

The Ultimate Guide to Critical 24/7 Workforce Rostering Automation

Revolutionize Workforce Scheduling:
Cut Costs and Manage Fatigue Efficiently

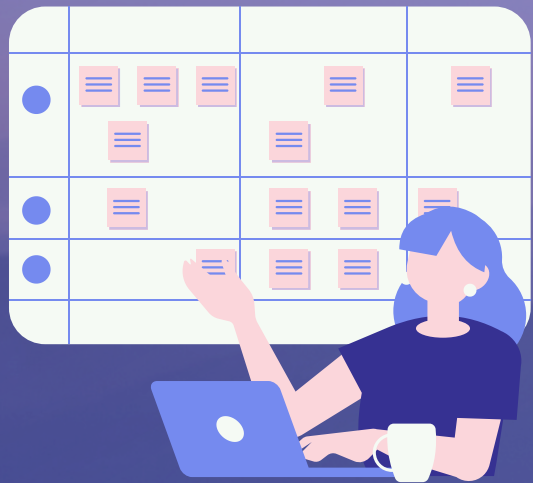
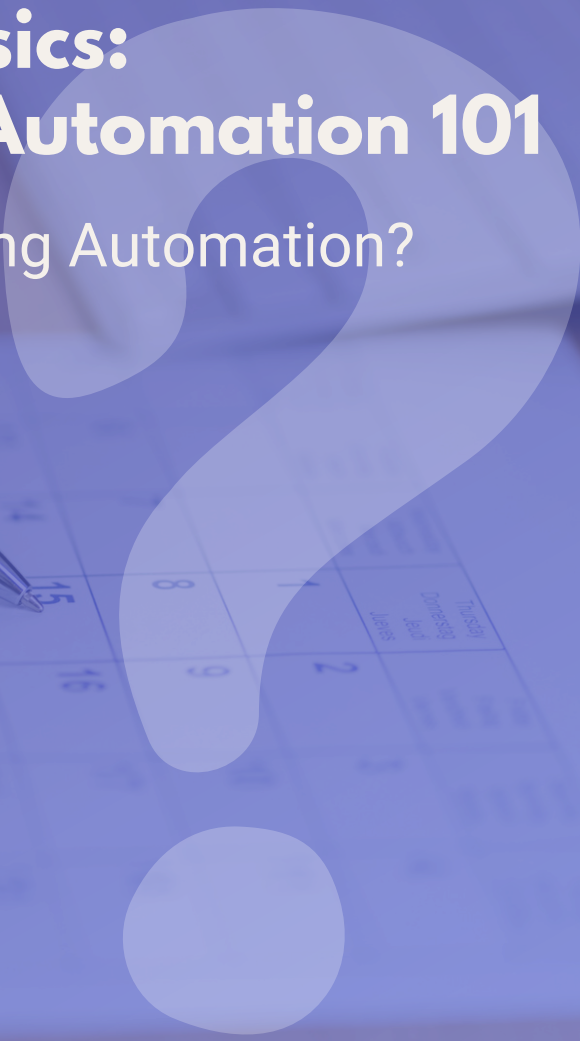


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Back to Basics: Rostering Automation 101

What is Rostering Automation?



What is Rostering Automation?

As with any ebook, article, or blog post, it's important to define the key term right from the start. So, let's begin by defining Rostering Automation in this ebook.



*Rostering Automation is a system that uses software to efficiently schedule employees, **reducing the need for manual planning** and minimizing errors. By using smart algorithms and data, it ensures optimal staff allocation, compliance with labor laws, and accommodation of employee preferences. This brings several benefits, such as **saving time, reducing operational costs, enhancing regulatory compliance, and improving overall workforce management efficiency**. Think of it as a helpful tool that makes scheduling as smooth and error-free as possible, much like a magical helper that perfectly organizes everything for you.*

Now that we have a clear understanding of what rostering automation is, let's explore why it has become so important. Join us in the next chapter to dive deeper into this topic.



Why is Rostering Automation Gaining So Much Importance?



Why is Rostering Automation Gaining So Much Importance?

The Employee Scheduling Software Market Report predicts that the market will reach US\$ 1,079.98 million by 2031, **with an annual growth rate of 12.1% from 2020 to 2031**. This growth highlights a significant shift towards automated solutions. This trend isn't just about improving efficiency; it's about using data analytics to enhance workforce management and increase operational flexibility.



In today's rapidly evolving technological landscape, **adopting rostering automation is crucial for organizations to remain competitive and efficient**. As businesses adopt these advancements, rostering automation becomes a vital tool in achieving streamlined operations and improved employee management.

Why is Rostering Automation crucial for the ATC industry?



Before implementing rostering automation, Excel and spreadsheets were commonly used for workforce scheduling in ATC operations. Despite technological advancements, many ATC centers continue to rely on these manual methods to create rosters. Perhaps your organization is still using these outdated methods. Unfortunately, this scenario is not ideal for your employees or your company's costs, and we can imagine that you're aware of this. However, it's important to recognize that these traditional approaches are insufficient in addressing the current challenges faced by the industry, beyond those mentioned earlier.

Most Common Challenges with Excel-based Scheduling

- Time-consuming and prone to human errors
- Limited flexibility in handling changes and unexpected scenarios
- Difficulty in enforcing regulatory compliance and managing employee preferences
- Increased costs due to staff leakage, manual planning, and regulatory non-compliance

Why is Rostering Automation crucial for the ATC industry?



A prediction of a 30% increase in air traffic by the end of the decade

Source: OAG report



77% of US Air Traffic Control is currently understaffed

Source: Simple Flying

Given these challenges and the growing demand, rostering automation becomes essential for ensuring efficiency, accuracy, and compliance in the ATC industry.

Rostering automation is not only vital for ATC but also for other sectors such as **airports, healthcare, railway, and fire and rescue services**. In these fields, maintaining efficient, error-free, and compliant schedules is crucial for ensuring safety, reliability, and continuous operation.



Why is rostering automation essential for sectors like airports, healthcare, railway, and fire and rescue services?

- **Enhanced efficiency:** Automated scheduling simplifies the creation and management of complex shift patterns, ensuring all shifts are covered with minimal manual effort.
 - **Reduced errors:** By reducing human input, automation significantly lowers the risk of scheduling mistakes, which is vital for operations that need continuous coverage.
 - **Regulatory compliance:** Automation helps ensure compliance with labor laws and regulations, preventing legal issues and promoting fair work practices.
 - **Optimal staffing:** Using data and algorithms, automated systems allocate staff more effectively, ensuring the right number of employees with the necessary skills are always available.
 - **Improved employee satisfaction:** Automation can consider employee preferences and availability, leading to more balanced schedules and higher job satisfaction.
 - **Quick adjustments:** Automated platforms can rapidly respond to changes like unexpected absences or increased demand, ensuring smooth operations without disruptions.
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Now that we understand the importance of rostering automation, let's explore the key features to look for in a rostering automation platform. These features will help you select the best solution for your organization's needs.

What Features to Look for When Selecting a Staff Management Solution for Rostering



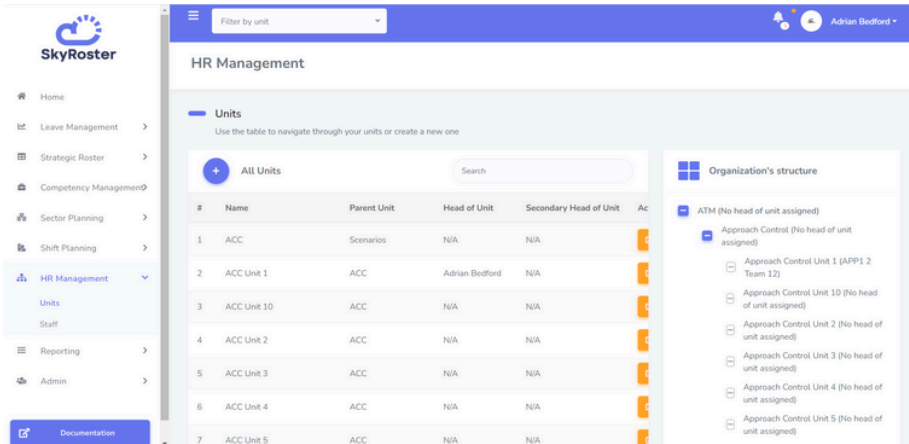
What Features to Look for When Selecting a Staff Management Solution for Rostering

Given that the market is continuously developing and growing, it's normal to find multiple workforce scheduling tools with various prices and specifications. Often, people get stuck on the price, finding a tool with 2-3 features that seem useful and fit within their budget, only to realize after implementation that the tool does not meet their needs. This leaves them back where they started, or even over budget. Considering such situations, we understand that for someone seeking an efficient workforce rostering tool, **it is important to conduct thorough research and find the solution with the most suitable and comprehensive features.** We will now present in detail, with real-life examples, what SkyRoster, a rostering automation platform with AI-based algorithms, can offer in terms of features for organizations in 24/7 critical industries.

What Features to Look for When Selecting a Staff Management Solution for Rostering

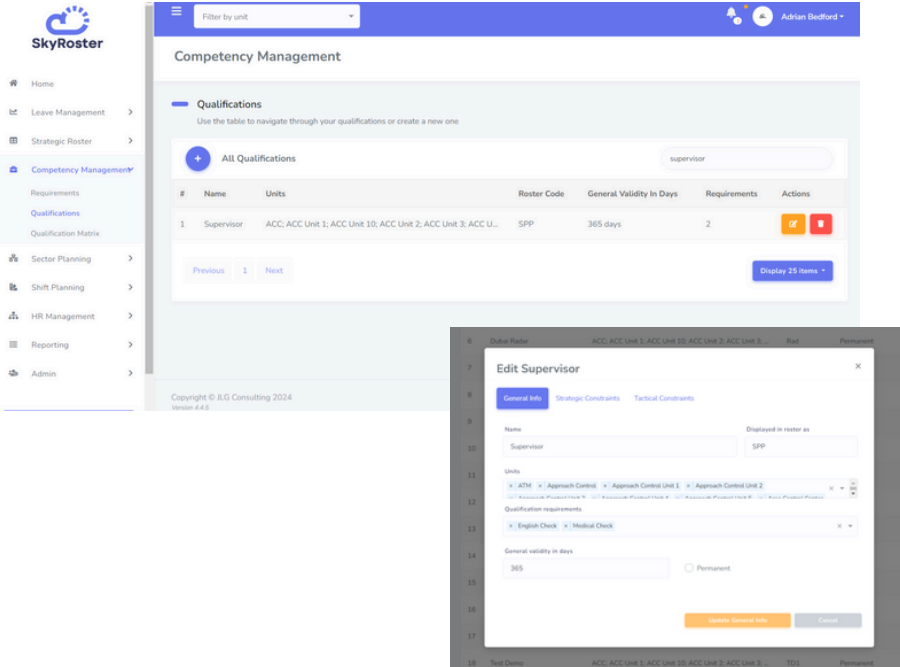
Paperless HR Management

Keeping everything organized makes day-to-day work smoother, especially when it comes to managing employee documents scattered in different places. A roosting automation platform with a Paperless HR Management feature, like SkyRoster, can revolutionize this process. It **cuts down on paper clutter**, **connects seamlessly with other HR systems**, **safely stores employee info**, and **provides quick access to important documents**. This reduces your hassle of administrative tasks significantly.



Advanced Competency Management

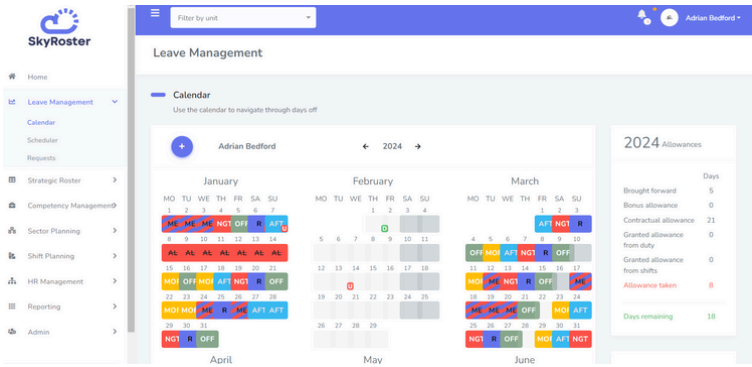
In a high-stakes working environment where specific skills are indispensable, effectively managing your team's competencies is crucial. A Competency Management feature isn't just helpful; it's essential. It ensures **the right people are in the right roles, automates compliance and license tracking, and facilitates smooth substitutions for absentees, thereby avoiding the risks associated with unqualified staffing.** This not only boosts operational efficiency but also ensures compliance with industry regulations.



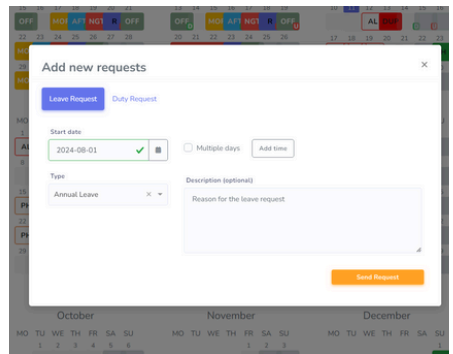
What Features to Look for When Selecting a Staff Management Solution for Rostering

Leave Management

To enhance work-life balance, productivity, and employee health, a Leave Management feature in rostering tools is invaluable. For a roster manager, it's like having a personal assistant for scheduling. It **automates leave requests, sets work hour limits, and keeps an eye on vacation balances**, all while **ensuring compliance with rules**.



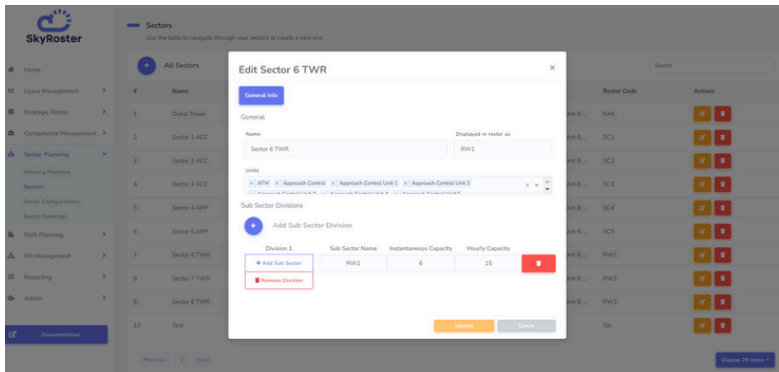
For employees, it acts as a digital buddy, letting them pick their preferred workdays and request time off with just a few taps on their smartphone. This modern approach not only smooths out day-to-day operations but also greatly improves overall job satisfaction for everyone involved.



What Features to Look for When Selecting a Staff Management Solution for Rostering

Workforce Demand Planning

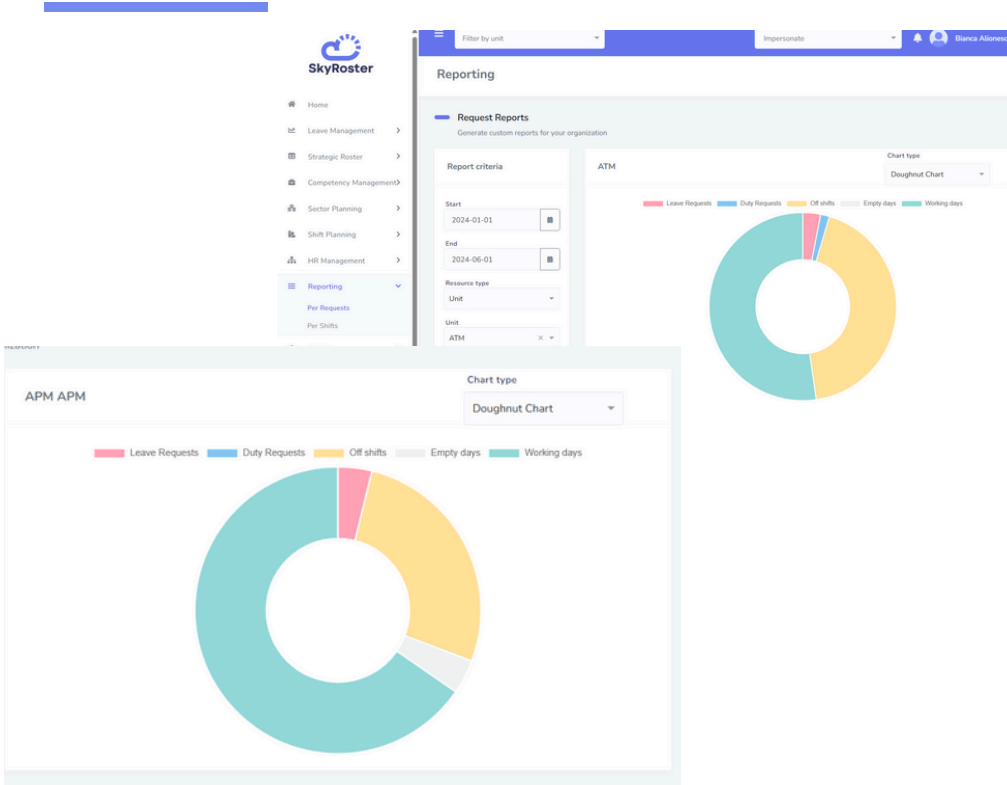
As a roster manager in an ANSP or a planning manager in a 24/7 critical industry organization, streamlining your scheduling is crucial. SkyRoster's Workforce Demand Planning feature is a game-changer, **allowing you to customize work positions, schedules, and rest times to fit the unique needs of your team.** It enables **quick adaptation to changes in traffic or unexpected situations, ensuring you always have the right people in the right places at the right times.**



This feature **helps you anticipate and meet workforce demands, manage shift rotations, and maintain compliance with industry regulations,** making your job easier and your planning more efficient, even in the most demanding circumstances.

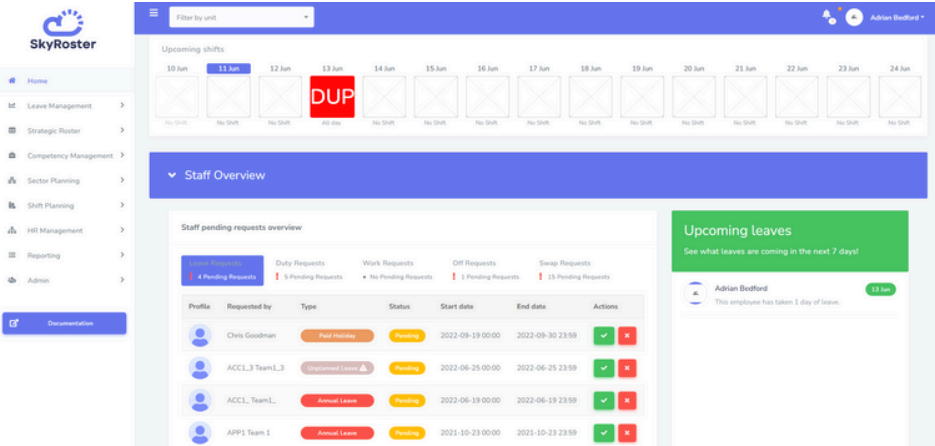
Integrated Reporting

SkyRoster's Integrated Reporting feature allows you to delve deep into the specifics with **custom reports on everything from shift patterns to specific requests and performance metrics**. Think of it as having a magnifying glass on your team's dynamics, enabling you to pinpoint opportunities for improvement and refine your strategy with precision. This powerful tool transforms raw data into actionable insights, streamlining your workflow and significantly enhancing your impact.



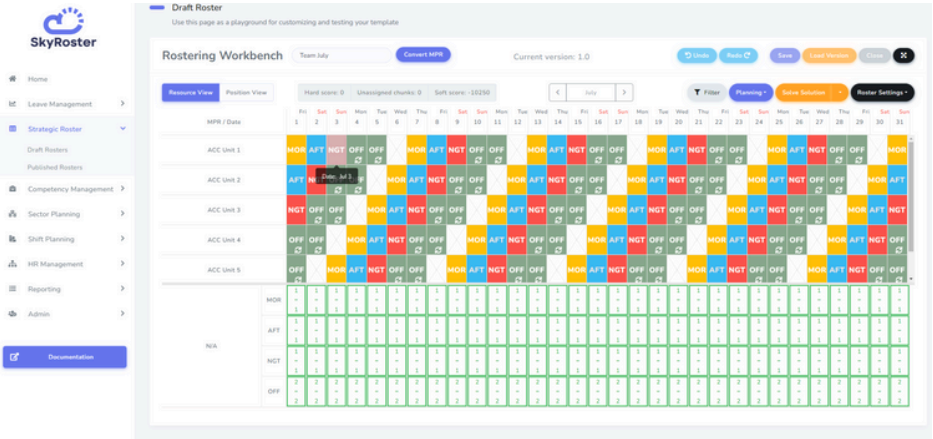
Personalised Workspace

Having a comprehensive overview is essential for efficient management and smooth operations. SkyRoster's Personalized Workspace is a standout feature, offering a **custom dashboard tailored to each role, integrated calendars for streamlined schedule management, and quick access to vacation days, extra allowances, and work preference fulfillment.** This feature enhances both managers' and employees' experiences by simplifying navigation and providing essential information at a glance, making it an invaluable tool for improving productivity and satisfaction.



Automated Rostering with AI-based optimisation algorithms

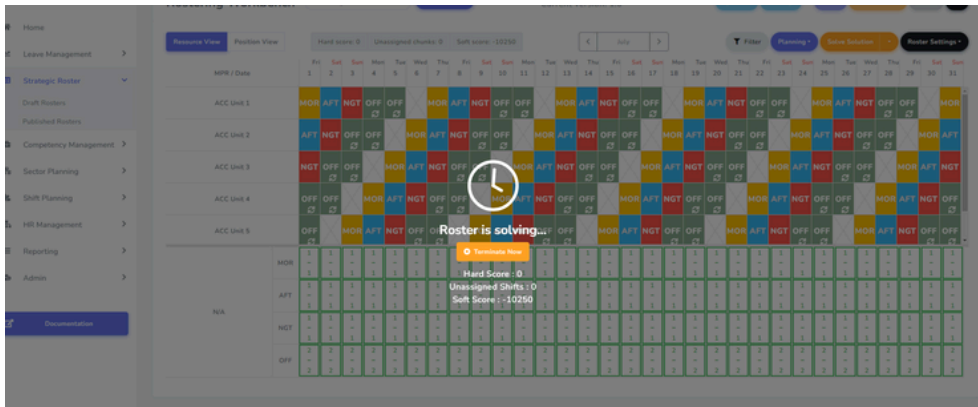
In addition to the impactful features for managing your workforce, one that truly stands out is the ability to smartly manage shifts. SkyRoster's Automated Rostering feature, powered by AI-based optimization algorithms, revolutionizes scheduling by tailoring it to your team's specific needs. With this feature, **you can effortlessly configure shifts, set work hours, and ensure that the right qualified staff are in the right places at the right times.**



What Features to Look for When Selecting a Staff Management Solution for Rostering

Automated Rostering with AI-based optimisation algorithms

This simplifies the rostering process and ensures compliance with regulations. The flexibility to tweak and adjust schedules as needed allows you to precisely meet your scheduling requirements, making the entire process from drafting to achieving the ideal schedule seamless and efficient.



While optimizing schedules and improving efficiency are essential, another huge real challenge lies in managing fatigue in a demanding 24/7 environment. Up next, we'll uncover how a rostering automation platform can be your secret weapon in **combating fatigue**, ensuring your team stays alert and productive.

How to Combat Fatigue with a Rostering Automation Platform

Let's explain concretely how SkyRoster, through its features, can assist in better managing fatigue in different scenarios.

Have you or one of your employees ever found yourselves in one of these situations or something similar?

Scenario:

Sarah, an Air Traffic Controller at a busy airport, struggles with a cumbersome leave request process that requires multiple approvals and often gets lost in the manual system. Because of the lack of an automated system, her leave requests are frequently delayed or overlooked. Additionally, due to a shortage of staff and poor scheduling practices, Sarah is often scheduled for excessive overtime.

Impact:

The constant delays in leave approvals mean that Sarah rarely gets the breaks she needs to rest and recuperate. She ends up working long hours, often back-to-back shifts, which leads to severe physical and mental exhaustion. This exhaustion affects her ability to manage air traffic safely, increasing the likelihood of mistakes in communication or flight monitoring. The frustration from the inefficient leave process and excessive work hours also diminishes her job satisfaction, making her consider leaving the profession altogether. This not only affects her well-being but also contributes to the ongoing staffing issues at the airport.



Solution:

Automated monitoring of hours worked, shift patterns, tasks performed, and breaks taken helps identify employees at risk of burnout. Managers can then implement sustainable changes to prevent it.

Another feature like Leave Management makes it much easier for employees to request their well-deserved leave days and for workforce planners to do the shift schedule around the staff's availability, accommodating their planned or unplanned leaves and working preferences.

Streamlined leave approvals and better overtime management allow Sarah to get necessary breaks, reducing physical and mental exhaustion, and improving job satisfaction and performance.

Have you or one of your employees ever found yourselves in one of these situations or something similar?

Scenario:

Alex, an Air Traffic Controller at a major ATC center, is repeatedly assigned the night shifts and high-pressure slots, while his colleagues often receive the more desirable weekend shifts off. The manual rostering system fails to distribute the workload evenly, leaving Alex with the brunt of the undesirable tasks

Impact:

The constant night shifts and high workload lead to significant resentment and reduced morale for Alex. His persistent fatigue results in missed communications and overlooked details in his tasks, which impacts the safety and efficiency of air traffic management. The unfair workload distribution creates a sense of injustice among the team, leading to internal conflicts and a decrease in overall team cohesion. Alex starts feeling undervalued and overworked, prompting him to start looking for other job opportunities. His departure, along with the increased turnover from similar situations among other Air Traffic Controllers, leaves the team understaffed and struggling to maintain productivity, further exacerbating the issue.



Solution:

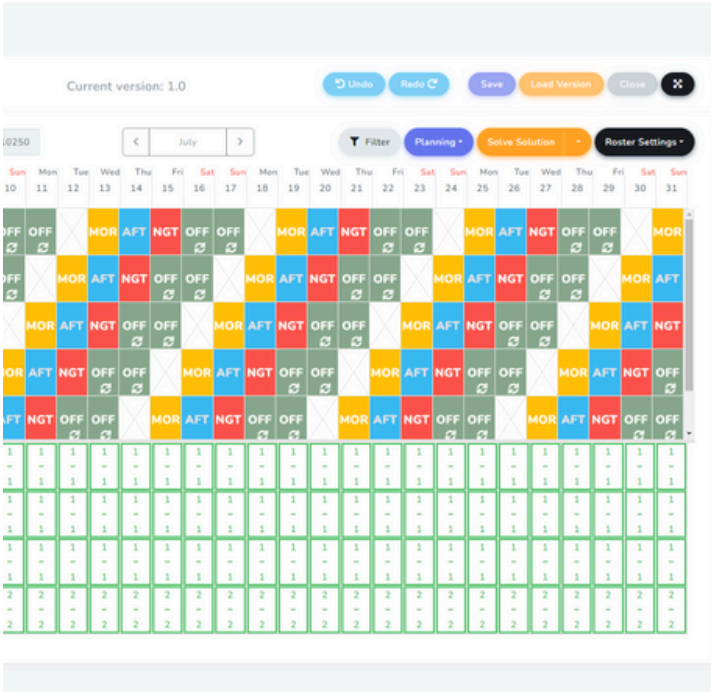
Shift swapping allows employees to exchange shifts with compatible colleagues while considering planning constraints. This ensures they can get the rest they need while maintaining safe and efficient operations.

Additionally, managers can use the platform's distribution rules to fairly assign public holidays, weekends, and night shifts, promoting a healthy workload distribution and improving overall satisfaction and efficiency.

Fairer workload distribution and the ability to swap shifts ensure Alex gets a balanced schedule, reducing fatigue and resentment, and improving morale and team cohesion.

How else can rostering automation help you manage fatigue more effectively?

SkyRoster is designed to help manage fatigue by integrating rules like required rest periods between shifts and limits on consecutive working hours. Automating these checks ensures schedules comply with best practices to minimize fatigue, preventing issues like back-to-back shifts or insufficient rest periods.



How else can rostering automation help you manage fatigue more effectively?

Predictive rostering helps employees feel more in control of their personal and professional lives, increasing satisfaction and work performance. Knowing their shifts in advance allows workers to plan their lives and adjust their sleep schedules, reducing fatigue.



The platform offers comprehensive reporting tools that provide insights into workforce use and fatigue levels. Managers can monitor fatigue scores and proactively adjust rosters to address emerging fatigue risks. This visibility supports informed decisions that prioritize employee well-being and operational efficiency.



How to Reduce Costs with Rostering Automation

Cost reduction - What manager or company doesn't want that? So how can rostering automation help reduce costs?

Rostering automation slashes costs by optimizing workforce allocation and cutting down on overtime, leading to substantial labor savings. SkyRoster's AI-driven system boosts efficiency by accurately predicting staffing needs and preventing overstaffing or understaffing. Automating scheduling tasks reduces administrative overhead and minimizes costly errors. Integration capabilities streamline HR processes, reducing paperwork and associated costs.



SkyRoster's system continuously optimizes schedules with AI-based algorithms, considering demand, employee skills, and labor laws to minimize overtime. Real-time adjustments manage unexpected changes like absences, avoiding expensive last-minute hires. This automation reduces manual scheduling errors, such as double bookings or compliance mistakes, which can incur fines and inefficiencies.

Cost reduction - What manager or company doesn't want that? So how can rostering automation help reduce costs?

By simplifying Leave Management, costs are further reduced through streamlined time-off requests, real-time tracking of worked hours and leave balances, and automated time and attendance tracking. This eliminates manual Excel sheets, ensuring efficient management of employee availability and shift patterns.

SkyRoster's Integrated Reporting offers insights into workforce data and fatigue levels. Managers can monitor key metrics and adjust rosters to prevent fatigue-related inefficiencies, maintaining a productive workforce and reducing burnout-related costs.



Explore more about cost reduction in the next example.



Cost reduction - What manager or company doesn't want that? So how can roosting automation help reduce costs?

Imagine John. He works for an Air Traffic Control (ATC) unit, serving as the roster manager. He used our ROI calculator to determine the potential savings in both money and time that could be achieved by automating the roosting process instead of handling it manually.

Here's a breakdown of the information:

Employees	He manages the schedules for 37 air traffic controllers.
Planners	There are 2 people, including him, who handle all the roosting tasks.
Locations	This work is done for 1 location.
Work Hours	Each controller works about 2,100 hours a year.





Cost reduction - What manager or company doesn't want that? So how can roosting automation help reduce costs?

Here's a breakdown of the information:

Planner Workload	He and the other planner spend 5 hours every week on tasks like approving timesheets, solving schedule conflicts, and transferring data to payroll.
Salaries	Both the controllers and planners earn around €40,000 a year.
Overtime Costs	The ATC unit doesn't pay any overtime.
Cost Per Hour	On average, it costs the ATC unit €19.05 per hour for both controllers and planners.
Wasted Hours	John and the other planner waste about 520 hours a year on manual roosting tasks.
Wasted Money on Manual Rostering	This wasted time costs the ATC unit €9,906 a year.
Wasted Money on Overtime and Non-Compliance	There's no extra cost here since there's no overtime paid and no non-compliance costs.
Wasted Money on Unoptimized Rosters	The ATC unit loses €44,400 a year because the rosters aren't as efficient as they could be.





Cost reduction - What manager or company doesn't want that? So how can rostering automation help reduce costs?

When all these wasted costs are added up, the ATC unit **is losing a total of €54,306 a year**. By automating the rostering process, the unit could save this amount. This means you and your colleague could spend less time on tedious tasks, and the ATC unit could save a significant amount of money.



Benefits of Rostering Automation for Cost Reduction



Optimize Workforce Use

Efficiently allocate staff to meet demand, reducing overtime and minimizing underutilization.



Data-Driven Decisions

Use analytics to predict staffing needs, aligning resources with real-time traffic and operational demands.



Minimize Manual Effort

Automate scheduling processes to save time and reduce administrative costs.



Reduce Errors and Compliance Issues

Ensure compliance with labor laws and regulations, avoiding costly penalties.



Improve Staff Retention

Better schedules lead to higher job satisfaction and lower turnover, saving on recruitment and training costs.

Conclusion + Special Offer



Conclusion

Rostering automation is revolutionizing the way critical 24/7 industries manage their workforce. By leveraging advanced algorithms and real-time data, it ensures optimal staffing, enhances regulatory compliance, and significantly reduces operational costs. From **Air Traffic Control to Airports, Healthcare and Fire and Rescue services**, automated rostering addresses the challenges of manual scheduling, such as inefficiencies, errors, and fatigue. Implementing a solution like SkyRoster not only boosts productivity and employee satisfaction but also ensures uninterrupted and safe operations, ultimately driving substantial cost savings and operational excellence.

Special Offer:

Sign up for SkyRoster-as-a-Service within two months of downloading this eBook and receive a **40% discount for the baseline version!**

Don't miss out on this opportunity to transform your rostering process. **Book a product tour today** to get started and take advantage of this exclusive offer.

