

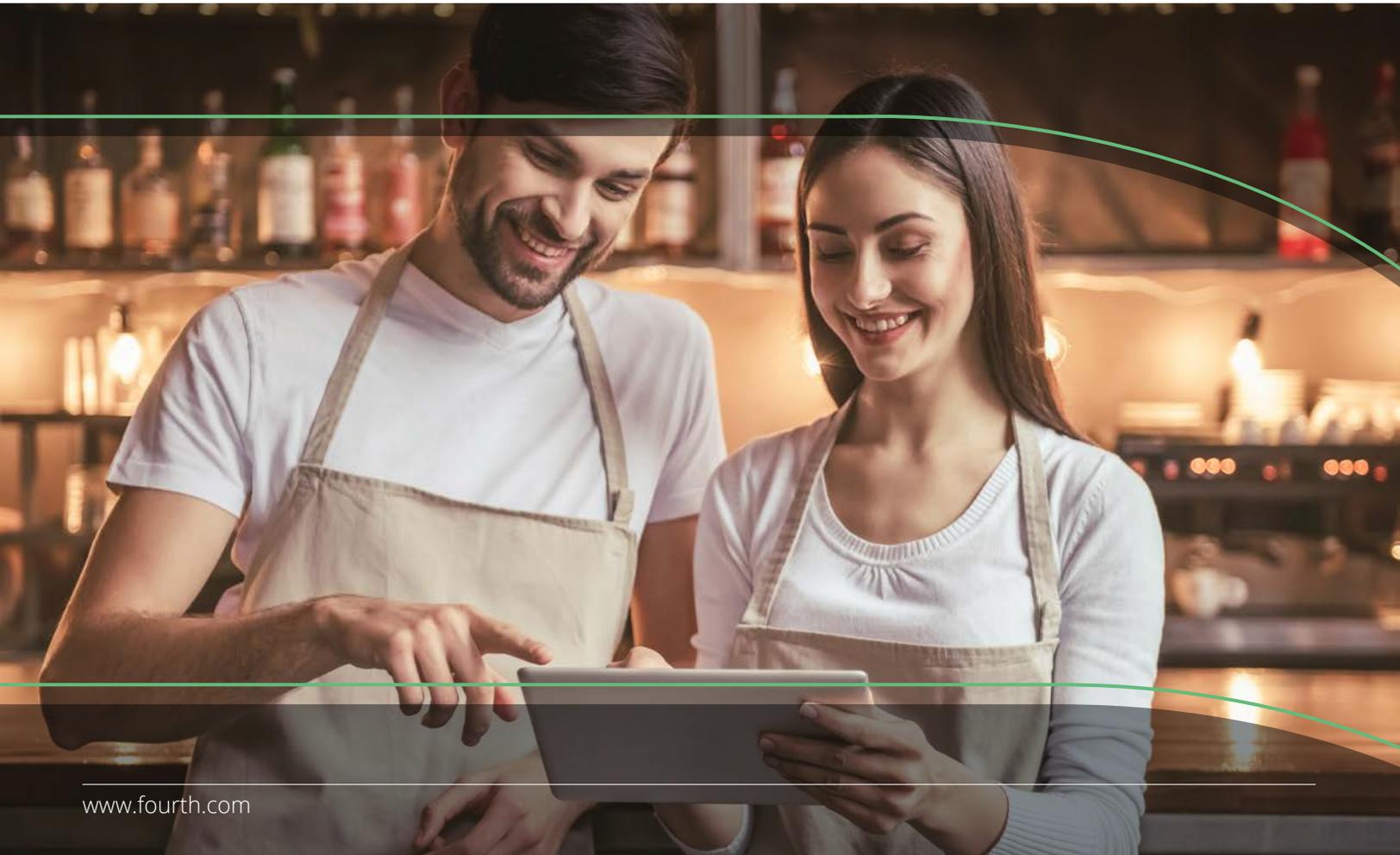
# Integrated Back-Office Restaurant Systems

Streamlining business processes for  
complete visibility into your restaurant.



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# Introduction

**Consider your back-office purchasing, accounts payable, inventory management, and recipe and menu engineering technology. What does it look like? Are you currently running disparate systems? If so, are you constantly working to deliver data from one system to another? To share data among systems, do you have to resort to manually inputting it? Or are you constantly maintaining your integrations to ensure that nothing is slipping through the cracks?**

If this sounds like your back-office experience, you have a huge opportunity to increase your efficiency, eliminate dual keying, optimize workflows and deliver better business insights. Hospitality demands efficiency as you strive to deliver engaging and remarkable customer experiences.

If you are working with a system made up of multiple standalone components, you're probably already aware of the limitations and frustrations. These systems have many deficiencies, including:

## **Lack of tools to optimize workflow:**

- Scarcity of advanced analytics and exception reporting.
- No forecasting data to help with predictive ordering nor availability reporting.
- No data sharing to facilitate planning and menu engineering.
- Absence of integrated food-management functionality and food-waste handling.
- Inability to keep up with changing legislation (especially around nutrition and allergen information).
- No way to ensure purchasing compliance among multiple sites/locations, and tough to track if purchases are up to brand standards.

## **Error-prone data entry and re-keying, data-connection issues, and unnecessary expense:**

- Reliance on paper invoices that require coding and manual entry in the books.
- Frustrations with juggling multiple different interfaces and file exchanges.
- Extra work re-formatting and re-coding electronic documents.
- Delays in P&L completion, due to multiple versions of the truth.
- Issues with payment amounts, from paying on invoice and high accrual volume.
- Trouble collecting owed credits, delays on closing periods, and after-the-fact and/or incorrect reporting.



**All of which makes it difficult or impossible to:**

- Get single version of the truth.
- Log in: multiple logins require different usernames and passwords.
- Work on the go, without a comprehensive mobile app.
- See the whole picture. With different sources of data, many of which don't talk to one another, there's a lot more guesswork involved.

Imagine how that could change if your Point of Sale (POS) systems seamlessly interface with menu prep, HR, scheduling and purchasing.

Integrated back-office systems offer a tangible way to streamline your operations, remove error and deliver savings – improving your bottom-line.

With financial system-integration, data is sent directly from local operational systems to central financial systems. This eliminates manual inputs and includes everything from POS records to payroll information to invoices. Integration of back-office systems enables you to increase productivity and drive profitability by providing:

- **Complete visibility:** Easy access to correlated data gives you a full- picture view of everything happening in your organization. One true data point from ingredient sourcing to what's on your customers' plates gives even better insight. With full control of your business, and more information, you'll be able to make better decisions faster. Through dynamic reporting, you can also track menu item popularity, so when making menu changes, you don't risk eliminating a favorite.
- **Reduction of administrative busy-work and elimination of errors:** Fully-integrated systems ensure that the most up-to-date data flows through the system, strengthening your analytics power, eliminating dual-entries and improving overall accuracy. It also helps ensure that all nutrition and allergen information is captured in one place.
- **Ability to better serve customers:** Automated workflows get your managers out of the back office and into the front of house, where they can better serve your staff and your customers. Delivering positive customer experiences will yield repeat visits. With access to key tasks and processes on a mobile device, your managers spend less time in the back office and more time interfacing with guests and team members.
- **Capability to track your vendor spend more accurately:** Access to full information about your spend ensures you are staying on top of rebates, helps strengthen vendor relationships and lets you monitor cost fluctuations in the market. Insight into your vendor performance also helps you negotiate the best contract pricing possible.
- **Improved compliance and menu clarity:** From giving guests the information they need (nutritional information, accurate allergen information), to ensuring compliance with menu labeling laws, integrated systems ensure that the most accurate and up-to-date data is available, right down to the ingredient level.



## Disparate Systems and Integrations

If your platform currently consists of disparate systems, each of your functional areas exists in siloes, disconnected from other systems. Individual software solutions require interfaces to link them. These integrations can be difficult to build and maintain. Plus, any updates or upgrades to any one system can cause a huge amount of work re-integrating the different components. Sometimes, new upgrades make previously working integrations fail. As a result, many operators are reluctant to update, which can further limit functionality and data security.



In this construct, data is moving back and forth among disconnected systems. This requires either a patched integration or manual data entry, introducing the opportunity for error at each stage. In the diagram above we see a number of integrations:

DATA	INTEGRATIONS REQUIRED
Sales items	from Product and Recipe to Point of Sale
Net Sales	from Point of Sale to HR & Scheduling
Time and Attendance	from Point of Sale to HR & Scheduling
Ingredients	from Product and Recipes to Purchasing & Inventory
Basic Recipe Data	from Product and Recipes to Purchasing & Inventory
Orders and Acknowledgements	from Purchasing & Stock to Vendor & Invoicing
Advanced Shipping Notifications, Proof of Delivery	from Vendor & Invoicing to Purchasing & Inventory
Invoices, Credit Notes, Accruals, etc.	from Vendor & Invoicing to Purchasing & Inventory

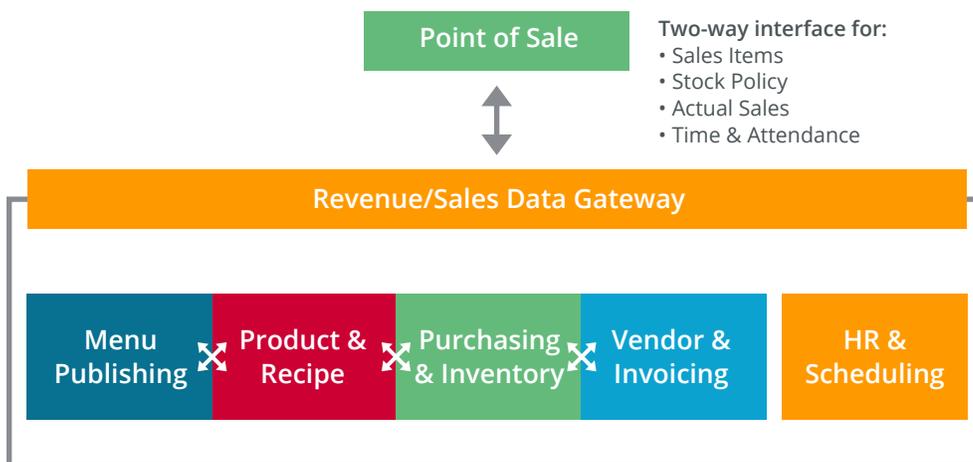
## Integrated System Dataflow

Luckily, there is a better way to approach your back-office systems. Investing in one cohesive platform will unite your back-office systems, and easily integrate with your point of sale solution and other key applications.

With all of your many departments working together on the same system, it becomes much easier to manage your business. With data and information seamlessly flowing from one tool to another, each team has what they need to do their jobs successfully.

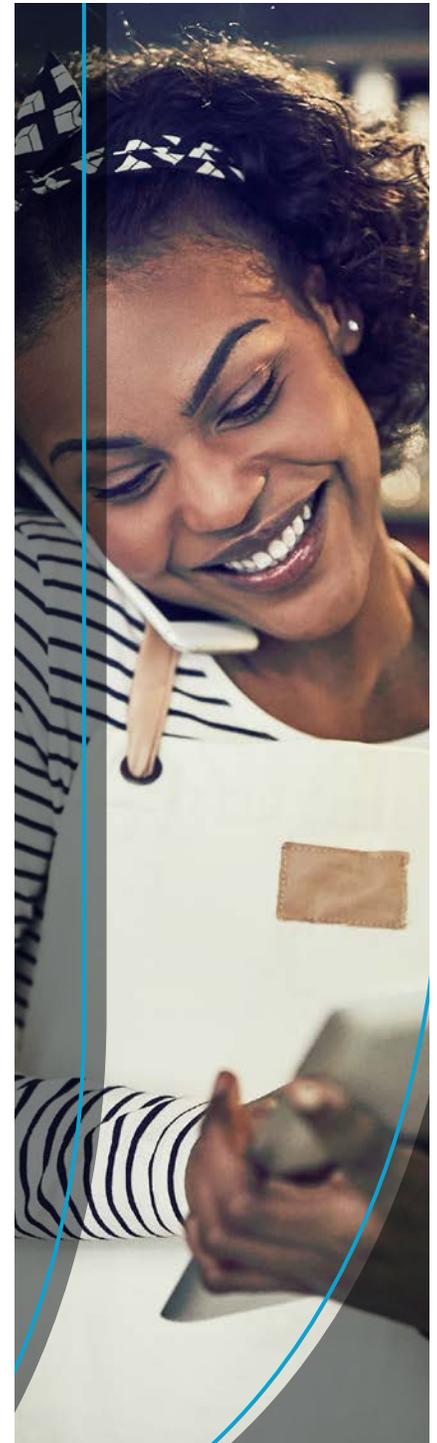
IT, Operations, Finance, Marketing, and Purchasing can collaborate and simplify processes and workflows. Managers, employees, and the corporate office can connect and work towards the same goals with the same information.

### Here's what that looks like:

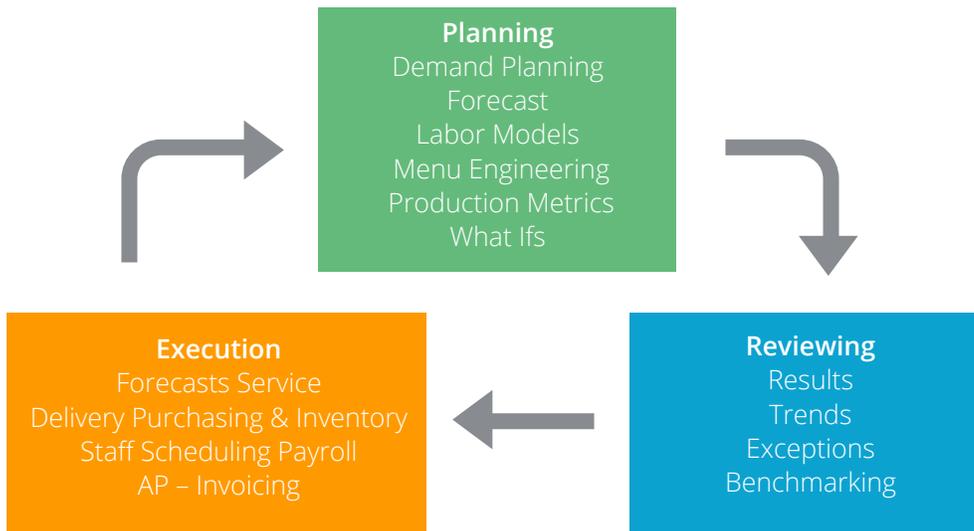


The robust interface connecting the back office to POS in the front of house ensures that all data is kept up-to-date and that all departments are truly working from a single version of the truth. This is critical for facilitating organizational communication and effective decision-making.

One key element that delivers value in this model is the data sharing (or data fabric) that exists in the back-office solution suite. This enables Single Sign-On (SSO) and true data sharing and supports publish and subscribe functionality.



An integrated approach supports a continuous workflow of planning, reviewing and execution.

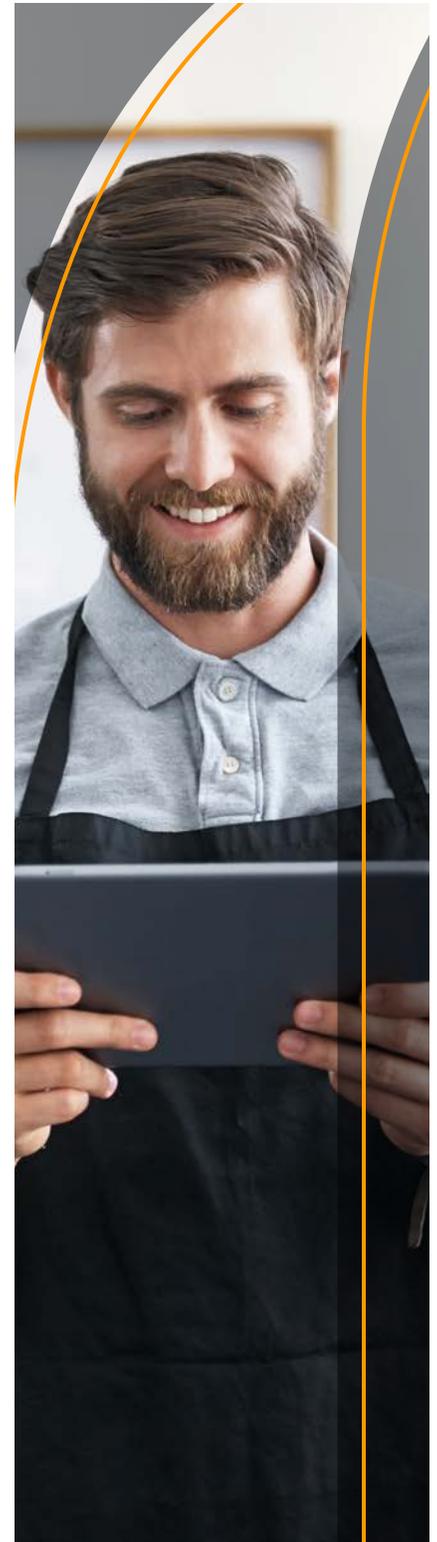


An integrated back office can help you deliver on your vision by enabling:

- Demand forecasting
- Task automation and push notifications
- Labor productivity
- Employee engagement
- Operational excellence
- Work by exception
- Vendor KPIs
- Legislation compliance

An integrated system can also yield additional productivity enhancements. When you are vetting solutions, make sure you look for solutions with these features:

- **Mobile optimized:** With a mobile workforce, you need solutions that your employees and managers can use on the go.
- **Manager functionality:** Your managers require additional functionality to do their jobs effectively. Providing them with apps that take into account their specific needs and workflows increases their productivity and effectiveness. Apps should be available on a tablet or phone and include an at-a-glance screen and to-dos.



## Use Cases and Workflows

Fully automate all operational reporting for sales, POS, HR, labor, inventory, and more including these key workflows.

### Demand Forecasting

Demand forecasting is one of the key workflows that is enhanced and enabled by using an integrated back-office system.

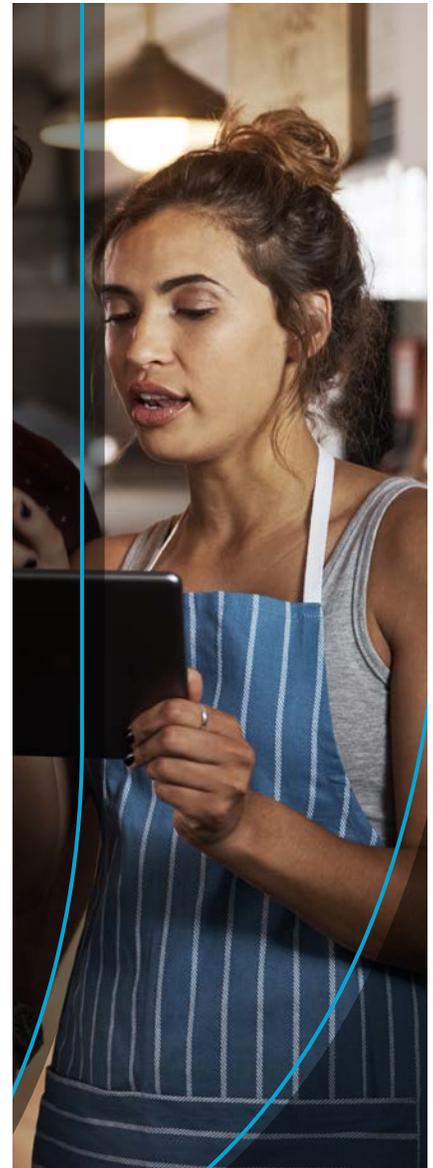
#### Information flowing in:

- Transactional POS data
- Third-party data including revenue forecast, covers, guest count, etc.

Data from algorithms including weather, benchmarking/historical performance, trends, holidays, and events. This data is analyzed to produce the Demand Forecast, by sales item, and in up to 15-minute intervals. Managers can then overlay their personal knowledge, including things like local events or construction in the area, to support inventory and staffing decisions.

#### Information flowing out:

- Inventory, including suggested orders and availability, informed by algorithms for back-up ingredients, vendor lead time, confidence, and central adjustments.
- Labor deployment information, for insight into how to staff each day, forecasted based on weather, prior sales, holidays and notable events, and trends.
- In-depth analytics presented on visually appealing dashboards for easy analysis and faster, informed decision making.



## Predictive Ordering

Using an integrated system allows you to replace all manual operational reporting. This automation saves managers time each week. You can activate this solution site by site. You still get the final say: while a forecast can run in the background for comparison, your manager or chef can still determine what's actually ordered.

### Information flowing in:

- Transactional POS data, informed by trend algorithms.

This data is analyzed to produce the Demand Forecast, by sales item by site, on a daily basis.

### Information flowing out:

- **Inventory, including predictive orders and availability reporting**, informed by algorithms for safety stock, confidence factor, central adjustments, forced drops and subject to head office input — as well as informed by algorithms for stock on hand, stock on order, min/max and vendor lead time.
- **Labor deployment information**, giving insight into how to staff each day, forecasted based on weather, prior sales, holidays and notable events, and trends. This lets managers make schedules that reflect what work will need to be done, rather than scheduling based on covers or SPLH.
- **Analytics** presented on dashboards for easy analysis and fast decision making.
- **Vendor order**, subject to manager adjustment.



## Other Use Cases

- **Vendor Scorecards:** Gain a view into vendor performance including quality of goods, pricing, and volume and quantity delivered. This visibility is helpful in negotiating favorable pricing, keeping track of rebates, and managing vendor relationships.
- **Tracking Waste:** Get insight into what you use and what goes to waste. An integrated back-office system simplifies reporting on waste by linking your sales data with all aspects of your inventory. This is instrumental in increasing your profitability, while also helping the planet.
- **Predictive Ordering:** Predicted order quantities are calculated for you based on the forecasted use of each ingredient, ensuring you have the inventory you need to keep favorite dishes available for guests, while avoiding waste from over-ordering. This ensures you always have what you need on hand, and helps eliminate rogue purchasing.
- **Machine Learning:** Your systems will learn as they go, improving data processing and delivering better recommendations to you and your teams. Machine learning can positively impact all facets of your hospitality organization.
- **Menu Engineering:** Understand your actual costs for each recipe, while incorporating all required nutritional information and allergy info down to the ingredient level. This allows for instant publishing across multiple digital platforms, to ensure accurate and up-to-date menu information for your guests. Everything is also linked to your inventory and the integrated with the POS, so when evaluating menu changes, you can make sure you are keeping the favorites and updating or removing dishes that are unpopular or unprofitable.

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## How to Move Toward Total Back-Office System Integration

Don't be overwhelmed with the thought of integrating all of your processes and systems at once. Here are recommendations on how you can take the necessary steps to move to an integrated back-office solution that leverages all of your data, optimizes your processes, provides insight into performance and offers recommendations for improvements.



Level	Description	Next Steps
1	At this level, all of your processes are manual and paper-based.	Taking the first step toward automation will yield great rewards. <ul style="list-style-type: none"> <li>• Start by automating your vendor catalogs.</li> <li>• Use assisted scheduling tools.</li> <li>• Gain insight into your wage forecasts, targets and actuals.</li> </ul>
	<table border="1"> <tr> <td> <b>Level 1 Purchasing</b> <ul style="list-style-type: none"> <li>• Manual process</li> <li>• Performed via vendor websites</li> <li>• No approvals necessary</li> </ul> </td> <td> <b>Level 1 Labor</b> <ul style="list-style-type: none"> <li>• Manual process</li> <li>• Performed via vendor websites</li> <li>• No approvals necessary</li> </ul> </td> </tr> </table>	
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2	Your organization has started to eliminate manual processes by automating a few key components.	The next step is to start to move from automation to integration. <ul style="list-style-type: none"> <li>• Link your systems.</li> <li>• With systems linked, better maximize the power of the data to deliver better insights.</li> </ul>
	<table border="1"> <tr> <td> <b>Level 2 Purchasing</b> <ul style="list-style-type: none"> <li>• Some parts of the purchasing process automated</li> <li>• Vendor catalogs online</li> </ul> </td> <td> <b>Level 2 Labor</b> <ul style="list-style-type: none"> <li>• Basic top-down cost control including reporting of plan vs. actuals performed</li> <li>• Weekly forecast and labor cost targets calculated</li> <li>• Assisted or embedded scheduling done</li> </ul> </td> </tr> </table>	
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3	Your organization has integrated a few key workflows and is starting to reap the rewards.	Now it's time to take advantage of those integrations. <ul style="list-style-type: none"> <li>• Develop workflows that make the most of your connected systems.</li> <li>• Leverage your shared data streams.</li> <li>• Introduce the concept of modeling.</li> <li>• Create full end-to-end process integration with automated analytics for immediate insight allowing for fast course correction.</li> </ul>
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4	You are leveraging the value of your sophisticated workflow integrations and optimizing purchasing and labor workflows.	You are already well on your way to reaping all the rewards of system integration, but there is more you can do. <ul style="list-style-type: none"> <li>• Further expand your use of your data to include more sophisticated analytics and reporting.</li> <li>• Leverage the power of predictive modeling and machine learning.</li> </ul>
	<table border="1"> <tr> <td> <b>Level 4 Purchasing</b> <ul style="list-style-type: none"> <li>• Master data</li> <li>• Recipe management</li> <li>• Inventory control</li> <li>• 3-way matching</li> <li>• ePOS integration</li> <li>• Supply chain</li> <li>• Menu engineering</li> <li>• Nutrition and allergens</li> <li>• ePOD</li> <li>• Clean invoicing</li> <li>• Menu publishing</li> <li>• Predictive ordering</li> </ul> </td> <td> <b>Level 4 Labor</b> <ul style="list-style-type: none"> <li>• Basic activity-based workload model                             <ul style="list-style-type: none"> <li>&gt; Labor standards</li> <li>&gt; Activity drivers</li> <li>&gt; 15-minute detail</li> </ul> </li> <li>• Forecast weather impacts, daily review</li> <li>• Schedule to shape of day</li> <li>• Team availability</li> <li>• Employee engagement</li> <li>• Event planning/price volume impacts</li> <li>• Optimized activity-based workload model</li> <li>• Budget modeling</li> <li>• Commercial modelling</li> <li>• Schedule accuracy measure</li> </ul> </td> </tr> </table>	
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5	Your organization is making the most of your integrated back office systems by leveraging analytics to drive business insights.	Now you need to work to maintain and improve your ability to deliver comprehensive visibility into your organization's performance. <ul style="list-style-type: none"> <li>• Continue to hone your machine learning and drive further insights.</li> <li>• Stay informed on new ways to gain value from your data to improve your performance, profitability and customer experience</li> </ul>
	<table border="1"> <tr> <td> <b>Level 5 Purchasing</b> <ul style="list-style-type: none"> <li>• Master data</li> <li>• Recipe management</li> <li>• Inventory control</li> <li>• 3-way matching</li> <li>• ePOS integration</li> <li>• Supply chain</li> <li>• Menu engineering</li> <li>• Nutrition and allergens</li> <li>• ePOD</li> <li>• Clean invoicing</li> <li>• Menu publishing</li> <li>• Predictive ordering</li> </ul> </td> <td> <b>Level 5 Labor</b> <ul style="list-style-type: none"> <li>• Self-learning forecast accuracy</li> <li>• Optimized suggested staff schedules</li> <li>• Predictive recruitment needs</li> <li>• Service productivity insight and guidance</li> <li>• Management by exception</li> </ul> </td> </tr> </table>	
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## Conclusion

No matter the size of your organization, integrating your back office systems makes sense. It helps you:

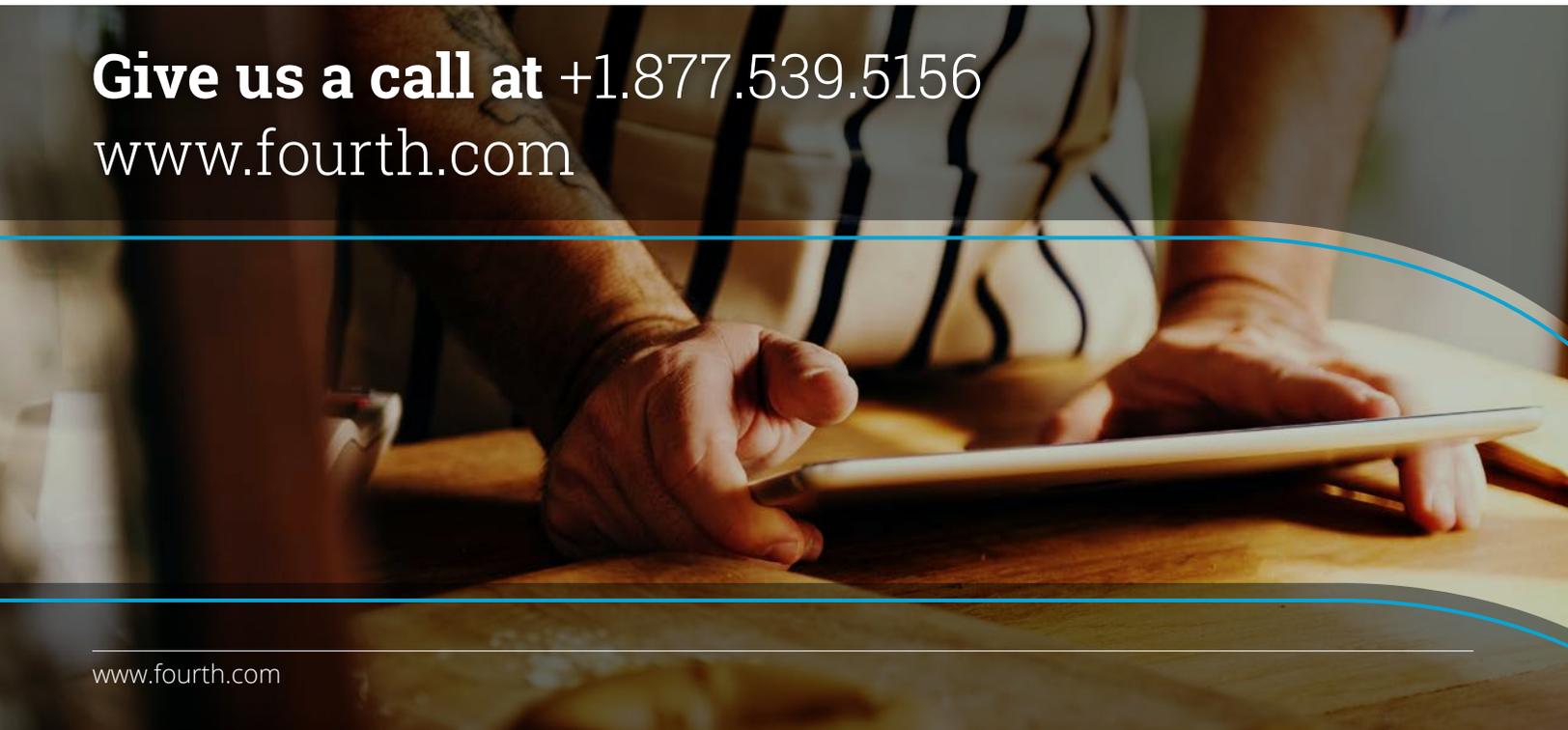
- Increase efficiency through the elimination of manual processes.
- Reduce errors and improve accuracy.
- Gain visibility into all aspects of your hospitality operation.
- Get intelligent reporting, all drawn from a single data source for better accuracy.
- Make informed decisions more quickly, with all the information you need at your fingertips.
- Work faster and smarter – not harder.

Examine your current back-office components, and then work towards an integration that will seamlessly link all systems, easily maintain data connections, create automated workflows and reporting, and communicate key findings across your teams. Want to learn how we can help? Feel free to give us a call.

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## About Fourth

Fourth provides end-to-end, best-in-class technology and services for the restaurant and hospitality industries. Their supply chain and workforce management solutions, coupled with the industry's most complete data and analytics suite, give operators the actionable insights they need to control costs, scale profitability, improve employee engagement, and maintain compliance. Since its merger with US-based HotSchedules, Fourth serves more than 7,000 customers across 120,000 locations globally.



**Give us a call at +1.877.539.5156**  
[www.fourth.com](http://www.fourth.com)