keyboard and screen.

**Time is wasted from  
double-entry and follow-up**

# Betty needs to get rid of the many ways time is reported...



A laptop screen is shown with a dark overlay. On the screen, there is a line graph with a blue line and a pie chart with a blue and green segment. The text 'What if Betty had one source of truth?' is written in large white font across the center of the screen. The laptop keyboard is visible at the bottom.

**What if Betty had one source of truth?**

**Digital time tracking is a starting point**

**TIME ENTRY**

WEDNESDAY, 8/9

Job: **1-Menards**

Equip No: **104** | Hours: **3.0** | Tons/Salt: **0**

Attachment: **N/A** | 12' | 14' | 16'

Job: **15-Midwest Electric Motor**

Equip No: **104** | Hours: **1.5** | Tons/Salt: **0**

Attachment: **N/A** | 12' | 14' | 16'

Total Hours: **5.0**

**ADD** **SEND**

Equipment, Maintenance  
& Quantity

**Schedule**

Current Period

SUN MON TUE WED THU **FRI** SAT

Job: **C88157** | Labor Code: **Wiring** | Hours: **3.0**

Job: **C88157** | Labor Code: **Clean Up** | Hours: **1.0**

Job: **Overhead** | Labor Code: **Vacation** | Hours: **4.0**

**+** Total Hours: **8.0**

Vehicle Mileage \*

**SEND**

Multiple Jobs

**TIME ENTRY**

Wednesday, 10/9

Job Site Time

Start time: **6:00 AM** | Lunch: **Yes** **No** | Stop time: **6:00 PM**

Employee: **John Smith** | PTO | Rain

Job: **7465 - ...** | Equipment: **5006**

Cost Code: **Gravel** | Hours: **2** | Extra: **✓**

Job: **7504 - ...** | Equipment: **Labor**

Cost Code: | Hours:

Cost Codes &  
Multiple Jobs

**TIME ENTRY**

Wednesday  
October 4, 2017

Job #1

**Add Crew** **Crew Time**

Search: **Doe**

John Doe | **JOURN** | **+**

Mary Doe | **FORE** | **+**

Can't find who you are looking for? **×**

Sandra Yager | **APPR** | **✓**

Team Entry

# One-Click // Real-Time Reporting for Time

## WHO OWES TIME?

☐ Show only employees who owe time

< Nov 1 - 7 >

EMPLOYEE NAME	MON 2	TUE 3	WED 4	THU 5	FRI 6	SAT	SUN
---------------	-------	-------	-------	-------	-------	-----	-----

AY Aaron Yager	12.25		1.00				
----------------	-------	--	------	--	--	--	--



AM Abby Munoz	8.00	6.00	1.00	7.50	1.00		
---------------	------	------	------	------	------	--	--

BW Betty Webster				8.25			
------------------	--	--	--	------	--	--	--



Abby Munoz  
Tue Sept 3

ST	OT	DT	TOT
3.00	0.00	3.00	6.00

edit

CW Cindy Wilkerson							
--------------------	--	--	--	--	--	--	--

JM Jerry Martinez					1.00		
-------------------	--	--	--	--	------	--	--

1577-17-01 Boldt:  
ND Powerhouse

1.00	0.00	3.00	4.00
------	------	------	------

JP Johanna Park					1.00		
-----------------	--	--	--	--	------	--	--

1577-17-01 Boldt:  
ND Powerhouse...

0.00	0.00	0.00	0.00
------	------	------	------

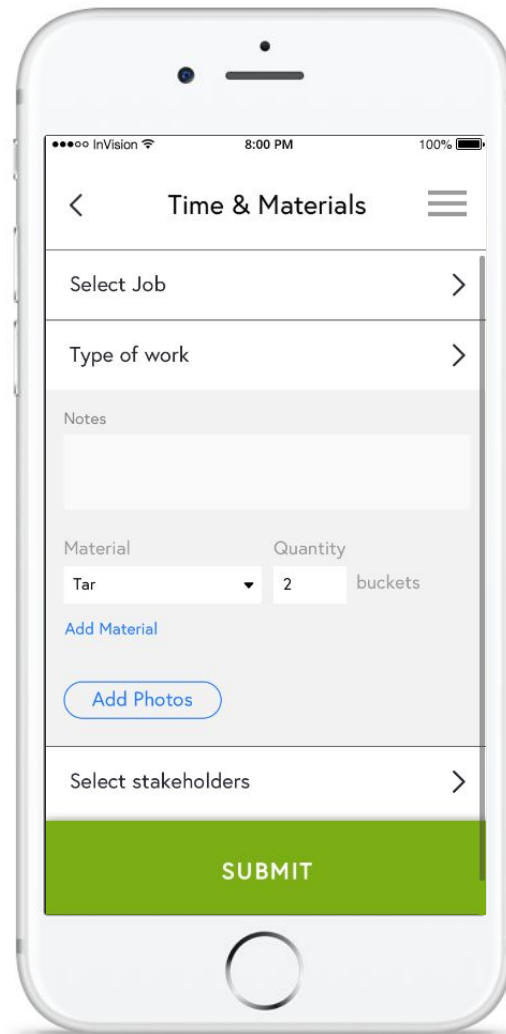
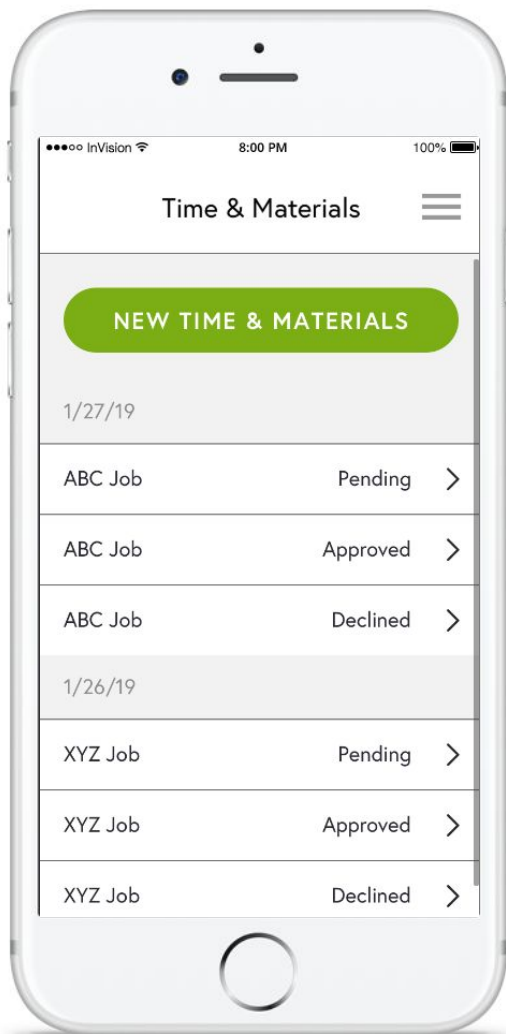
NS Nina Simpson					1.00		
-----------------	--	--	--	--	------	--	--

1577-17-01 Boldt:  
ND Powerhouse...

2.00	0.00	0.00	2.00
------	------	------	------



# Tracking time & materials



# One-Click // Real-Time Reporting

[Dashboard](#)[Jobs](#)[Clients](#)[Time Manager](#)[Time & Materials](#)[Employees](#)[Schedule](#)[Settings](#)[Super Admin](#)[Sign out](#)

Job

All

Select Date

11/17/2019 - 11/23/2019

Submitted By

All

[Add T&M](#)


T&M #	Job	Submitted On	Submitted By	Total Labor	Total Material	Total Equipment	Status
9-27	Novi Condominiums	09/23/19	rlogical rlogical		20.40	102.00	Approved
9-26	Novi Condominiums	09/02/19	Stormtrooper #1	6.75	252.00	143.00	Declined
9-25	Novi Condominiums	06/11/19	Stormtrooper #1		247200.00	12.00	Pending
9-24	Novi Condominiums	06/12/19	Stormtrooper #1	3	424.00	101.00	Approved
9-23	Novi Condominiums	06/14/19	Darth Vader				Approved
9-22	Novi Condominiums	07/23/19	Darth Vader	0.75	2276.30	38.25	Pending
9-21	Novi Condominiums	08/20/23		1.5			Pending
9-2	Novi Condominiums	06/06/19	Stormtrooper #1	0.75			Pending
9-19	Novi Condominiums	08/21/26		9	725.00	43.00	Pending

**KNOWLEDGE IS POWER**

**FALSE. DATA ENTRY IS POWER**

A close-up, slightly blurred photograph of a laptop screen. The screen displays a data visualization interface. In the upper half, there is a line graph with a blue line showing fluctuations over time, with a label '19 av.' visible. Below the graph, a pie chart is partially visible, with a legend indicating 'New Visitor' (blue) and 'Returning Visitor' (green). The bottom of the screen shows a macOS-style dock with various application icons. Overlaid on the center of the screen is the text 'So, how is technology being leveraged?' in a large, white, sans-serif font.

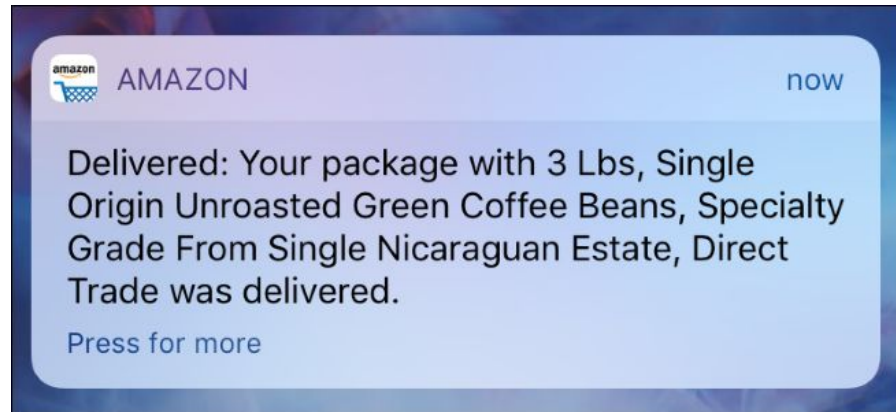
**So, how is technology being leveraged?**

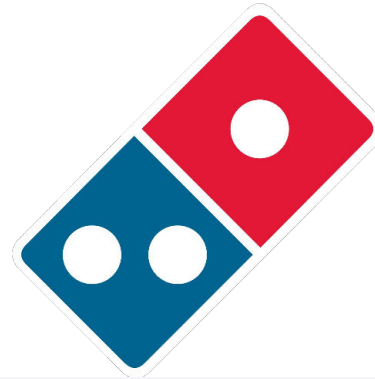
A laptop screen is shown with a dark overlay. On the screen, there is a line graph with a blue line and a pie chart with a green slice. The text "Let's look at how some companies you already know are doing it for their challenges..." is written in white, bold, sans-serif font across the center of the screen. The laptop keyboard is visible at the bottom.

**Let's look at how some  
companies you already know  
are doing it for their  
challenges...**



# amazon





## Project Progress & Consumed Budget

Status



Date



### PROJECT

### PROGRESS

### CONSUMED BUDGET

SPARK Business Works

62%

51%

\$9,009,337

Amity Co-Work

50%

76%

\$3,474,722

TJI 01

12%

10%

\$2,500,000

Novi Condominiums

46%

65%

\$2,402,844

Amity Co-Work

50%

76%

\$3,474,722

SPARK Business Works

62%

51%

\$9,009,337

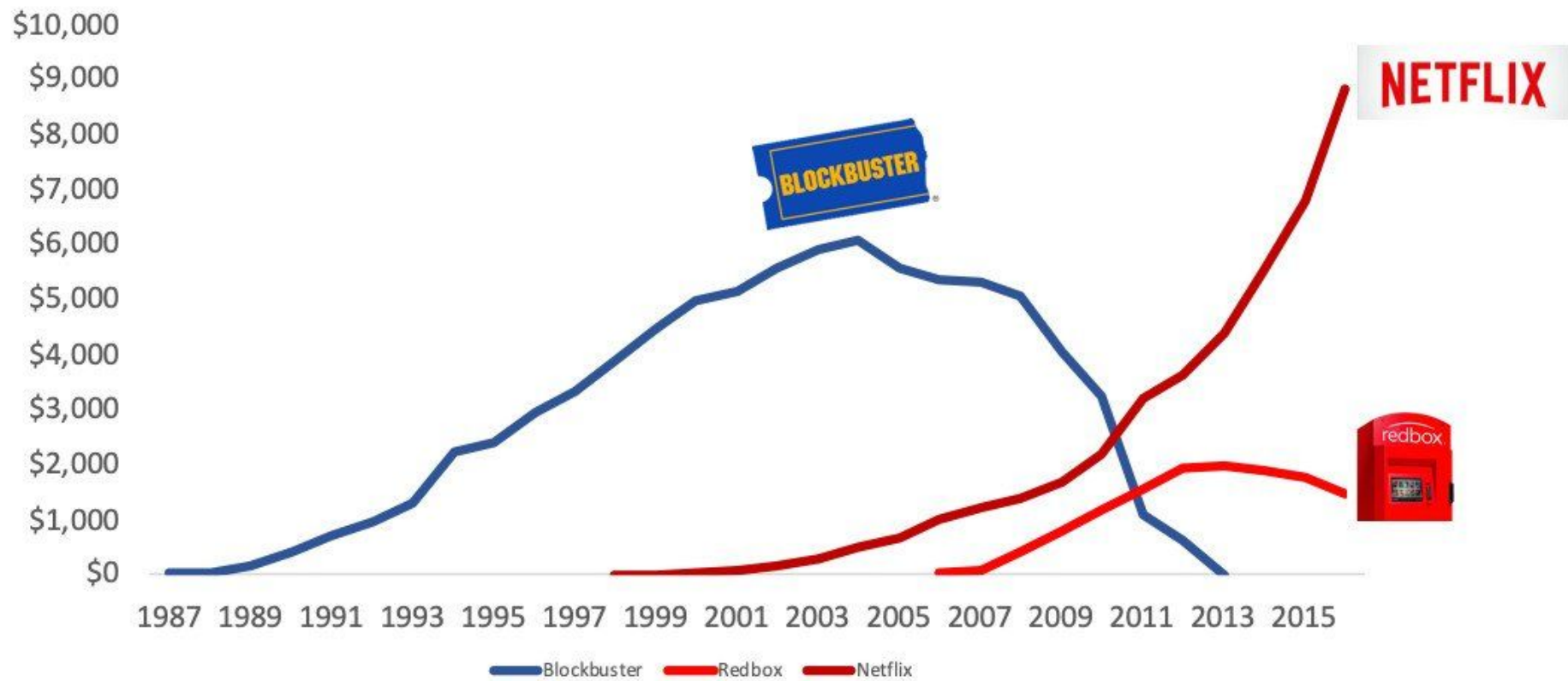
Total Projects




An aerial photograph of a city skyline at dusk or dawn. The sky is a mix of dark blue, purple, and orange. The city is densely packed with skyscrapers, many of which are illuminated with lights. The Empire State Building is prominent in the center, with its top lit in red and green. The text "What happens if technology is not leveraged?" is overlaid in a large, white, sans-serif font, centered horizontally and vertically.

**What happens if technology  
is not leveraged?**

Revenues (Millions)

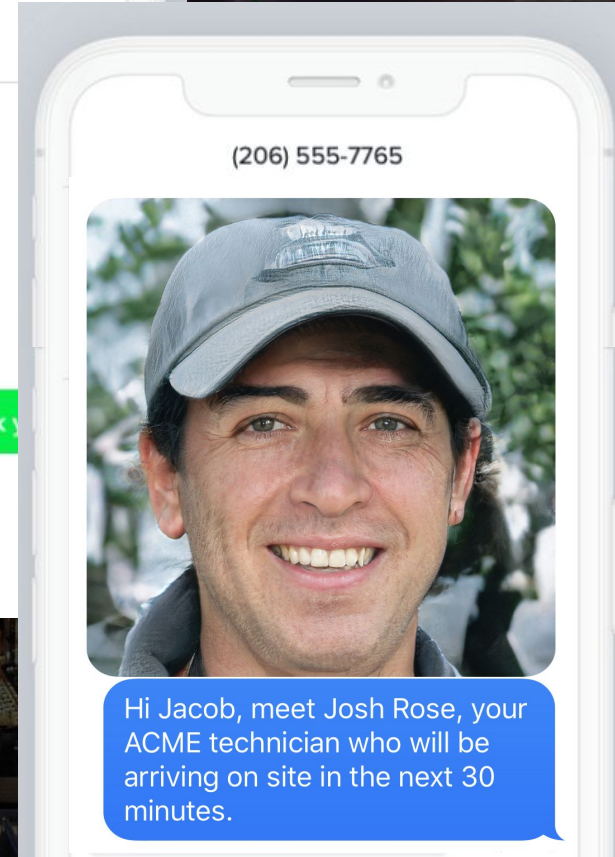
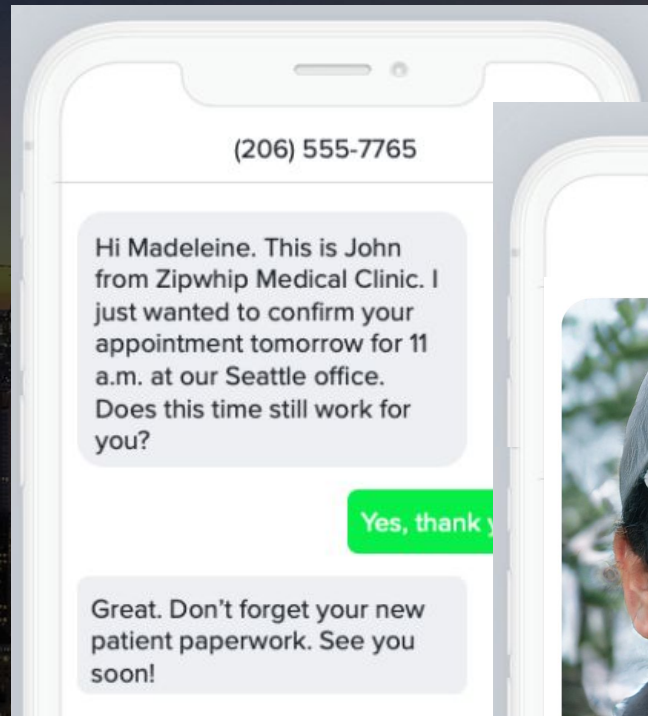


An aerial photograph of a city skyline, likely New York City, taken at dusk or dawn. The sky is a mix of dark blue and orange, with some clouds. The city is densely packed with skyscrapers, many of which are illuminated with lights. A large body of water is visible in the background. The entire image is covered with a dark, semi-transparent overlay, making the white text stand out.

**So, what technology  
is being used to  
increase automation  
on mobile devices?**



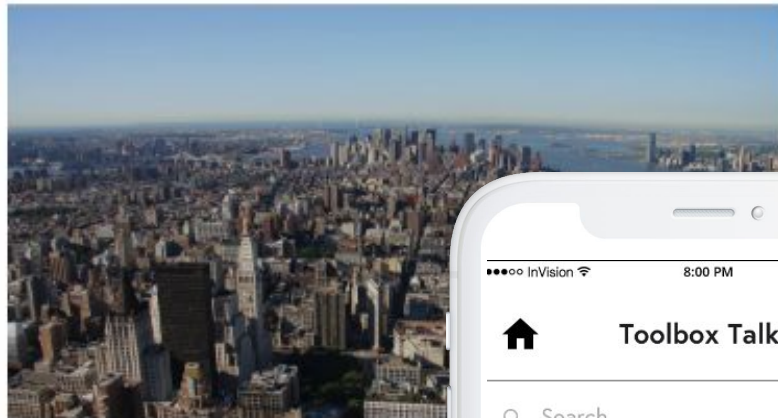
# Text Messaging



# Push Notifications

 Crew Time Entry ^

Please submit your time entry for your crew.  
Be sure to report your mileage and any



Reply Ignore Cancel

●●● InVision 8:00 PM 100%



Toolbox Talks



Q Search...



Toolbox Talk Fact Sheet



Basic Electrical Toolbox Talk Bi...



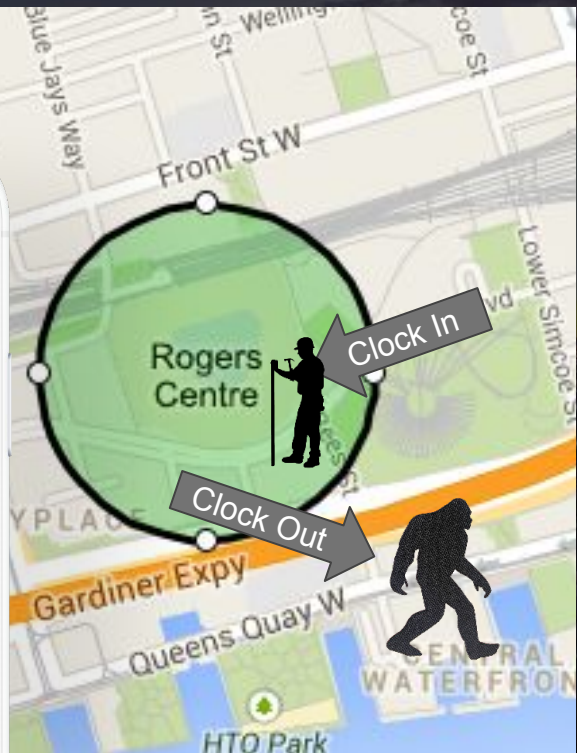
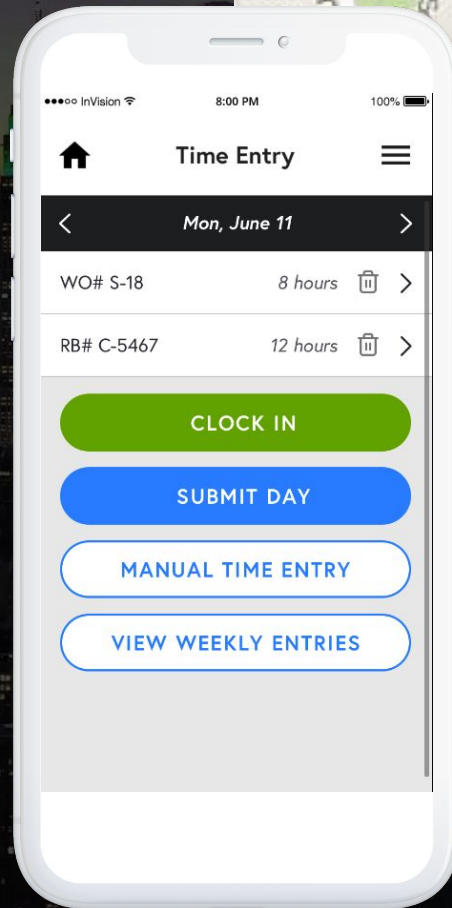
Compressed Gas Cylinders Too...



Computer Ergonomics Toolbox...



# GPS & Geofencing



An aerial photograph of a city skyline at dusk or dawn. The sky is a mix of dark blue, purple, and orange. The city is densely packed with skyscrapers, many of which are illuminated with lights. The text "5G network is here" is written in a large, white, sans-serif font, and "10 - 100x faster than 4G/LTE" is written below it in the same style. The text is centered horizontally and vertically over the image.

**5G network is here**  
**10 - 100x faster than 4G/LTE**



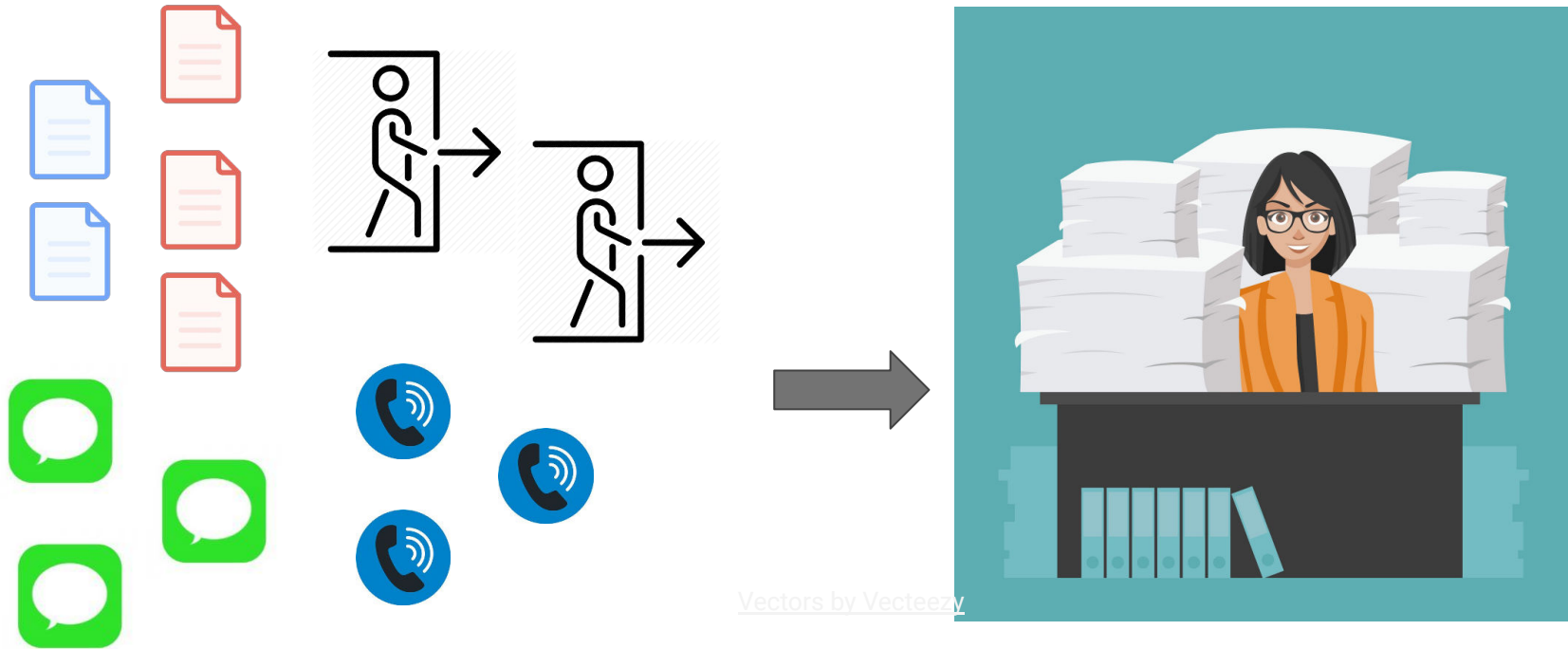
A laptop screen is shown with a dark overlay. On the screen, there is a line graph with two data series: 'New Visitor' (blue line) and 'Returning Visitor' (green line). The 'New Visitor' line shows a general upward trend with some fluctuations, while the 'Returning Visitor' line is relatively flat. Below the graph is a pie chart with a large blue section and a smaller green section. The text 'How could your company use these tools?' is overlaid in white, bold font.

**How could your company  
use these tools?**

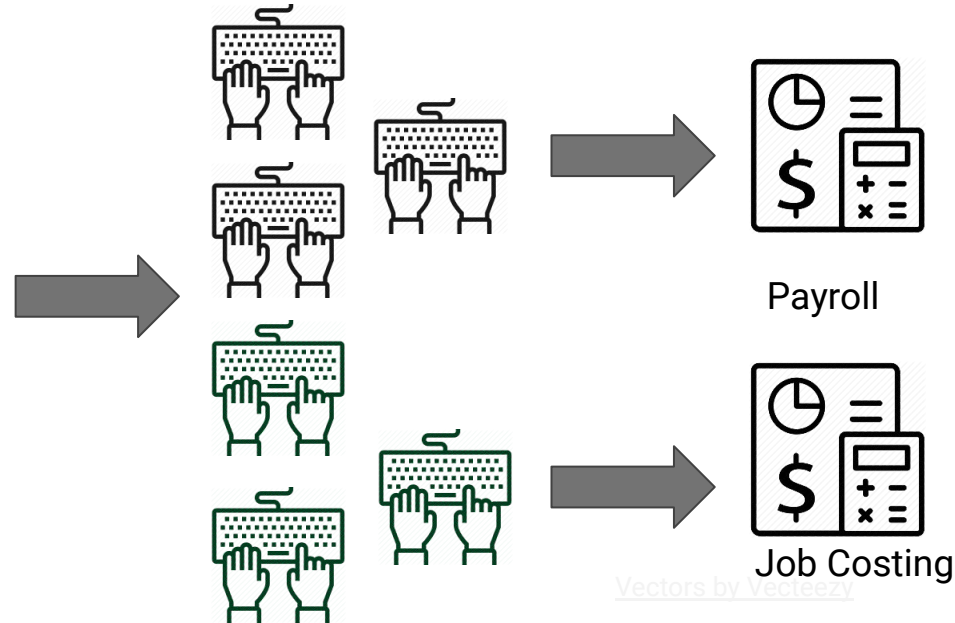
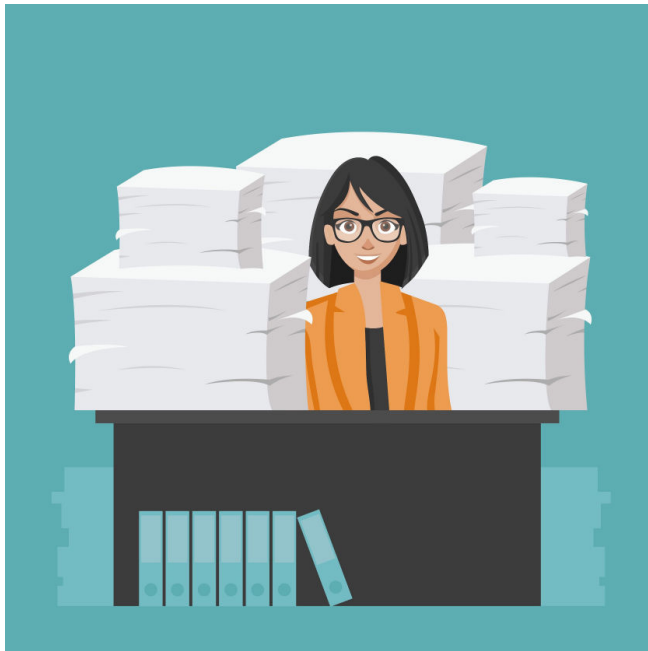
**Let's imagine this for a moment...**



# Rather than Betty getting time and field data from...



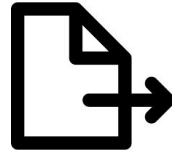
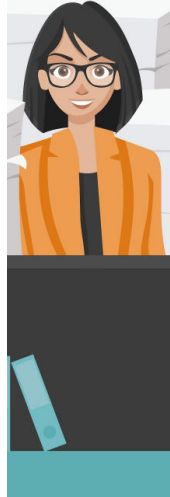
# And manually entering Payroll and Job Costing...



# It could be like this...



One Source  
of Truth



Export  
Button




Payroll and  
Job Costing


# Payroll & Accounting Integrations

**EXPORT TIME DETAILS**

SELECT DATE RANGE

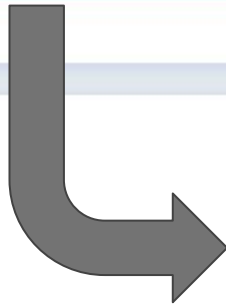


SELECT JOB NEW



SELECT EMPLOYEE(S)

[Export](#) [View FMT Location Report](#)



**sage**  
50, 100, 300



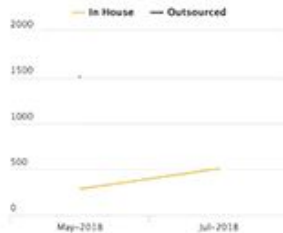
**ComputerEase**



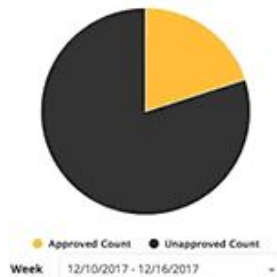
50, 100, 300



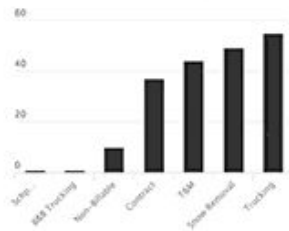
### Monthly Maintenance Costs



### Approved Time



### Job Count by Type



### Quick Reports

[Maintenance Board](#)

[Maintenance Requests](#)

[Out Of State Mileage Log](#)

[Equipment List](#)

[Time Entry Export](#)

[Active Job List](#)

[Employee List](#)

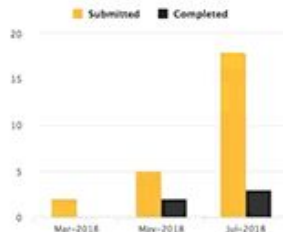
[Invoicing](#)

[Extras Report](#)

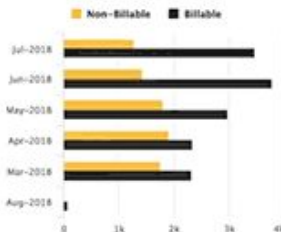
[Non Billable Labor](#)

[Per Diem Report](#)

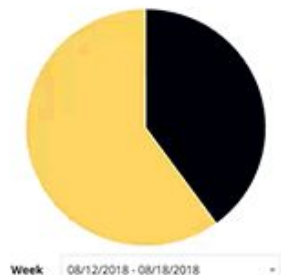
### Maintenance Requests



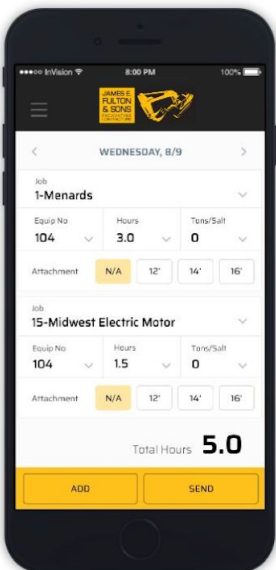
### Hours to Job vs Non Billable



### Hours by Job Type



Week: 08/12/2018 - 08/18/2018







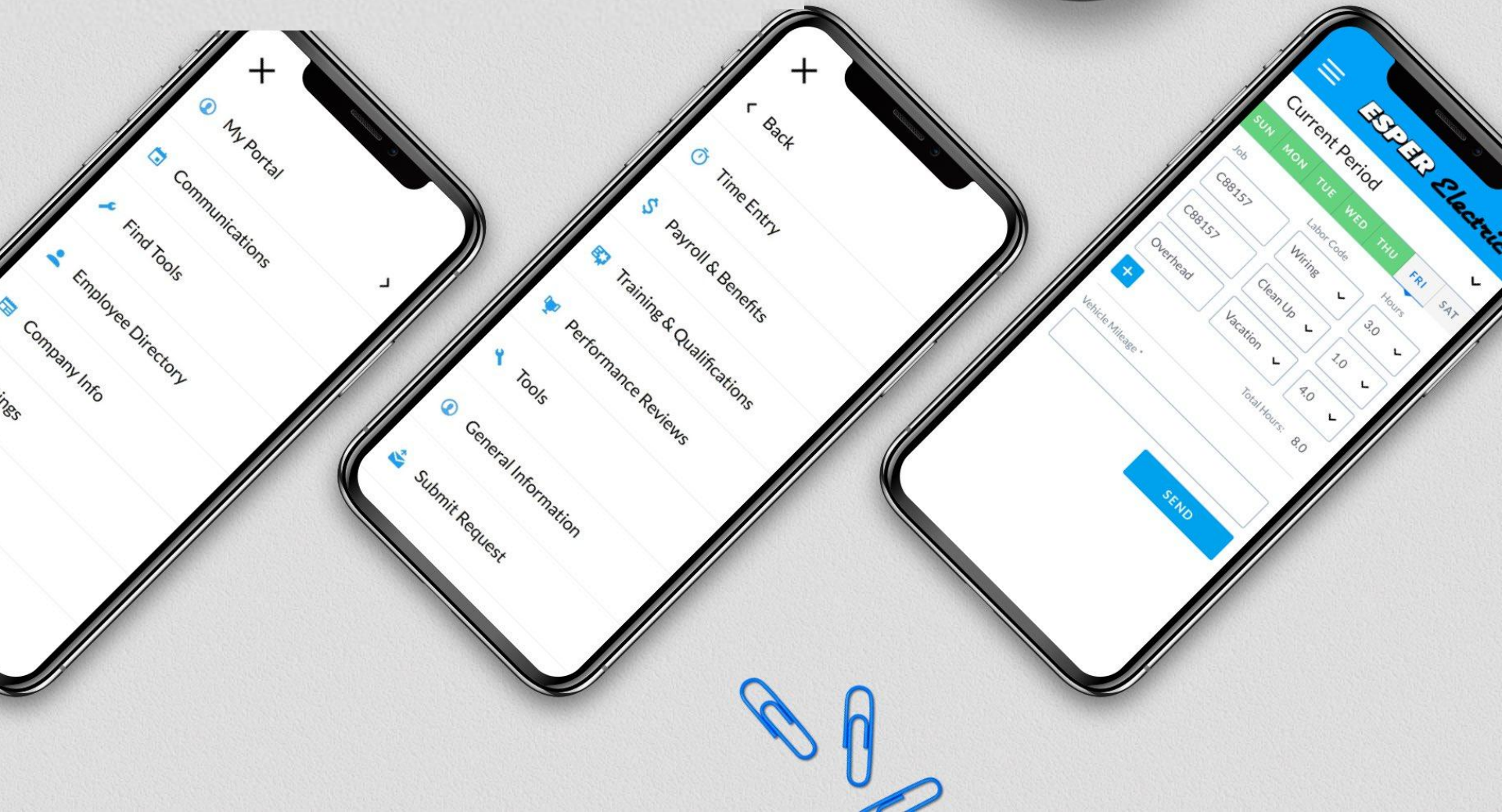
**34 Years in Business**

**Diamond ABC Safety Award Winner**

**Services:**

- Residential
- Commercial Construction
- Industrial Services
- Facilities Maintenance





+

My Portal

Communications

Find Tools

Employee Directory

Company Info

ings

+

< Back

Time Entry

Payroll & Benefits

Training & Qualifications

Performance Reviews

Tools

General Information

Submit Request

ESPER Electric

Current Period

SUN MON TUE WED THU FRI SAT

Job: C88157

Labor Code: C88157

Overhead

Wiring

Clean Up

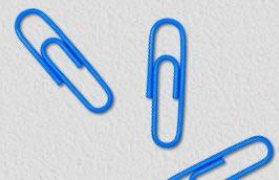
Vacation

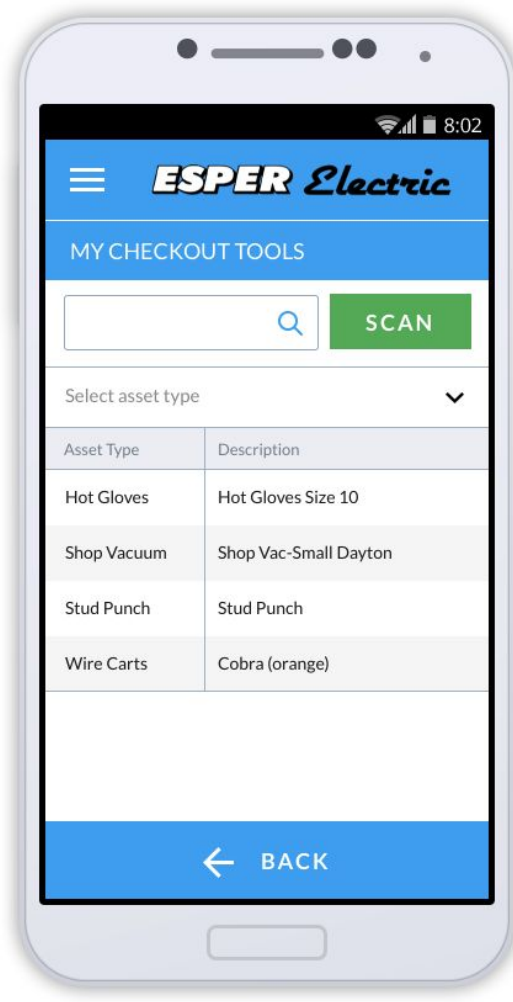
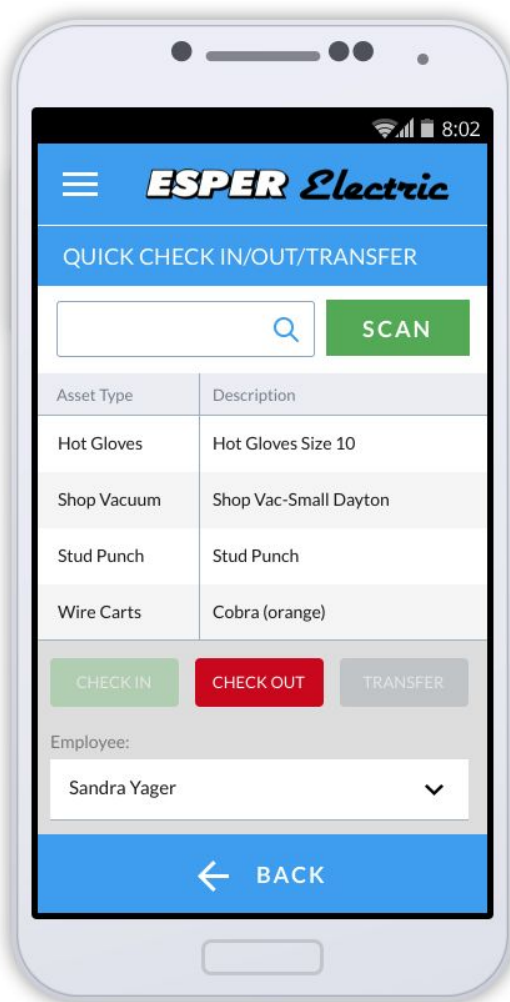
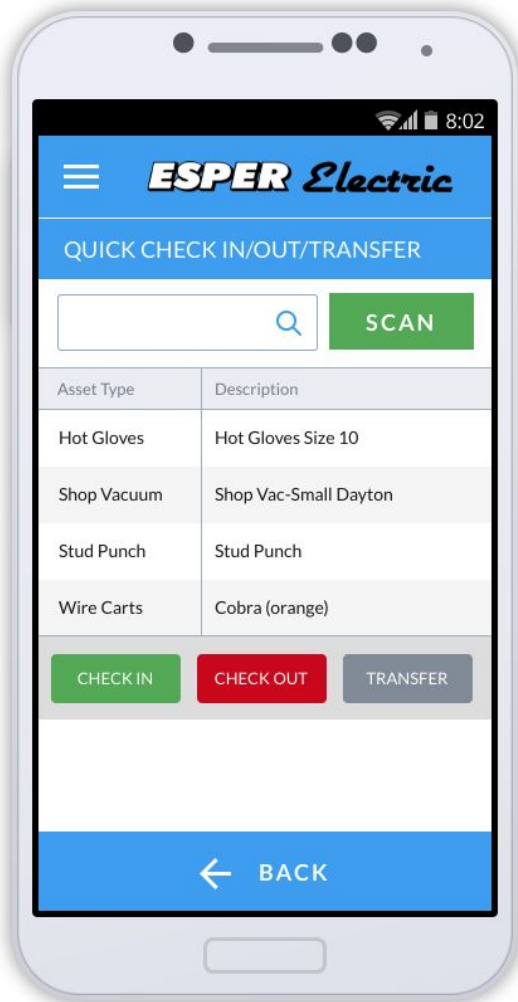
Hours: 3.0

Vehicle Mileage \*

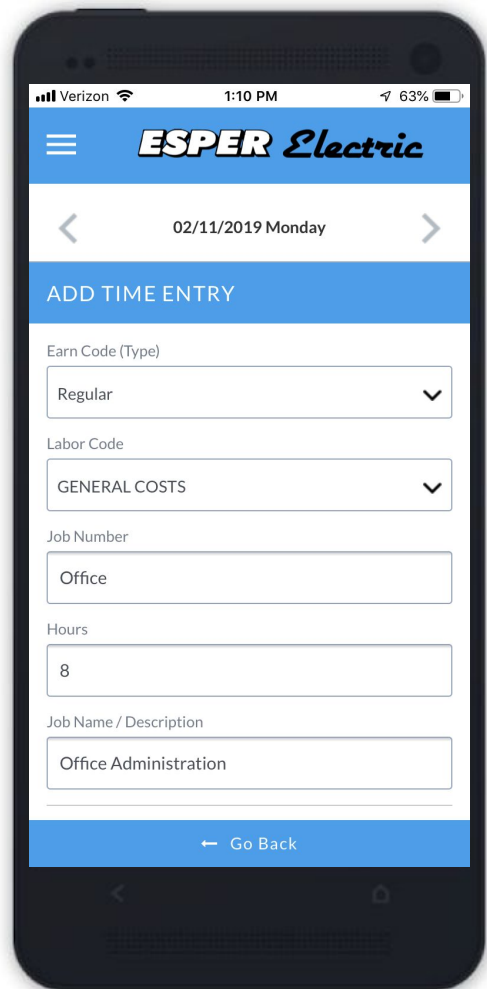
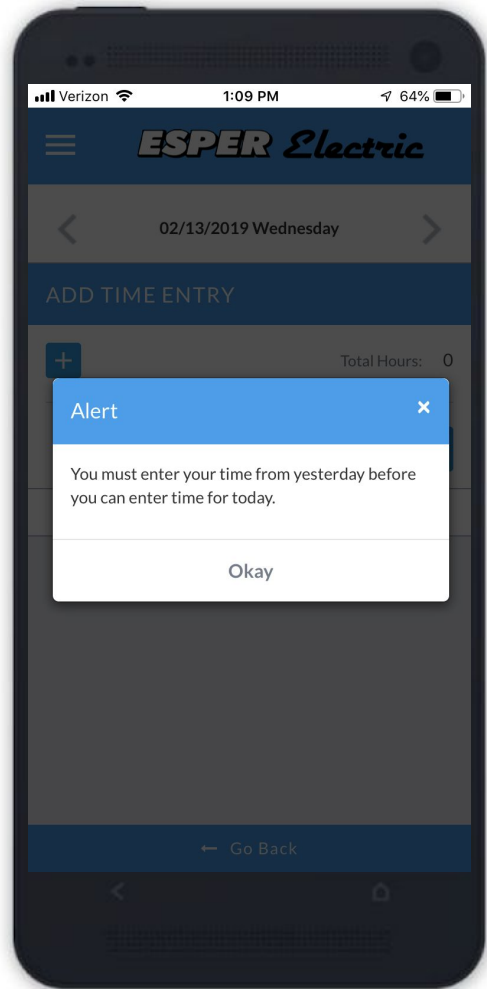
Total Hours: 8.0

SEND

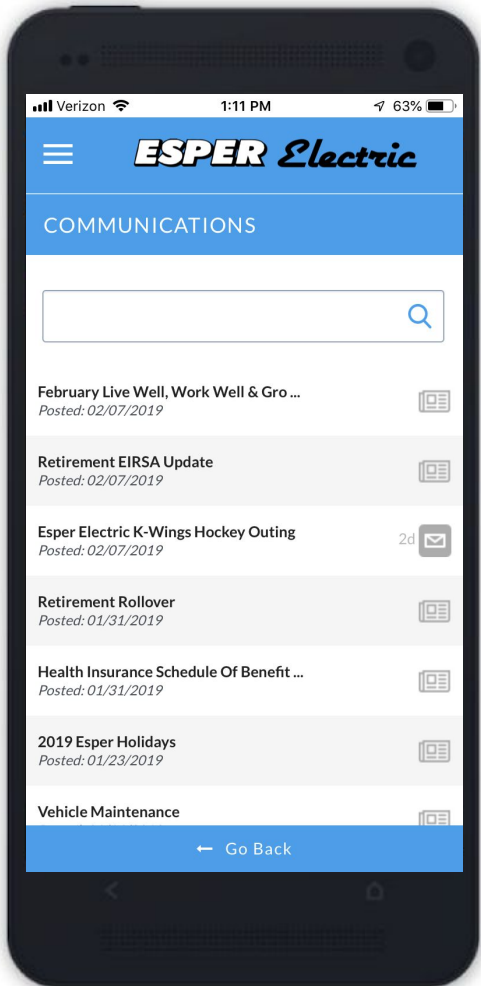
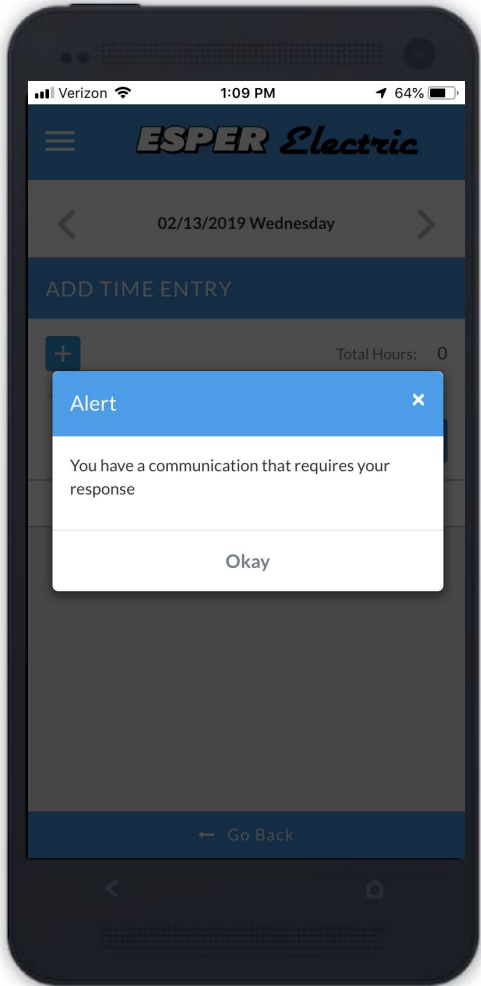




# Require Time



# Alerts



[TIME MANAGER](#)
[EMPLOYEES](#)
[TOOLS](#)
[MAINTENANCE](#)
[LOGOUT](#)

EMPLOYEES

Time Entries | PTO Requests

Pay Date: 02/13/2019

Department

Select Department

Work Week

02-02-2019 02-08-2019

Employee, Total Hours Approved ☐

-

Jigar Patel , 10 Hours

Date	Job Number	Job Name/Description	Earn Code	Labor Code	Hours	Action
02/04/2019	PTO	PTO	PTO	GENERAL COSTS	2	
02/04/2019	Holiday	Holiday	HOLID	GENERAL COSTS	8	

-

Scott Pennell , 47 Hours

☐

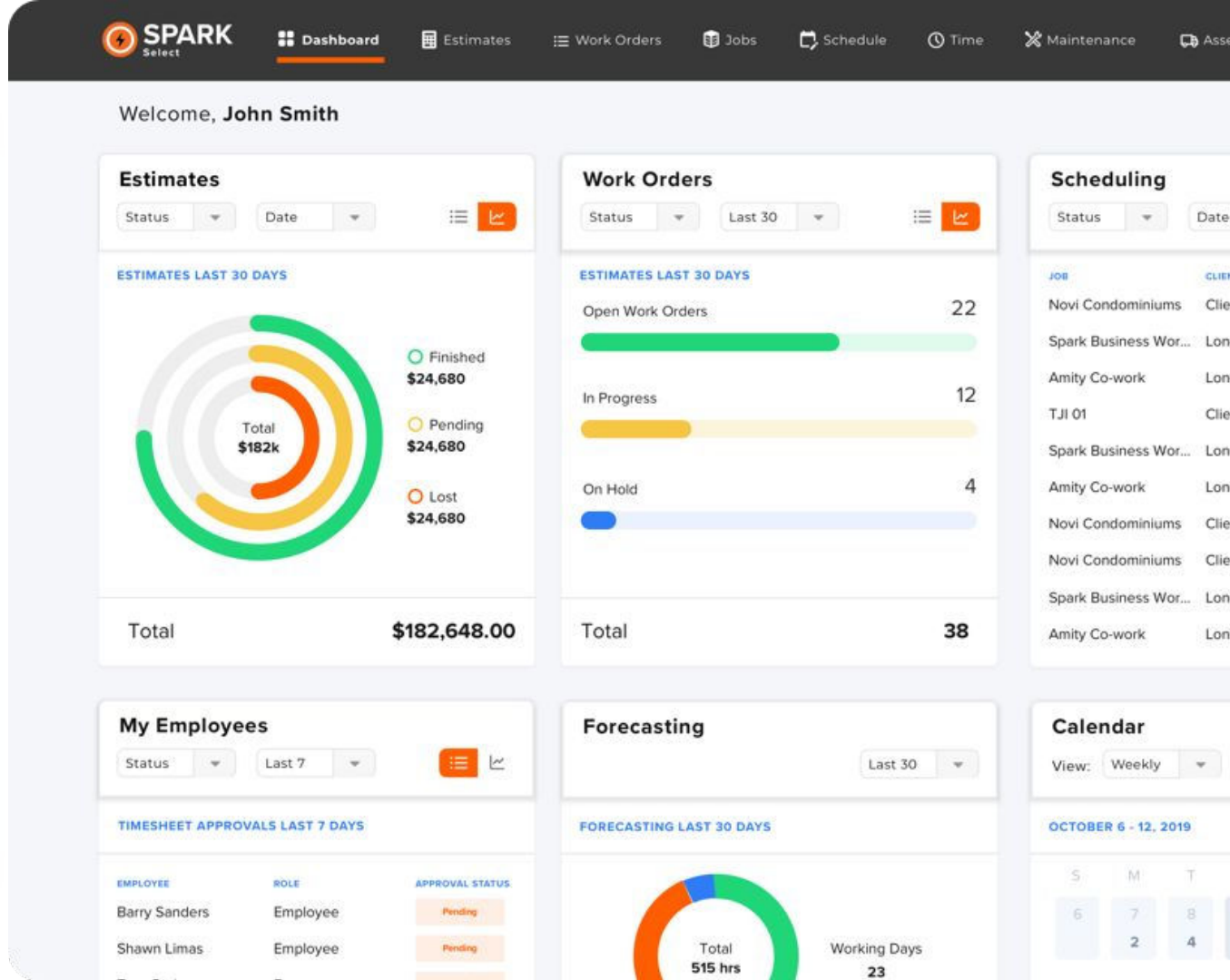
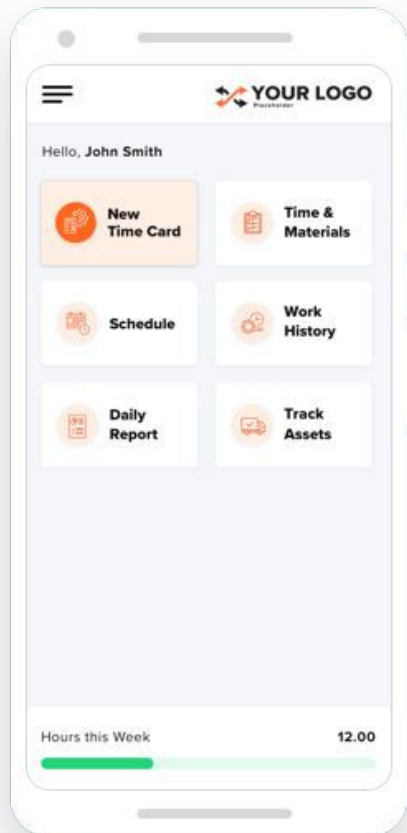
Date	Job Number	Job Name/Description	Earn Code	Labor Code	Hours	Action
02/08/2019	12	56	REG	EMPTY RACEWAY	45	
02/08/2019	Test	Testing	REG	EMPTY RACEWAY	2	

+

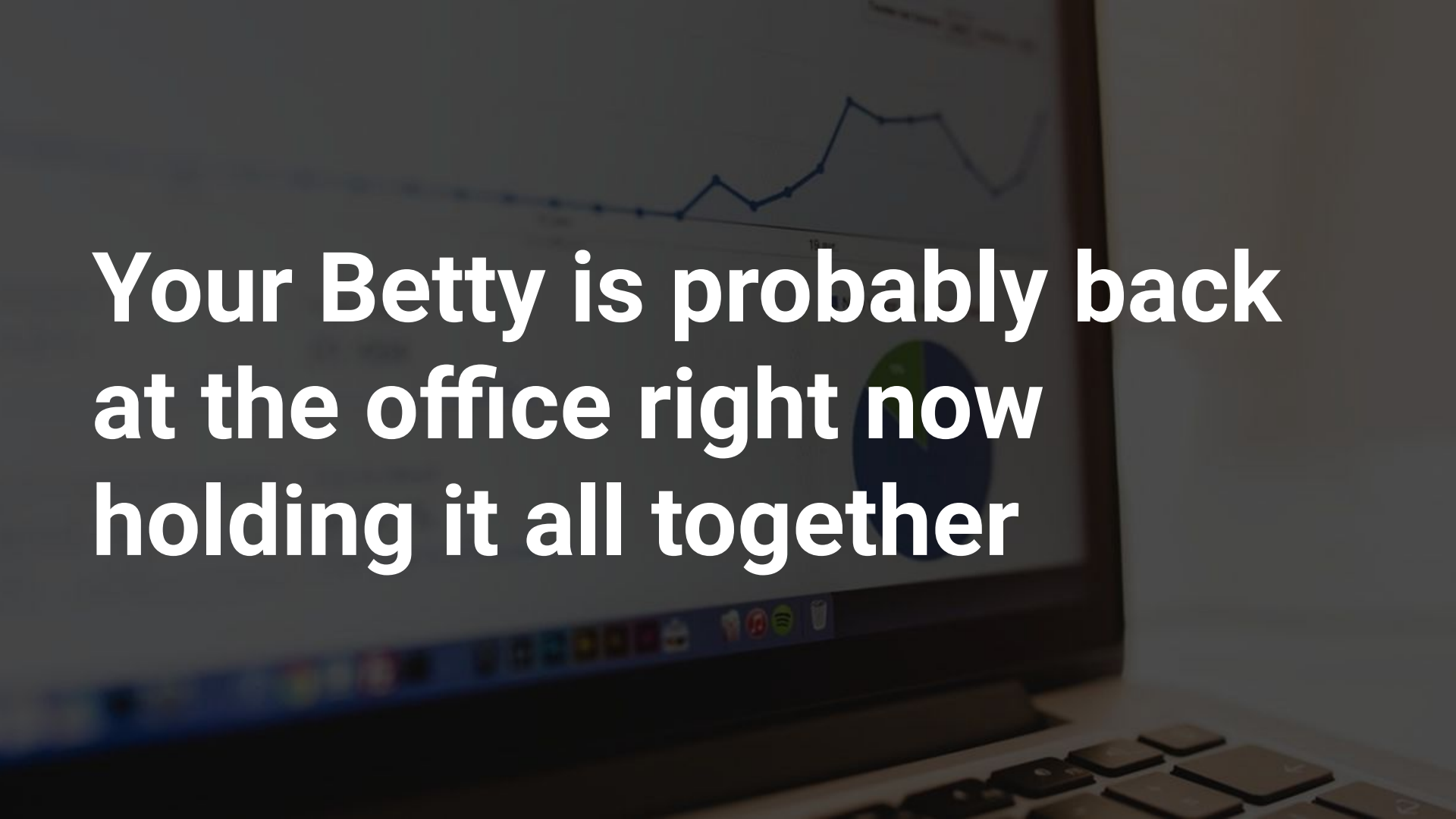
Suzanne Motter , 5 Hours









A close-up, slightly blurred image of a laptop screen. The screen displays a line graph with a blue line and a green line. Overlaid on the screen is large, bold, white text. The laptop keyboard is visible at the bottom of the frame.

**Your Betty is probably back  
at the office right now  
holding it all together**

**Who's your Betty?**

**Maybe it's your Tom?**

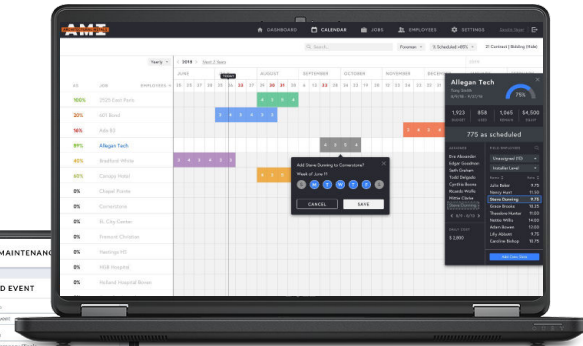
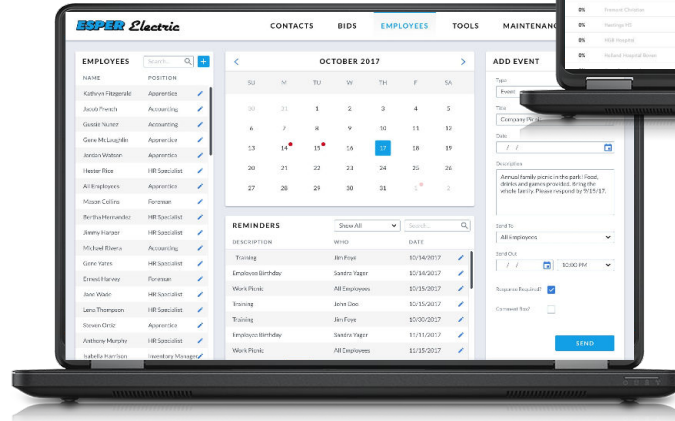
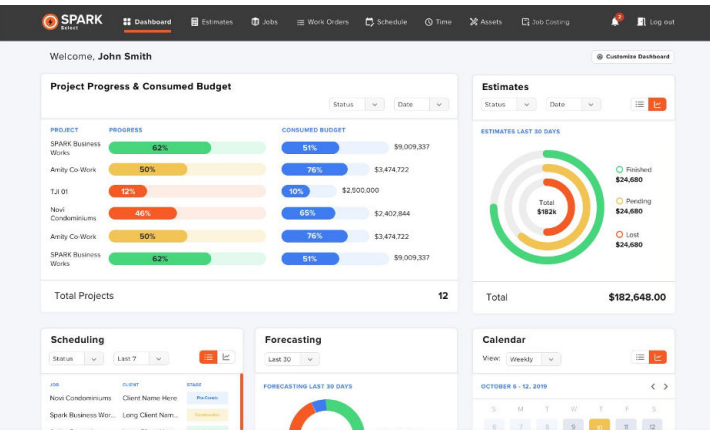
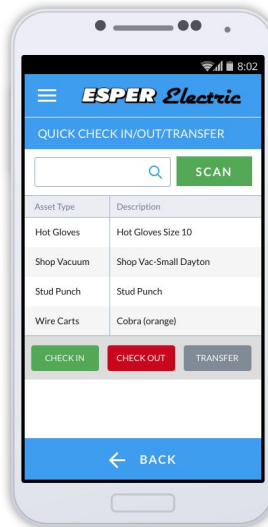
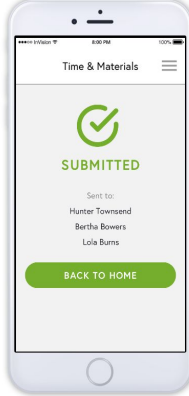
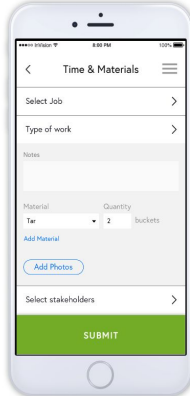
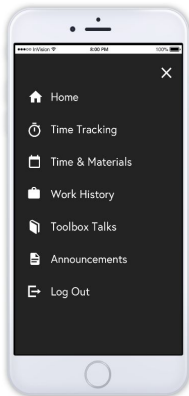
**Maybe it's you.**

Are you investing in automation?



Your crew is ready

INTERNAL



**More accurate field data collection  
leads to productivity & better invoicing**

**Productivity & better invoicing  
leads to happy clients**

**Happy clients lead to an  
increase in cash flow**

**and for Betty...**

**One source of truth for real time field data may just be your next step.**



# Free Stuff!



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Q&A



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