Contribution / Response from Tugboat to Article

(Tugboat response is in blue)
This article is very well targeted and represents the conditions that Tugboat finds when automating labor scheduling in manufacturing operations today.

Excerpt:
"An integrated WFM platform with workforce scheduling provides a higher quality of information and consistent user experience. With a single database system, all changes to schedules, time cards, accruals, and leave are updated in real time, so there is always only one version of the truth. With a number of point solutions needing integration to T&A and back-office accounting and HR systems, there is always the question of whether everything is up to date."

1. The key here is making a clear distinction between actual WFM data and labor planniig and scheduling data. Most of labor planning & scheduling data does not need to go to a WFM system. Rather than "changes to the schedule", **changes in the WFM data that impact the schedule** comprise a very low volume of shared data. Typically this includes a person's home job, home shift, or crew membership.

2. Having a limited amount of data in common provides and advantage, a pivot point, for selecting the best application for scheduling and the best application(s) for other WFM processes.

3. The mindset "One version of the truth" is counter productive to a labor planning and scheduling system. In a dynamic labor scheduling system there are at least four statuses (truths) for a schedule: built, pending, current and final. Labor scheduling is all about volatility:
    a. "What if" planning
    b. Rapid feedback cycles from labor scheduler to production scheduler
    c. Constant change cycles in schedules that do not necessarily affect WFM mainstay time and attendance.
    d. Finer grain job specific information is used for labor scheduling which is not needed and seldom found in T&A or payroll solutions.

	Example of data type	***WFM***	***Optimized Scheduling***
	Job assignment	Broad Job Classification re payrate	- Certirfication for specific Machine/Position. - Line or work area. - Reason for assignment.

			- Preference - Multiple job segments on single shift - Interspersed training or meeting events
	Shift Assignment	Standard shift start time	- Startime of specific job, or job time is often offset from nominal shift or line start time
	Overtime	Date, shift, # hours	- Job start and end time, - Specific line & job. - Reason for assignment - Volunteer or drafted or other status
	SKIU labor standard	??	- Standard sets of Jobs and times for each SKU - Variants for each SKU for setup, low production or other special production conditions

"For example, a point workforce scheduling system typically requires its own employee information. That means that a large manufacturing customer would be maintaining this information in one system and updating at least two others (i.e., ERP/accounting/HR and T&A). On top of that, schedule updates must be passed back to T&A to validate the schedule hours against the hours punched in. Then, actual hours worked need to be passed back to scheduling to determine critical factors, such as approaching overtime, employee availability, compliance rules, etc."

1. "One system updating at least two others" can be efficiently managed by the an "On-Demand Platform/SaaS/Cloud (Many to Many)". ... and B2B utilities.
2. "...schedule updates must be passed back to T&A to validate the schedule hours" is not the most effective flow. The schedule is downloaded to T&A *ahead of* the when a person comes on site in order to set allowed entry time. Seldom is T&A information passed back to the scheduling process.
3. For example, planned absences, which are essential to labor scheduling, are downloaded from labor scheduling to WFM ahead of time. The "call-in" absences and final schedule are downloaded at the end of each shift or end of day. If actual absence records are uploaded from WFM the volume is small. Typically these cases occur when a normal WFM module, such as disciplinary tracking, is not available..

"Not surprisingly, the manufacturing WFM arena is replete with a number of best-of-breed solution providers, some coming from the WFM platform play and others from the point-solution forum. ScheduleSoft, **Kaba**, **Infor Workbrain**, **CyberShift**, **TimeLink**, **Workforce Software**, **Dayforce**, Kronos, and others have competitive offerings. Look for future articles from TEC that dig deeper into some of these offerings."

1. Not mentioned here in the article are workorders from any ERP or APS solution. These are a critical planning component for any labor scheduling solution. Without this integration, the labor scheduling is not actually an extension of the engineering cycle that begins with ERP and ends when production meets the customer's demand.
2. Scheduling is optimally done with the understanding that for any single day or shift the labor pool has a FINITE capacity. Without finite capacity considerations and quick rescheduling, the feedback needed for production APS systems is not available.

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