

## UNION RULES AND AUTOMATED WORKFORCE SCHEDULING

By James Fitzpatrick Product Architect Tugboat Software Inc Newport Beach CA 92660 800-777-3581 www.tugboatsoftware.com

July 12, 2005

THE PROBLEM In most food processing operations, just getting the right people in the right jobs is difficult enough. In union environments you have all the challenges of crewing and also must honor the constraints of a union contract. Contracts usually include language that addresses the senior employees right-to-work, preferences for either shifts, jobs, highest paying jobs, or all three, drafting for overtime, and many other requirements that bear on workforce scheduling.

> Its not union rules alone that make workforce scheduling so difficult. When union rules are combined with changing production runs or with crewing systems that rotate employees through shifts and jobs over days and weeks, the scheduling process becomes very complex. Given their best effort, the human scheduler, if they can keep up at all, can not apply the rules consistently and fairly. The number of variables - seniority, job preferences, qualifications, absence conditions, rotations, etc. - are just too great. In the push-and-shove of getting product out the door, rules are often enforced unevenly or stretched outright.

In every facility, scheduling is given the same tasks; assigning employees to shifts and overtime, managing vacations, absences, training, etc. Yet, no two labor contracts are alike and no two facilities run their scheduling operations the same. Not only are different unions found in the same enterprise at different plants, different unions are found in separate facilities on the same production site. In these environments, any organized approach to standards across an enterprise, much less within an industry, is simply out of the question.

Where workers are represented by a labor contract, merely changing the existing scheduling process is a non-starter. These are the main reasons that computer automation, with its usual mission to provide a "best practices" or "industry standard" solution, hasn't been able to gain any ground on this problem, until now.

## WHAT ROLE SHOULD COMPUTER AUTOMATION PLAY?

What's needed is a software solution that automates the entire scheduling process and applies the union rules in a manner that is absolutely consistent with the intention of the labor contract as it exists in each manufacturing facility. Using today's database tools, a proprietary analysis process, and a program that is tailored to the rules and policies of a specific facility, Tugboat's scheduling solution does just that.

Tugboat starts with an industrial engineering analysis that records and organizes the existing rules, those defined in the union contract as well as any related practices and polices. The analysis is succinct and focused exclusively on the scheduling process that is in place. The result enables facilities to verify sometimes for the very first time - that their own scheduling rules are carried out according to the intent of the union contract. The rules are then automated with a library of task-specific software programs that accurately model every stage in the scheduling process. Since the software is tailored to the specific scheduling rules that are found in each facility, the need for an enterprise-wide standard is eliminated.

Software doesn't care, as we all know, who we are. It wont play favorites. You can't make it mad. It wont get tired. In workforce scheduling, especially in a union environment, these characteristics are just what's called for. They uphold everyone's best interest. Once the work rules are fully automated and consistently applied by the software, certain things are eliminated;

Personal interpretations of the rules.

- Favoritism and arm twisting.
- Most human scheduling errors.

The result is a scheduling process that is predictable, according to the union rules, for each and every employee. Consistent application of the rules serves the objectives of both labor and management. It doesn't provide an advantage to one constituency over the other.

## WHAT REALLY GOES ON IN THAT SOFTWARE?

To most people, the computer is a black box. Tugboat eliminates this barrier by providing an audit trail and log files. When making job assignments or other scheduling decisions such as drafting for overtime or granting leave, the audit trail records how each employee is treated in every step in the scheduling process. This report can be examined at any time, providing transparency and insuring that all employees are treated fairly. Also, the audit trail allows supervisors to discover and correct any clerical errors quickly. We are only human after all and when using computers, clerical errors do occur.

Automated sign-ups for overtime, requests for time off, vacations, bid on jobs, and more are enabled through an employee kiosk. To the extent that automated approvals are enabled, the software verifies that enough coverage is available when schedules are generated and grants or denies requests strictly according to the union rules. This eliminates personal favoritism and avoids any forgetfulness that might color decisions. Fundamentally, giving employees access to the scheduling system through a kiosk at all hours without having to go through the HR office, empowers them with control over their requests.

All interactions with the kiosk are automatically recorded in logs. This date-andtime-stamped hard data eliminates any "he-said she-said" debate about who signed up and who approved what and when. By using software to manage these requests, union standards, to which every worker is subject, are uniformly applied.

Using Tugboat's solution to automate workforce scheduling according to the intent of the union contract makes scheduling more efficient by insuring that union rules and policies are applied consistently and objectively - every shift, every day, for every worker. A software solution that assigns every member of the labor force in a manner which is consistent with the labor contract is in the best interest of production planning, management and the employees.