Building Productivity: Automating Time and Attendance in Manufacturing

Manufacturing organizations always face a critical balancing act. They must achieve the highest levels of efficiency possible, while also ensuring that they are not over or under supplying the marketplace. This need to be flexible and efficient requires exceptional visibility into all of the factors that influence productivity and output — including the talent and labor required. Many organizations turn to automation and technology to enable them to better manage workforce data and practices. This Sector Insight will look at the unique challenges manufacturing organizations face and how automation of key workforce management processes, including time and attendance, helps manufacturers not only improve efficiency, but also better manage labor spend, reduce compliance risk, and improve productivity.

Productivity is Paramount

Running a manufacturing organization is inherently an exercise in maximizing productivity. Profitability is what comes when an optimal balance of labor, materials and demand is maintained. So it’s not surprising that manufacturing organizations are 13% more likely than their counterparts to cite the need to improve productivity as the top marketplace pressure driving workforce management (Figure 1).

Figure 1: Workforce Management Pressures

Aberdeen defines manufacturing organizations as those that build or produce across multiple industries including consumer electronics, industrial equipment, consumer packaged goods, automotive goods, and others.

This study is based on data from 202 organizations, 37 of which were manufacturing concerns, collected between May and August 2012.
In addition to this need for productivity, manufacturing organizations also face some specific challenges with regard to the need to respond to organizational growth, as well as merger and acquisition activity. Over half (54%) of manufacturing organizations cited the need to integrate systems and processes as a result of mergers, acquisitions, or expansion as one of their top two most pressing internal challenges to be solved through better workforce management. This challenge was cited by just 24% of all other organizations.

In other industries, achieving greater levels of workforce utilization and reducing the time spent on manual transactions topped the list. These are still significant concerns for manufacturers, but it’s interesting to note this focus on growth and merger activity as a workforce management driver. Manufacturing organizations seem to express a need to have a single source of truth for workforce management data, due to the complexity of facilities operating on multiple different platforms as well as acquisition and expansion activity, which will allow them to achieve their productivity goals (Figure 2).

Figure 2: Workforce Management Challenges

![Figure 2: Workforce Management Challenges](image)

Source: Aberdeen Group, August 2012

Fortunately for manufacturing organizations, many of these needs can be met by common solutions. Organizations are turning to automated workforce management technologies to help them be more efficient, more consistent, and more transparent as they execute workforce management activities. And the most common place for organizations to begin their automation journey is with time and attendance. Aberdeen's July 2012 study *Workforce Management 2012: Efficiency, Effectiveness and Engagement* found that 67% of Best-in-Class organizations (see sidebar page 3) utilize automated time and attendance solutions, making it the most frequently

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**Fast Facts**

- 12% greater workforce capacity utilization is achieved by organizations with automated time and attendance solutions in place.
cited technology enabler among these top performing companies. And there is good reason for this level of adoption. Data shows that organizations with automated time and attendance solutions achieved 12% greater workforce capacity utilization than those with manual processes, in addition to other organizational improvements. Automation also lays the foundation for the type of analytics and visibility these organizations require to improve overall organizational performance.

The Impact of Automation

Automation of time and attendance functionality is at the core of automating overall workforce management and solving critical business challenges for manufacturers. As Figure 3 illustrates, automated time and attendance not only drives the workforce utilization improvements discussed above, but organizations automating this key capability also improving HR compliance while reducing manual transactions.

Figure 3: The Impact of Automation

Automation is critical to improving both labor and HR productivity. Automation frees up HR staff to focus on more strategic and value-added activities, and provides a level of detail and visibility that lets managers and leaders make better labor decisions to improve productivity and utilization. For example, many manufacturing plant operations are cyclical (i.e. the plant shut downs during certain seasons). By gaining this visibility, decision makers can better make hiring decisions as to when and how many employees are needed to fill their demand needs. While automated time and attendance is often the first step, to achieve the full benefits, organizations should look to automation solutions for workforce management that includes scheduling, absence management, and other key processes.
Automation also underpins an organizational ability to share and integrate data to drive better decision-making. Figure 4 highlights several critical organizational capabilities that are nurtured by automated time and attendance solutions. These tools make it more likely that the organization can maintain accurate records, integrate time and attendance with scheduling, and bring together individual and organizational productivity and performance data to drive better analytics capabilities.

**Figure 4: Organizational Capabilities in Place**

Results are never achieved by the implementation of a single tool or technology in isolation. That said, organizations that automate workforce management and combine it with a mindset of productivity and accountability are able to leverage their data in new ways to let them achieve their organizational goals.

**Improving Compliance, Building Trust**

Given the scrutiny and growth pressure that manufacturing organizations are under, compliance is critical — and a critical driver for automation. Organizations must ensure that they not only follow labor laws, but also state and local policies, federal rules and regulations, and quite often union mandates. Employers must be able to prove to themselves, governing and legislative bodies, and to their employees that they are operating in compliance. Moving away from handwritten or manually stamped timecards, manager calculated payroll inputs, and paper-based attendance records improves accuracy and transparency. It is easier to collect the proper data, and easier for individuals, managers, and even other systems to have access to this data in order to run reports and ensure that rules are being followed.
In looking at organizations that achieve the greatest levels of improvement in their compliance scores year-over-year, there is a distinct bias towards automation of many workforce management solutions. When comparing organizations achieving a 5% or greater year-over-year improvement in compliance scores to all other organizations (those achieving lesser levels of improvement, no improvement or even a decline in compliance scores), top performers are significantly more likely to have automated solutions in place (Figure 5).

**Figure 5: Automation Underpins Improved Compliance**

![Bar chart showing automation and improved compliance](image)

Organizations achieving the greatest levels of improved compliance are 34% more likely to automate time and attendance solutions (71% vs. 53%), 42% more likely to automate absence management (44% vs. 31%), and 75% more likely to automate scheduling (35% vs. 20%). Not only are these organizations able to improve their compliance, but they are also able to share this information with confidence because they know they have the data to back it up. These organizations protect themselves from exposure to litigation due to violations of labor rules.

**Mobile Tools for the Manufacturing Workforce**

In addition to improving efficiency and effectiveness, all organizations must also enable and engage their workforce. Mobile tools play a significant role in collecting more accurate workforce data, enabling manager and employee self-service, and making life easier for both HR practitioners and employees who must interact with time and attendance systems on a daily basis. While not particularly focused on a field or mobile workforce, manufacturing organizations do frequently have employees and managers that move throughout complex plant environments, so real-time access to information and systems can be a critical business driver. Manufacturing organizations are often focused on collecting task-level detail from workers as well. This
means not just capturing when someone arrives at or leaves their job, but how long they spend working on a particular machine or asset. Mobile technology can help gather this data and make it available in real-time to managers.

Currently, just about one in five manufacturers utilize mobile tools for workforce management (22%), but they can take advantage of some of the benefits by modeling after top-performing organizations. Best-in-Class companies (see sidebar) in Aberdeen's 2012 HCM Trends study were four times more likely than Laggards to adopt mobile technology for workforce management. When it comes to mobile tools in human capital management in general, there has been a pattern of evolution. Typically it starts with static viewing of information (such as a schedule), then interaction with information (such as initiating a time-off request), and finally collaboration to enable action (such as interactive dashboards that allow managers to drill down into talent data). As this evolution continues, organizations use mobile tools to support a variety of workforce management activities. Organizations are taking advantage of applications for smart phones and tablets to support employee self-service, a natural progression given the continued consumerization of enterprise technology. If individuals can get their bank balance through a mobile app, they want to do the same with their vacation balance. Mobile tools are still gaining in popularity, so organizations can expect to see new functionality and rapidly increasing adoption.

**Required Actions**

Automation is critical in order to achieve the level of visibility, productivity, and ultimately profitability that manufacturing organizations require. Not only does automation support efficient and effective processes, but it also enables more control over labor spend and protection in the form of accurate workforce records to ensure compliance. Organizations that still rely on manual or spreadsheet-based workforce management solutions should look to automated tools in order to improve operational efficiency, HR effectiveness, and employee engagement.

Manufacturing organizations should also consider how mobile technology can help them improve performance. Once the automation foundation has been laid, mobile technology is often a beneficial next step. Automated workforce management solutions help organizations achieve higher levels of productivity, while reducing manual transactions, improving compliance, and supplying data for analytics to drive better business decisions.

**Best-in-Class Definition**

In Aberdeen's January 2012 Human Capital Management Trends 2012 study, the following key performance indicators were used to distinguish the Best-in-Class (top 20% of aggregate performers) from the Industry Average (middle 50%) and Laggard (bottom 30%) organizations, with mean performance among the Best-in-Class as follows:

- 81% of employees rated themselves as “highly engaged” in their most recent engagement survey
- 71% of key positions have a ready and willing successor identified
- 13% year-over-year improvement in hiring manager satisfaction
For more information on this or other research topics, please visit www.aberdeen.com.

### Related Research

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<td>Workforce Management Goes Mobile</td>
<td>February 2012</td>
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