

White Paper



Integrating Task Management and Labor Scheduling to Boost Store Productivity

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Abstract

Retailers are increasingly focusing on task management as a formal function. Store task management involves streamlining workflow and communication between corporate and store, optimizing workload and driving execution compliance. Labor scheduling creates shifts and staffs them with employees for a range of store activities.

Although the benefits of a task management solution are obvious, the next logical step is integrating it with labor scheduling. This way, retailers fully leverage task management benefits while containing labor costs.

The major challenge in achieving integration is making task information in the application available to the labor scheduling solution. Sans integration, store tasks are scheduled manually without factoring in other store activities and labor demand, or employee availability, skills and preferences. Integration enables the scheduling engine to access all the task information enabling to fill gaps or troughs in labor demand with store tasks.

Labor Scheduling and Store Task Management

In the store, work can be divided into activities and tasks. 'Activities' can include regular work such as cashiering, stocking, receiving, customer service, or cleaning. On the other hand, any non-recurring, ad-hoc work, primarily driven by corporate such as merchandise/end-cap reset, changing store signage, product recall, or HR survey, is referred to as a "task" or "store task".

Labor scheduling creates shifts for the week by activity. It then fills those shifts with employees based on availability, skills and preferences.

Store task management involves managing tasks to streamline workflow and communication between corporate and store, optimize and drive execution compliance. Communication is streamlined by creating a single channel, rather than multiple modes. It also allows corporate priorities to be defined clearly, with consideration for capacity available at the store. Further, it includes a feedback mechanism to track compliance.

While task management clearly improves customer shopping experience, achieving this without an increase in labor costs is critical. The answer lies in its integration with labor scheduling.

Store Tasks: Scheduling Objectives

With the right tools, store task management in itself is a no-brainer. The challenge arises in the integration of task management with labor scheduling. Significant business value in achieving integration between the two comes from:

- Improved store productivity
- Better store execution of corporate strategies and programs

A retailer may have the following key objectives in integrating the two functions:

1. [Making store tasks available to the scheduling engine](#)

Labor scheduling and task management are handled through two separate applications at most retailers. The first objective is to get tasks, created in the task management application by corporate, into the scheduling system to build an optimized schedule.

2. [Assigning tasks based on skill and availability](#)

The next goal is to align skills required for a task with the skills of employees who will perform the task.

3. [Specify day/time for tasks](#)

The final objective is to get the scheduling engine to schedule the store task for a particular time of the day/day of the week based on customer traffic and other production/critical store activities.

Balancing Productivity & Service

In a typical store scenario, there are times in a day when there isn't enough demand for labor to create a shift. In such a situation (Fig 1.0), the option is to either drop the activity that requires partial labor, or create a shift without enough activity. The first option may result in poor customer service, while the second will lead to decreased productivity.

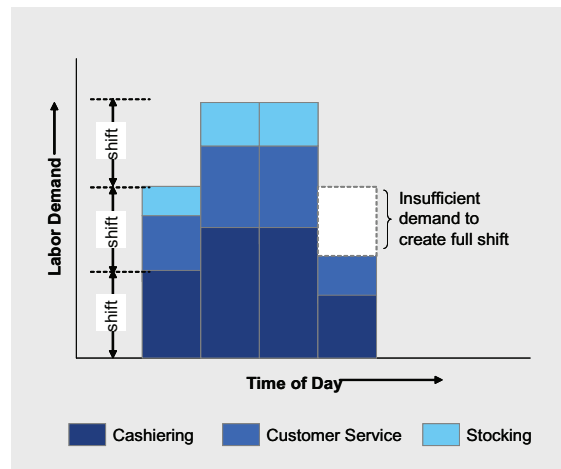


Fig. 1.0: Scheduling challenges

Instead, in such situations, if a store task is available (such as end-cap reset, which does not have to be performed at a particular time of the day), the scheduling engine can fill the gap in demand with this task. This will ensure that while the task is accomplished, neither store productivity nor customer service suffers.

Integration Approaches

To achieve successful integration, retailers can choose one of two approaches from a business perspective. The difference lies in the assumptions and the retailer's approach to labor management.

Option 1

The first option (Fig. 2.0) assumes sufficient labor capacity at the store level so that most tasks for a week can be scheduled in the given week.

In this option, labor hours required for a store task are estimated while creating the task/project. This information is passed to the scheduling system so that the total labor hours required to complete all tasks in a given week are available to the scheduling engine.

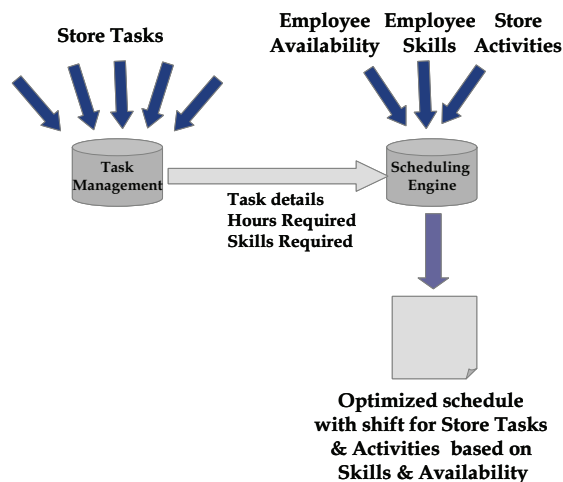


Fig. 2.0: This method assumes sufficient labor capacity at a store

The scheduling engine creates an optimized schedule, i.e., it creates shifts and then assigns store employees to the shifts based on their skills and availability.

Option 2:

In option 2, instead of assuming “infinite” labor capacity at the store, a fixed number of labor hours per week are set aside for corporate tasks (Fig. 3.0).

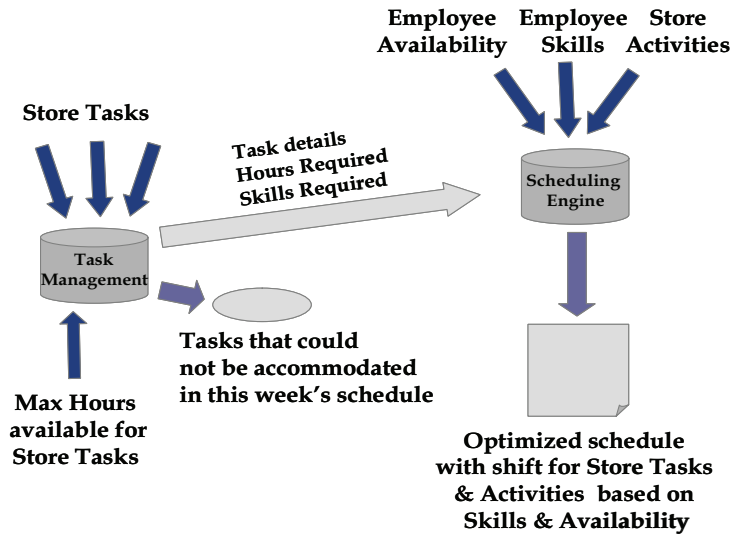


Fig. 3.0: Fixed hours for corporate tasks

Labor hours are estimated at the time of creating a store task/project in the task management application. The application applies the cap of total hours available for such tasks, enabling low priority tasks to be dropped. Information on all other tasks is passed on to the scheduling system.

As in the first option, the scheduling engine then draws up an optimized schedule with tasks allocated, based on availability and skills.

Neither option is better than the other. The retailer's choice will depend upon its approach to task management and labor scheduling.

In the typical scenario of limited store labor capacity, most retailers limit the number of hours set aside for corporate tasks. This often involves a gatekeeper at corporate who manages tasks sent to stores every week.

Levels of Integration

A retailer can choose between 4 levels of maturity for task management and labor scheduling integration. The maturity of the solution varies with the level of automation and the granularity of scheduling. For example, a shift for a store task can be assigned manually or automatically while an assigned task could be defined by week, day, and shift on a day, or by shift and skill.

Level I: Basic

At the basic level, all that integration achieves is making the hours required for store tasks available in the overall schedule. Shifts for store tasks are assigned manually to employees. The scheduling system is unable to assign the task on a particular day in the week. Moreover, it lacks the capability to display the task on the schedule.

- Labor hours included in the schedule
- Task assigned manually to employees
- Assigned task description not displayed on the schedule
- Assigned task not defined by day

Level II: Primary

As a first step on the maturity curve, a retailer can have the tasks assigned by the day, i.e., the scheduling engine can specify which day of a week should a task be performed. However, shifts are assigned manually to employees and specific tasks are not displayed on the schedule.

- Labor hours are included in the schedule on the right day
- Task assigned manually to an employee
- Assigned task description is not displayed on the schedule
- Assigned task is defined by day (but not by shift)

Level III: Intermediate

At the third level of maturity, the scheduling engine can assign the task by day and also by shift. This is the level where a retailer can start seeing some real productivity gains since the task is scheduled to be completed during the “down” time, i.e., when there is no other pressing production or customer activity.

- Labor hours are included in schedule on correct day and shift
- Task assigned manually to an employee
- Assigned task description is not displayed on the schedule
- Assigned task is defined by shift and day

Level IV: Complete

This is the highest level of integration with complete automation and tasks assigned by shift and based on employee skills. The core difference between this level and the previous one is that skills required for tasks are taken into account when assigning employees. This approach is useful where tasks require highly specialized skills.

Labor hours are included in schedule on correct day and shift showing task assigned

- Automated scheduling of task
- Task assigned by day, shift and skill
- Task description displayed on schedule

At approximately 11% of sales, labor represents the largest variable expense for a retailer.”

AMR Research *

Benefits

Although task management is relatively new as a formal retail or store function, it is fast gaining significance. While the benefits of task management itself are obvious, retailers can derive greater value from this investment.

Improving customer shopping experience using task management while keeping labor costs under control can be achieved by integrating it with labor scheduling.

Some key benefits of integration are:

- A significant rise in productivity
- Elimination of employee down-time
- Improved store execution of corporate programs and strategies

While the maturity level of integration will depend on the specific needs of a retailer, Levels II or III will be the obvious choices for most. The cost of achieving Level IV integration may not be justified easily while Level I would be too rudimentary to yield any significant benefits.

About the Author

Paras Goel is a Principal with Infosys' Industry Solutions Consulting team focused on Store Operations and Store Execution. He has worked with Fortune 1000 retailers in North America, Europe and Australia to help define and implement their store strategies through business and process redesign and solution implementation. An MBA from the Indian Institute of Management (Calcutta), Paras holds a BS in Electrical Engineering from the Institute of Technology, Banaras Hindu University, India.

*AMR Research: “Stretched Store operations find relief with workforce management” by Rob Garf, April 2003 and Alert by AMR: “Leading grocery chain benefits from enterprise workforce management” by Greg Girard, Sep 2002



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