

Oscar E. Saenz

Professor Troy Adams

CIS129

15 December 2024

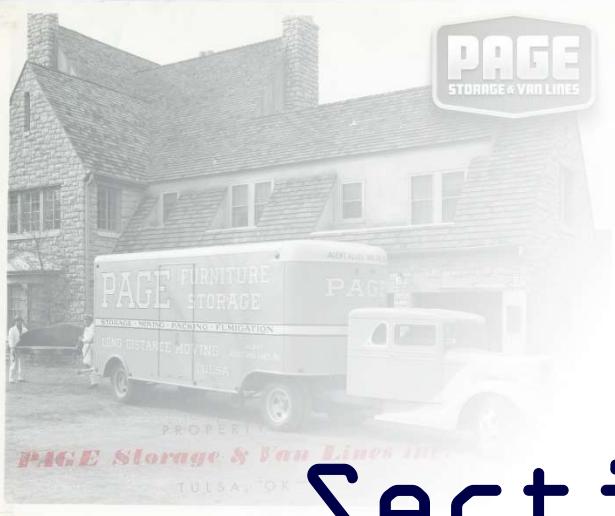


MoverPro

"Moving & Storage Solutions for the modern era."

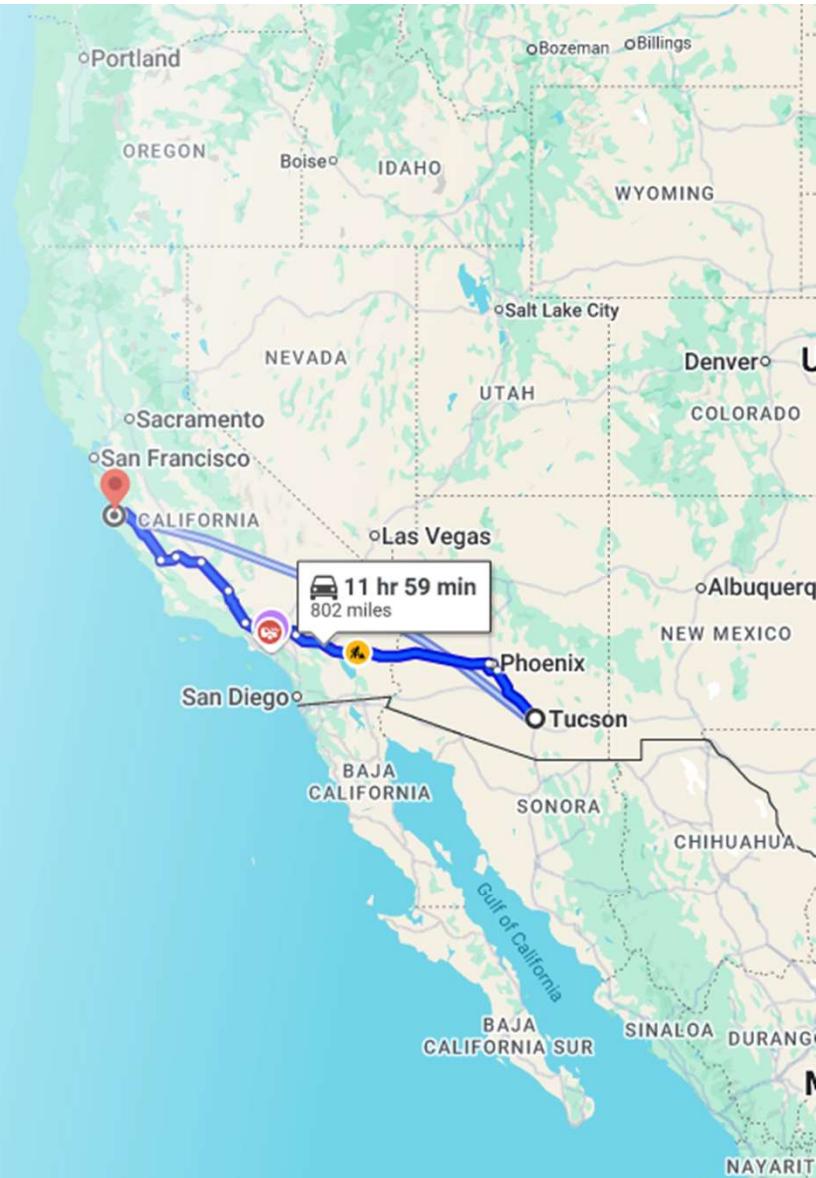
Section 1:

A brief introduction into the world of Moving and Storage



Scenario

- Professor Adams is moving from Tucson, Arizona, to a seaside villa on the Monterey Peninsula.
- He will explore various options at different price points, but for a hassle-free move, he opts to use a professional van line.





What: Van Lines

- A company or network of companies that coordinate and manage long-distance or cross-country moves.
- Handle the entire moving process, including packing, loading, transporting, and unloading.
- Partner with local agents and movers to provide a coordinated service across different regions.

What: Van Lines

- Unlike DIY options, van lines transport your household goods from origin to destination, handling all logistics.
- Van lines use a team of local agents, cross-country office admin, moving professionals, and long-haul drivers to ensure a smooth, coordinated move.



WHY IS MOVING SO EXPENSIVE?

Home moving can be an exciting but stressful time and an added factor into the stress involved is determining how you'll get your items from [Point A to Point B](#). This comes down to one of two choices: moving yourself or hiring professional movers. Moving on your own can be challenging, and not only can it turn into a hassle, but can become physically challenging and has the potential risk of damage to your belongings.

On the other hand, [hiring professional movers](#) ensures you avoid the heavy lifting and physical toll, but it does cost money to hire them. Of all the questions we get asked about TWO MEN AND A TRUCK®, [questions about cost](#) are the most

[MEN AND A TRUCK](#)®. If you're thinking about hiring a moving company but find



Over the years,

van lines have gained a reputation for being **expensive**, **poorly coordinated**, **outdated in technology**, and offering **subpar service quality**—a perception that is well-known both inside and outside the industry.

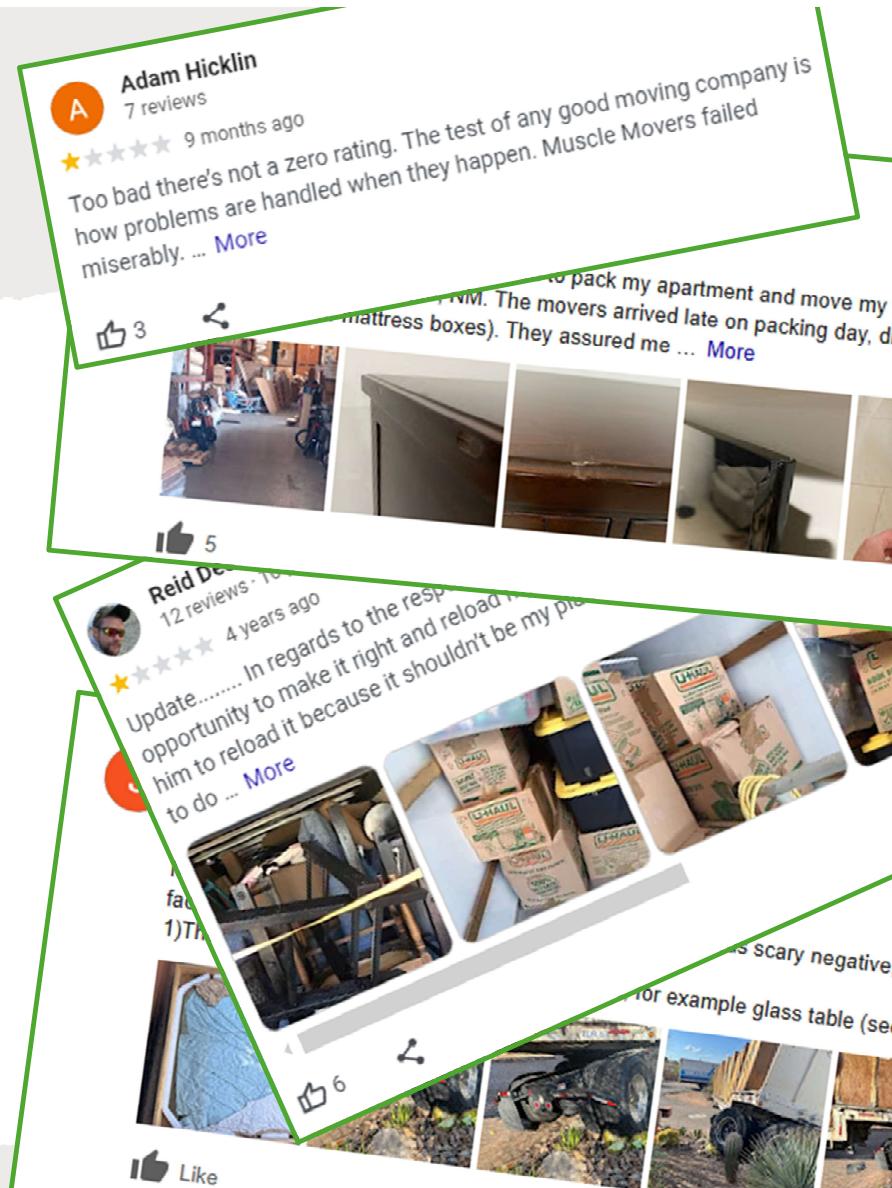
Current State

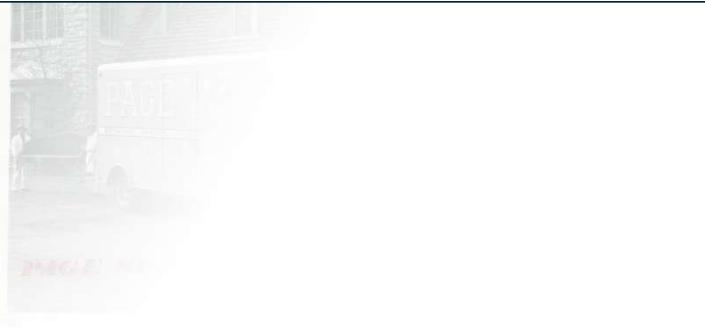
- Service costs are influenced by anticipated resources for each job, and wasted resources drive up these costs.
- Unnecessary administrative roles can lead to errors, increasing operational costs and affecting pricing.



Current State

- According to Consumer Affairs, “many customers report negative experiences with professional movers due to rising costs.”
- In addition to escalating prices, many consumers cite concerns about service quality, such as delays and miscommunication.
- These issues highlight the need for more transparent, efficient, and cost-effective solutions in the moving industry.





Section 2:

How moves are booked and managed by a van line

- Professor Adams will likely contact a major van line in his region.
- The Van Line will then handle all necessary procedures to coordinate his relocation.

Van Line in Tucson

Trusted long-distance movers. Licensed, insured, experienced. Call for...

Sponsored

All My Sons
 <https://getmyquote.allmysons.com/tucson/mover> :

[Top Tucson Moving Company](#)

 All My Sons Moving® – Trusted Tucson Moving Company. Over 1,000,000 Happy Customers. Book Our Tucson Mover Today. Trusted Tucson Arizona Movers.

United Van Lines
 <https://www.unitedvanlines.com/movers/tucson> :

[Best Tucson Movers | 1M+ Satisfied Customers](#)
 ... Van Lines, one of the best moving companies in Tucson, AZ area. With the largest network of movers, personalized customer service and the latest moving ...

Allied Van Lines
 <https://www.allied.com/local/Tucson-Moving-Compa...> :

[Tucson Movers - #1 Long Distance Company](#)
 Allied is your full-service local moving company in Southern Arizona. Allied Van Lines is ready to get you into your new house, apartment, or office.

North American Van Lines
 <https://www.northamerican.com/moving-companies/t...> :

[Moving Companies in Tucson, Arizona](#)
 Moving Companies Serving Tucson · North American Van Lines 4101 E Columbia St, Tucson, AZ 85714.
 Request an Estimate 520-244-0472. Distance:2.95 Miles. Rating: ...

People also ask :

Who is the largest van line?

LIST OF LARGEST MOVING COMPANIES



Moving and storage bookings are typically handled in two main phases:

Phase 1:

- The consumer's booking experience

Phase 2:

- The internal management processes

Phase	Step
Phase 1	1. Contact Van Line
	2. Sales Representative
Phase 2	3. Move Coordinator
	4. Long-Haul Dispatcher
Phase 2	5. Local Agent (If Needed)
	6. Local Dispatcher
Phase 2	7. Pickup & Transport

Phase 1: Booking

Upon contacting a van line, Professor Adams will be assigned a sales representative who will:

- Arrange an in-person or virtual walkthrough of his residence.
- Provide a detailed quote with charges and anticipated services.
- Forward the confirmed quote to the van line or an agent for processing.

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Phase 1	1. Contact Van Line
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Providing a Quote

A good sales representative will provide an accurate quote detailing all move specifics, including:

- **Accessibility:** Layout of the residence, move equipment, stairs/obstacles, and distance between loading and drop-off points.
- **Items of Special Interest:** Fragile, oversized, or valuable items.
- **Third-Party Service Requirements:** Crating, carpentry, or electrical assistance.
- **Labor Requirements:** Manpower needed for the move.

Phase 2: Management

Once the quote is submitted to the van line, it will go through the following touchpoints:

- **Move Coordinator:** Reviews the quote, registers the move in national and local databases, and updates documentation and notes as the load date approaches.
- **Long-Haul Dispatcher:** Schedules a long-haul driver ("Van Line Operator" or "PVO") to load the shipment from the origin city and transport it to the destination.

(Continues...)

Phase	Step
Phase 1	1. Contact Van Line
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Phase 2: Management

If a Long-haul driver is unable to Load the shipment due to scheduling conflicts the shipment is transferred to a Local agent—an authorized office or warehouse.

- The local agent is responsible for loading the shipment and temporarily storing it in a warehouse until a long-haul trucker can pick it up for transport to the destination.

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Phase 2: Management

- Once the shipment is handed over to the local agent, the move registry created by the Move Coordinator based on the Sales Representative's quote will be reviewed and dispatched by a Local Dispatcher.
- The Local Dispatcher coordinates the labor, equipment, storage resources, and manpower needed to load the shipment and temporarily store it until it is ready for pickup.

Phase	Step
Phase 1	1. Contact Van Line
	2. Sales Representative
Phase 2	3. Move Coordinator
	4. Long-Haul Dispatcher
Phase 2	5. Local Agent (If Needed)
	6. Local Dispatcher
	7. Pickup & Transport

Phase	Step	Action/Description
Phase 1	1. Contact Van Line	-Professor Adams contacts the van line to initiate the process.
	2. Sales Representative	<ul style="list-style-type: none"> - Arranges an in-person or virtual walkthrough. - Provides a quote detailing charges and services. - Forwards the authorized quote to the van line or agent.
Phase 2	3. Move Coordinator	<ul style="list-style-type: none"> - Reviews the quote. - Registers the move in national and local databases. - Updates documentation and move notes as the load date approaches.
	4. Long-Haul Dispatcher	<ul style="list-style-type: none"> - Schedules a long-haul driver ("Van Line Operator" or "PVO"). - Loads shipment from the origin city and transports it to the destination.
	5. Local Agent (If Needed)	<ul style="list-style-type: none"> - If a long-haul driver is unavailable, shipment is transferred to a local agent. - Local agent loads and temporarily stores the shipment.
	6. Local Dispatcher	<ul style="list-style-type: none"> - Reviews the move registry. - Coordinates labor, equipment, and storage resources for loading and storing shipment until pickup.
	7. Pickup & Transport	<ul style="list-style-type: none"> - Shipment is picked up by the long-haul driver and transported to the destination.



MovePro

streamlines the moving process by reducing waste, eliminating admin tasks, and cutting costs for better pricing efficiency.

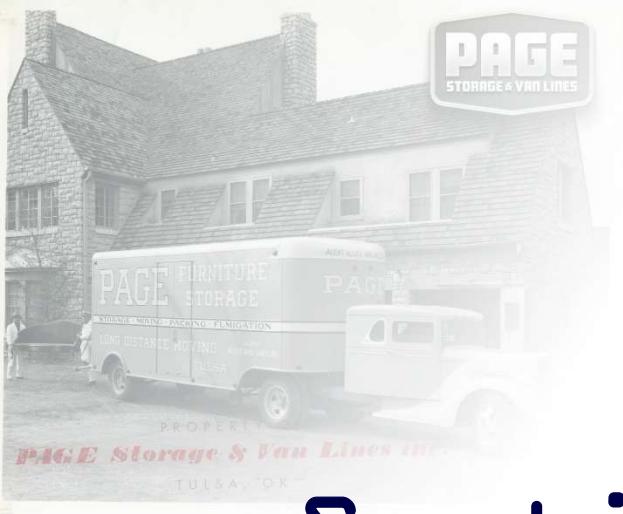
IBISWorld projects U.S. moving companies will generate \$23.2 billion in 2024, despite inflation challenges.





“What new technology does is create opportunities do a job that customer want done.”

- Tim O'Reilly



Section 3: Points of efficiencies

Shedding Light

- After a quote is generated, moves are managed, and information is passed through multiple sources, creating numerous points of contact where human error and miscommunication can occur.
- Poor communication between entities can lead to costly scenarios that impact customer confidence.
- Inefficient processes and errors can increase resource costs per household, driving up operational expenses.

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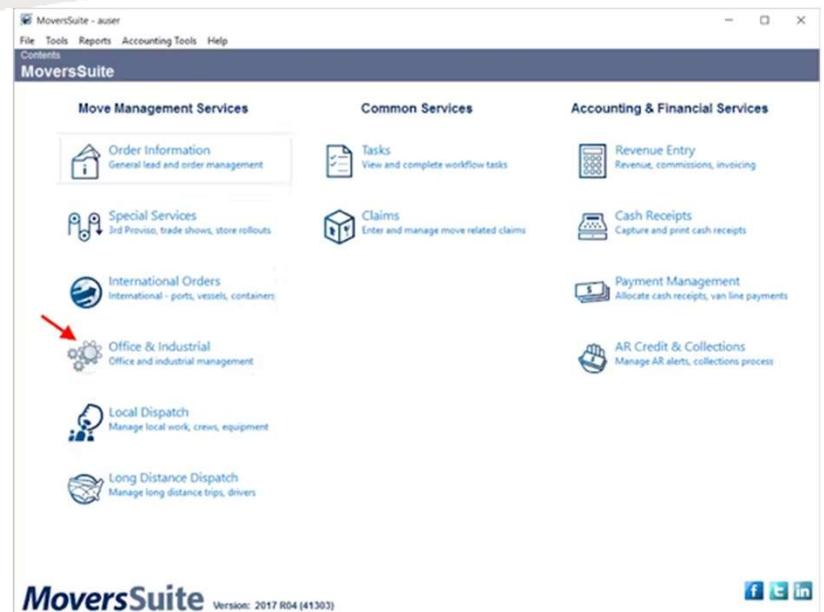
Booking to Service

- A major source of concern arises between the **Sales Representative and Dispatch teams** on the administrative side, where miscommunication and discrepancies can cause delays and increase costs.

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Moving Software

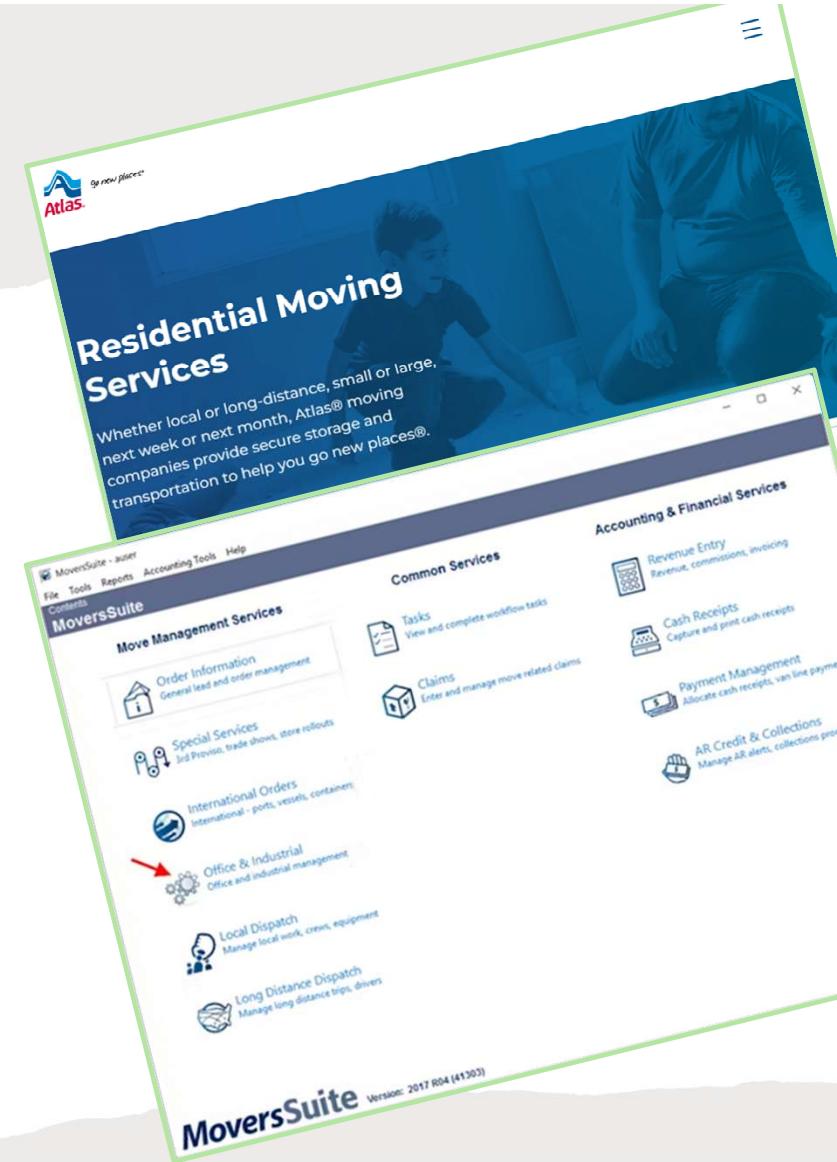
- After receiving the move quote, a Move Coordinator inputs it into 1-3 separate systems that communicate with van lines or local agents.
- The industry's lack of system integration leads to errors and missed opportunities for valuable sales and service data.



Case Study: 1

For example, **Atlas Van Lines** uses **two separate software systems**:

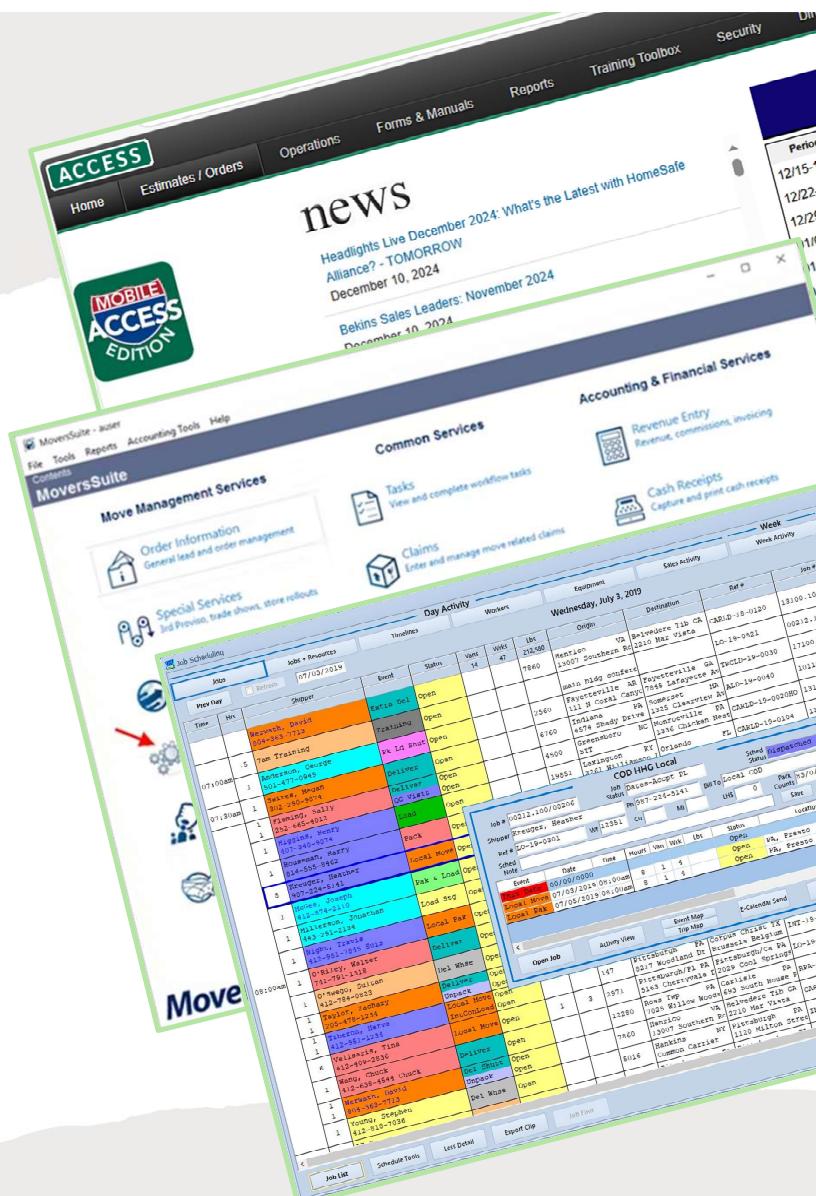
- **MoverSuite**, a subscription-based service by EWS Group for local agents to manage crews and scheduling
- **Atlas International**, a proprietary platform for the van line to monitor moves. However, these systems do not communicate, leading to inefficiencies.

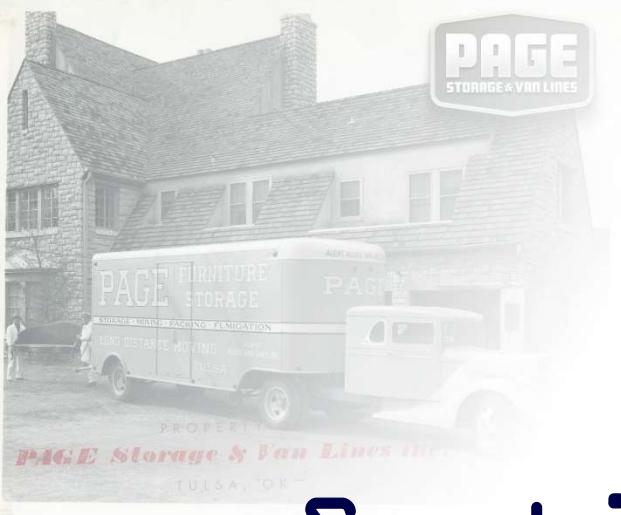
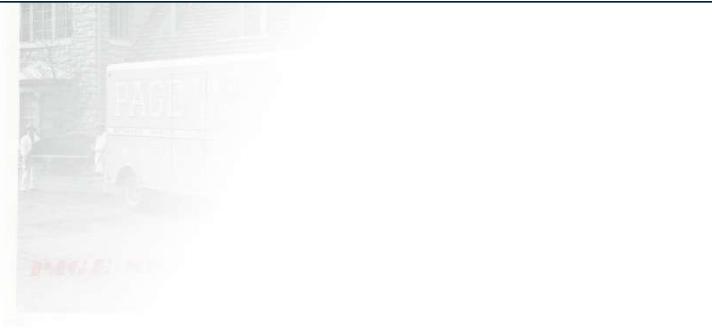


Case Study: 2

Wheaton/Bekins Van Lines uses three separate software systems:

- **MoverSuite**, a subscription-based service by EWS Group for local agents to manage crews and scheduling.
- **CompuMove**, used by several Southwestern offices for equipment tracking, a feature not available in MoverSuite.
- **Access**, a proprietary platform to monitor moves. However, like Atlas Van Lines, these systems do not communicate, leading to inefficiencies.





Section 4:

MovePro: An all-in-one solution

MovePro: Overview

MovePro, developed by O-Tech, is a comprehensive technological solution designed to address both consumer and industry needs within the moving and storage sector.



MovePro: Overview

- The MovePro Mobile App serves as a user-friendly platform for customers, offering seamless communication and move management.
- The MovePro Work Interface is tailored for industry professionals, streamlining essential operational tasks and enhancing efficiency across the moving process.



MovePro: Overview

Areas of improvement:

1. Customer Experience
2. Administrative Efficiency
3. Cross-Platform Integration



MovePro Mobile App

The MovePro Mobile App is designed to streamline and enhance the moving experience for both customers and sales professionals.



MovePro Mobile App: Booking

- **Appointment Scheduling:** Customers can schedule appointments with sales representatives through the app, with automatic assignments based on zip code and availability.
- **Estimate Management:** Sales professionals can draft estimates via the app, send them for customer approval and digital signature, then store them for both customer and administrative access.



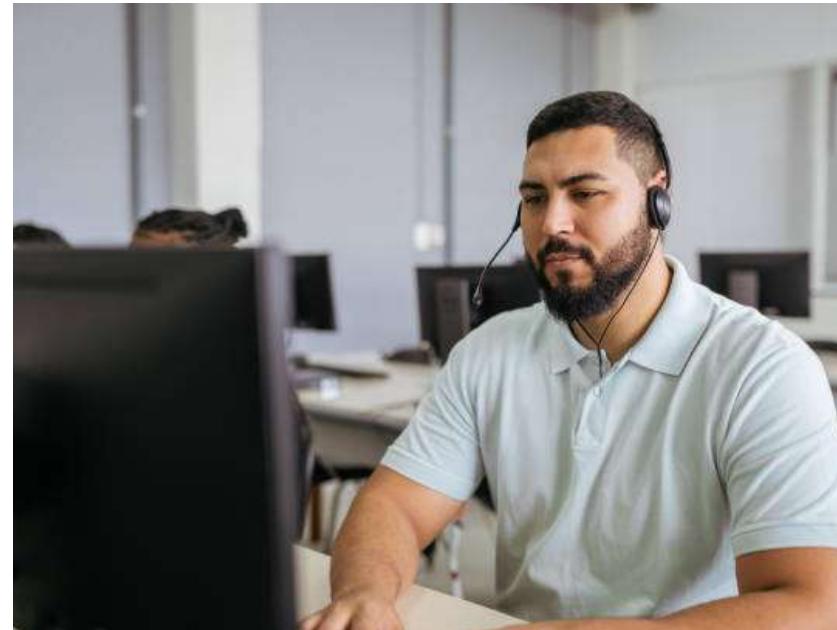
MovePro Mobile App: Booking

- **Virtual Walkthroughs:** Sales professionals can conduct and store virtual walkthroughs of residences for later review by administrative staff.
- **Appointment Scheduling:** Customers can schedule appointments with sales representatives through the app, with automatic assignments based on zip code availability.
- **Payment Management:** The app enables secure payment processing directly from customers' phones.
- **Real-time Updates:** Customers can track delivery dates, crew ETAs, and move status directly on their phones through the app.



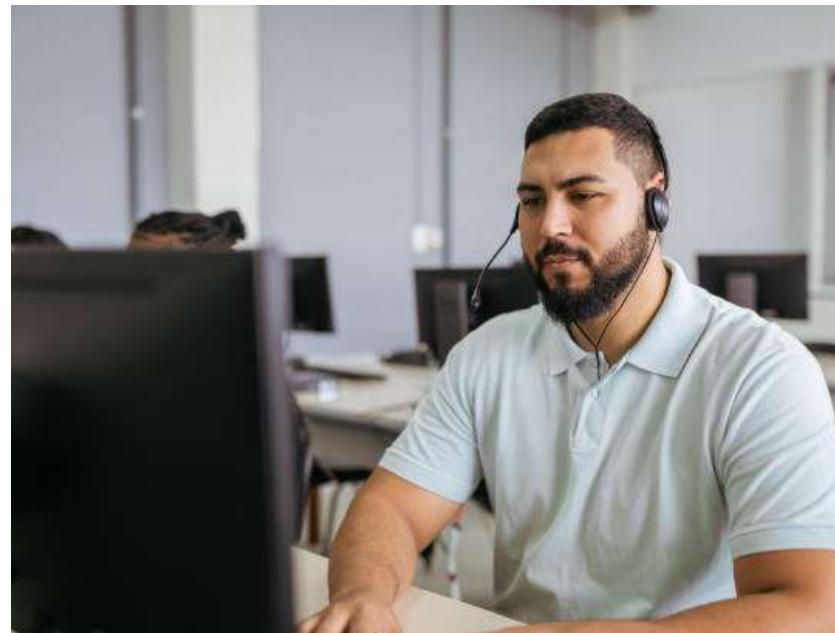
MovePro Work Interface

The MovePro Work Interface streamlines communication and administrative tasks, reducing miscommunication and errors common in traditional systems. By automating processes and providing real-time updates, it minimizes errors, cuts resource costs, and enhances efficiency.



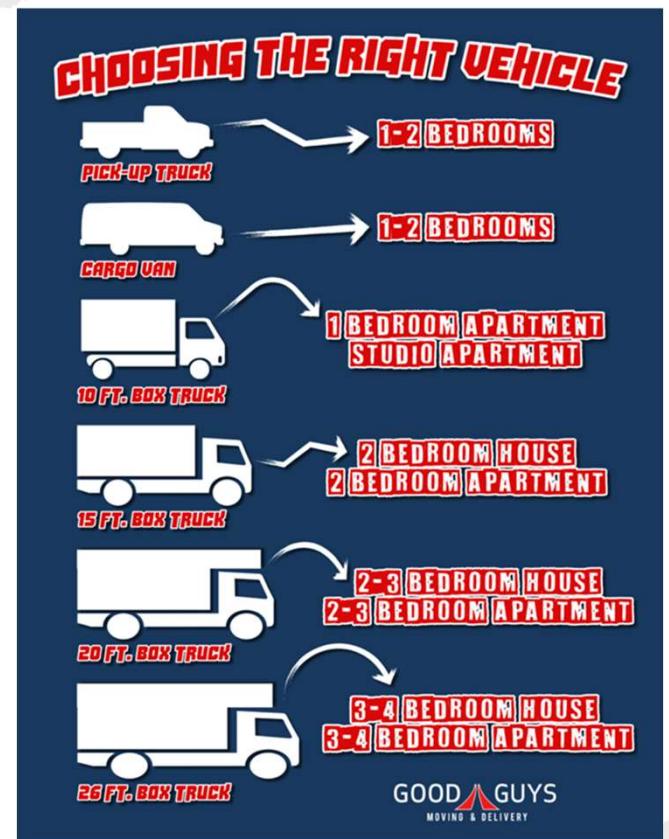
MovePro Work Interface: Efficiency

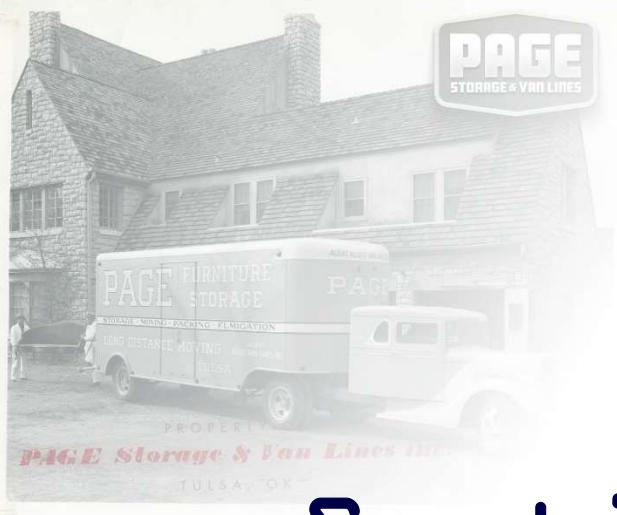
- **Move Approval and Registry:** The move is sent to a local agent for approval, with both local and van line registries created based on the quoted, man-power, resources and specifics.
- **Seamless Communication:** Local and long-haul dispatch teams can coordinate through the MovePro Workflow interface, ensuring real-time updates.
- **Last-Minute Changes:** Customers can communicate directly with drivers and dispatch through the MovePro Mobile App.
- **Direct Access for Long-Haul Drivers:** Long-haul drivers can view move details, including quotes, photos, and videos, for better preparation and smoother logistics.



MovePro Work Interface: Sales

- **Driver and Crew Availability:** Real-time updates allow drivers and local crew to adjust availability based on schedule needs.
- **Adjustable Logistics:** Local dispatch can update move details to accommodate logistical needs and notify sales representatives for approval, with crew sizes and requirements pre-set.
- **Equipment Status Tracking:** MovePro tracks and updates equipment status, including inspection dates and registrations, with notifications for relevant updates.
- **Resource Allocation and Availability:** MovePro ensures necessary equipment, like flatbeds and liftgate trucks, is available for each move, minimizing scheduling conflicts.





Section 5:

Interface and Layout Overview

Customer and Sales

- Customers will be encouraged to download the MovePro mobile app by their Sales Representative. They will use the app to receive shipment status updates and communicate with office administration.

Phase	Step
Phase 1	1. Contact Van Line
	2. Sales Representative
Phase 2	3. Move Coordinator
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Customer Interface

<p>Start</p> <p>Display "Welcome Screen - Splash Screen"</p> <p>If User is not logged in:</p> <p> Display "User Login/Registration Screen"</p> <p> User enters login/registration details</p> <p> Validate credentials</p> <p> If valid:</p> <p> Proceed to Main Menu</p> <p> Else:</p> <p> Display "Invalid Login" message</p> <p> Return to Login Screen</p> <p>Else:</p> <p> Proceed to Main Menu</p>	<p>Main Menu:</p> <p>Display Menu Options:</p> <ol style="list-style-type: none">1. View Quote2. Track Shipment Status3. Message Your Move Team4. Schedule Appointment with Sales Rep <p>User selects an option:</p> <p>Option 1: View Quote</p> <p> Display user's moving quote</p> <p>Option 2: Track Shipment Status</p> <p> Display real-time status updates on the shipment</p> <p>Option 3: Message Your Move Team</p> <p> Display chat interface with move team</p> <p> User can send messages</p> <p>Option 4: Schedule Appointment with Sales Rep</p> <p> Display available time slots</p> <p>End</p>
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Sales Representative

- Sales professionals will use the app to schedule appointments, conduct virtual walkthroughs, and create quotes.

Phase	Step
Phase 1	1. Contact Van Line
	2. Sales Representative
Phase 2	3. Move Coordinator
	4. Long-Haul Dispatcher
	5. Local Agent (If Needed)
	6. Local Dispatcher
	7. Pickup & Transport

Sales Interface

<p>Start</p> <p>Display "Sales Professional Login Screen"</p> <p>User enters login credentials</p> <p>Validate credentials</p> <p>If valid:</p> <p> Proceed to Sales Professional Dashboard</p> <p>Else:</p> <p> Display "Invalid Login" message</p> <p> Return to Login Screen</p> <p>Sales Professional Dashboard:</p> <p> Display Menu Options:</p> <ul style="list-style-type: none">1. Schedule Appointment2. Conduct Virtual Walkthrough3. Create Quote4. View Customer Shipments5. Communicate with Office Administration	<p>User selects an option:</p> <p>Option 1: Schedule Appointment - Select Customer</p> <p> Display available time slots</p> <p>Option 2: Conduct Virtual Walkthrough</p> <p> Initiate video call with customer</p> <p> Record walkthrough video for reference</p> <p> Store Video</p> <p>Option 3: Create Quote</p> <p> Input customer and move details (e.g., resources, specific needs)</p> <p> Generate quote based on entered data</p> <p> Send quote to customer for approval</p> <p> Wait for customer approval and digital signature</p> <p> Store approved quote for future reference</p>
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Sales Interface (Continued)

Option 4: View Customer Shipments

- Display list of current customer shipments
- View status updates and shipment details
- Option to message or call the customer for additional support

Return to Sales Professional Dashboard

Option 5: Communicate with Office Administration

- Open communication interface
- Send messages or requests to office admin regarding customer moves

Return to Sales Professional Dashboard

End

Dispatch/Admin Staff

- The MovePro Work Interface allows Sales Representatives to manage move approvals, streamline communication between dispatch teams, and provide real-time updates on scheduling, resources, and logistics. It enhances coordination, reduces errors, tracks equipment status, and manages crew and driver availability.

Phase	Step
Phase 1	1. Contact Van Line
	2. Sales Representative
Phase 2	3. Move Coordinator
	4. Long-Haul Dispatcher
	5. Local Agent (If Needed)
	6. Local Dispatcher
	7. Pickup & Transport

Dispatch/Admin Staff Interface

<p>Start</p> <p>Display "Office Admin/Dispatch Login Screen"</p> <p>User enters login credentials</p> <p>Validate credentials</p> <p>If valid:</p> <p> Proceed to Office Admin Dashboard</p> <p>Office Admin Dashboard:</p> <p> Display Menu Options:</p> <ul style="list-style-type: none">1. Move Approval and Registry2. Communication with Dispatch Teams3. Track Last-Minute Changes4. Access Long-Haul Driver Information5. Update Logistics and Availability6. Monitor Equipment Status7. Manage Resource Allocation8. Add/Update Equipment, Trucks, and Staff/Teams	<p>User selects an option:</p> <p>Option 1: Access Move Registry</p> <ul style="list-style-type: none">Display move details (resources, manpower, specifics)Send Approval notice to Sales RepresentativeGenerate local and van line registries based on quoted resources <p>Option 2: Communication with Sales/Customer</p> <ul style="list-style-type: none">Open communication interfaceRevise: Update the displayed dispatch status and send it to the customer. <p>Option 3: Access Long-Haul Driver Information</p> <ul style="list-style-type: none">Display long-haul driver detailsShow relevant move details (quotes, photos, videos)Ensure drivers have the necessary preparation materials <p>Return to Office Admin Dashboard</p>
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Dispatch/Admin Staff Interface

<p>Option 4: Update Logistics and Availability</p> <ul style="list-style-type: none">Display available driver and crew schedulesUpdate driver and crew availability based on new move detailsAdjust schedules based on move requirementsNotify sales representatives or other relevant teams of updates <p>Option 5: Monitor Equipment Status</p> <ul style="list-style-type: none">Display status of available equipment (e.g., trucks, flatbeds, liftgates)Track inspection dates and registration updatesSend notifications for updates on equipment status to relevant teams	<p>Option 7: Manage Resource Allocation</p> <ul style="list-style-type: none">Display list of available resources (e.g., trucks, crew, specialty equipment)Assign resources to moves based on specific requirementsMinimize scheduling conflicts and ensure resource availability <p>Option 8: Add/Update Equipment, Trucks, and Staff/Teams</p> <ul style="list-style-type: none">Display current list of available equipment, trucks, and staffOption to:<ol style="list-style-type: none">1. Add new equipment or truck details (e.g., type, registration, inspection dates)2. Update existing equipment, truck, or staff details (e.g., availability, status)3. Add or update crew/team assignments (e.g., crew member, role, shift)Confirm and save updates to the systemSend notifications to relevant teams (dispatch, sales, etc.)
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Outstanding Questions:

1. There is currently a software for virtual surveys that uses your call phone camera to inventory items in your residence, how does this work, exactly?
<https://yembo.ai/moving>

2. Does mobile application creation use Python, Java, or some other language? Is this the same for Android Vs Apple?

Citations

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