RIDDELL ADOPTS SAAS-BASED AUTOMATION TO RUN ITS PROGRAMS WITH EASE

Leader in Football Automates and Coordinates Processes Across Multiple SAP Systems, Improves Scheduling, Eliminates Manual Effort, and Instills Ownership Through Self Service

by **Lauren Bonneau**, Senior Editor, SAPinsider

As sports facilities start to reopen after the COVID-19 lockdown — evidenced by NASCAR racing resuming on May 16, 2020 and the announcement that the NBA season will continue on July 31 — it looks like professional sports and likely collegiate games will soon resume to some extent, albeit with social-distancing rules in place and spectatorship not quite what it once was. This prospect is welcome news for holding company BRG Sports, parent company of Riddell, which designs, develops, and markets innovative sports equipment, smart helmet technology, team apparel, and accessories.

Through the divestment of its baseball, softball, hockey, and action sports businesses in 2014, the organization revealed an effort to concentrate on football helmets, protective gear, and apparel. Its flagship brand, Riddell, is the namesake of John Tate Riddell, who invented the first plastic suspension football helmet in 1939. More than 80 years later, the helmet has advanced dramatically — today, it can be personalized to precisely fit the shape of an athlete's head, and it can include sensors that store and analyze on-field impact data for coaching staff members and trainers to review in real time. Riddell's InSite smart helmets, which are already in use by some National Collegiate Athletic Association (NCAA) football teams, are a step toward improving playing behavior and training by providing coaches and players with a deeper understanding of the head-impact landscape during practice and game competition. Additionally, a coach can monitor impacts from the sidelines during a game and is notified when a hit on a player exceeds certain acceptable parameters and determine if that player needs to be taken out of the game and evaluated in accordance with concussion protocol.

As the helmet evolves, Riddell's focus on safety is paramount, and the narrowed focus on head protection has manifested success for the business. The 2020 Helmet Laboratory Testing Performance Results — which are released annually by the National Football League (NFL) and the National Football League Players Association (NFLPA) and are based on helmet safety research conducted by independent testing organizations — announced Riddell helmets as the highest performing, meaning

they best reduce the severity of head impacts. In fact, Riddell SpeedFlex models held the top three spots of the 35 models evaluated, and eight other Riddell helmet models made the list of helmets recommended for use by NFL players. Currently, Riddell has partnerships with the NFL to be the exclusive provider of licensed collectibles and an authorized supplier of helmets to the NFL, and with USA Football, the sport's governing body, to be its official protective equipment partner.

With its dedication to minimizing injuries, Riddell has a massive job to accomplish, which includes manufacturing and distributing its equipment in time for each football season, continually manufacturing top-quality product, and meeting and exceeding customer expectations.

Keeping Up with Demand

To fulfill orders from sports organizations, schools, sporting good retail stores, and parents, Riddell, which is headquartered in Des Plaines, Illinois, has 10 facilities and offices with 1,400 employees worldwide dedicated to marketing, selling, and manufacturing its product. With its manufacturing crews squarely focused on creating equipment that is optimally safe, the IT department, which is based in Irving, Texas, is tasked with ensuring that all the company's jobs — from creating accurate invoices to producing the correct number of shoulder pads to developing personalized helmets for student or professional athletes — are performed efficiently and on time.

For its back-end systems, Riddell runs SAP ERP and SAP HANA in addition to other SAP and non-SAP applications. While the organization intends to eventually migrate to SAP S/4HANA, due to its many years of heavily customized code, it anticipates a lengthy preparation process for the conversion, and so the project plan for that move is not yet ironed out, according to Alan Buckner, Basis administrator and SAP HANA database administrator for Riddell.

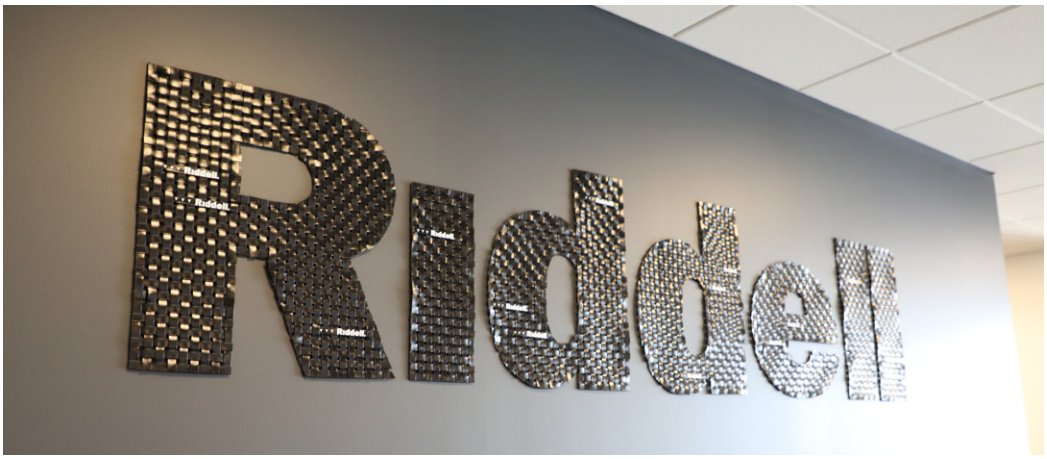
Throughout its years of operating the standard SAP ERP functionality for process scheduling, Riddell identified some limitations for running jobs, which at a basic level means executing a program that accomplishes a task. For example, a job could be producing invoices so that accounts payable knows who to ask for payment or creating a bill of materials so the manufacturing floor knows what parts to pull to create a helmet. "When we receive an order, that has to be broken out into steps, and programs complete those steps," says Buckner. "In SAP ERP, calls to ABAP programs in batch jobs are single-threaded, which means jobs can only contain one program execution per step. There's no way to run programs in parallel."

Riddell's InSite smart helmet technology collects and analyzes on-field head impacts to give coaches and staff members a deeper understanding of the head-impact landscape during practice and game competition

Additionally, the built-in SAP scheduling system had no mechanism to report job failures, which had a significant impact on operations when an important job failed silently and led to late nights for IT personally "babysitting" the entire batch of jobs to ensure each completed successfully, according to Buckner. "As you can imagine, that got old really fast," he says, describing an urgent need for automated notifications whenever a job failed. Notifications would eliminate tiresome manual supervision and directly notify the individuals responsible for the job so they could address the problem before it affected operations.

To get automated notification and increase productivity, Riddell looked to SAP partner Redwood Software and implemented its on-premise solution Cronacle. This workload automation and job scheduling application runs jobs automatically and monitors the progress and the status of what happens as the job runs and concludes. Among other capabilities, the application allowed Riddell to run more than one process at the same time and to start the next step as soon as all processes in the current step completed, instead of waiting for a scheduled time.

After running this application for many years with great results, Riddell was intrigued by



Riddell, headquartered in Des Plaines, Illinois, is the leading manufacturer of football head protection and protective equipment at all levels of play

Redwood's software-as-a-service (SaaS) product, RunMyJobs. "With the on-premise version, we had to supply the hardware, maintain the database, and perform the backups and disaster recovery activities. We owned all that," says Buckner. "The attraction of the cloud-based version was that all that maintenance went away. The new application talks to our systems in much the same way that the earlier one did, and it replaces those previous responsibilities that got in the way of the other work we had to do. By offloading the management and support of hardware and licenses, we relieve a lot of hassles."

Moving to SaaS-Based Job Scheduling

After previewing a demonstration from Redwood on the new solution's capabilities, the IT department was convinced to invest in moving its workload automation and job scheduling solution to the cloud. The migration itself from Cronacle to RunMyJobs was smooth and took under a month to complete, and problems were minor and addressed right away, according to Buckner. "An expert from Redwood came on site to assist us with the migration, ensure it was done correctly, show us how to use the product, and hold training classes, which were very helpful," he says. "Because the project was not a brand-new implementation but rather a migration, it involved pulling out the configuration — that is, the parameters about what a job looks like, what its schedule looks like, and any other functionality in there — from the on-premise application and loading it into the new one. We decided to take a phased approach where we began running two or three secondary functions in parallel in the on-premise system and in the cloud. We watched those in RunMyJobs to ensure they were running properly before turning them off in Cronacle. And we kept that up until all of them were on RunMyJobs."

After successfully migrating and rolling all jobs completely onto RunMyJobs, Riddell learned about the new capabilities it could use to achieve additional process improvements. Buckner was especially taken with the mobility and accessibility of the new solution. "I no longer had to be in my environment to access the solution — I could be anywhere and watch the system to see what was going on with it," he says. "About a month after we went live with RunMyJobs, I was at a conference in the middle of a keynote speech, and I got an email that we had a job failure. I was able to immediately pull out my mobile device and investigate what went wrong with it."

This mobility and alerting functionality eliminates many hours of manual effort, especially for important jobs that previously would have required someone to be sitting at a desktop logged into the SAP system, keeping an eye on the progress, and watching the job run. The benefit of the alerting function is that it eliminates potential time wasting. For example, say a job owner was in the habit of checking on a certain job's status once every hour. If that individual checked at 9:00 am but the job then failed at 9:05 am, 55 minutes would have been lost since the next manual check would not have occurred until 10:00 am.

"The alerting module in RunMyJobs watches all the jobs for us and tells us if something went wrong so we can fix the problem," Buckner says. "It makes the job log accessible so I can see the errors themselves right there in the application and know

Riddell works directly with SAP to continue to meet high demands in its North Ridgeville, Ohio manufacturing, reconditioning, and distribution facility

exactly what went wrong with the job. Then I can contact the person that manages that specific function, have them fix it, and then restart the job. But if nothing is wrong with the job, it is completely out of my hands, and I don't need to be bothered. I get brought in only if I am needed, which is great and frees up a lot of time."

Coordinating Processes Across Multiple SAP Systems from a Central Location

Another major timesaving benefit that Riddell experienced with RunMyJobs was drastically reducing the time it took to perform previously long-running jobs. For example, the production planning functionality of SAP ERP deals with production processes such as material requirements planning (MRP), and Riddell historically had a long-running MRP job that would detail what each of the manufacturing plants needed to run for the day. Buckner describes this job as a chain that has multiple steps in it, where each step runs a program with a different set of parameters to operate. "The MRP job that we pulled from SAP ERP had 31 steps in it, and each step ran one program," he says. "With SAP ERP's built-in scheduling package, each job can only run one program at a time, one after the other. There is no ability to run jobs at the same time and coordinate them to talk to each other."

At that time, Riddell had plants outside the US, which complicated the planning process due to time-zone differences. To help address this, the 31 steps were orchestrated so that the plants that opened first were earlier in the sequence. However, another complication was that once the MRP process finished, a business intelligence (BI) process needed to start to send that information to the data warehouse. Originally, this was handled by estimating how long the MRP job would take (usually about 10 hours) and scheduling the BI process to start at a specific time after that. But if the MRP process took longer than 10 hours, the jobs would overlap and create a waterfall of extra work. For instance, if the MRP process ran long, the manufacturing plants might start their day with incomplete information, and the BI people would have to expend a lot of time and effort cleaning it up.

RunMyJobs acts as a bridge between systems that do not talk to each other — for Riddell, these were SAP ERP and the data warehouse — and brings them together to coordinate jobs between the systems. In

the case of the long-running MRP process, an MRP specialist at Riddell went through all the program calls with the various plants and worked out which could run simultaneously, according to Buckner. "That allowed me to redesign the flow so the MRP job was reduced from 31 steps to 12, where instead of each step running one program, each step could now run multiple programs at the same time," he says. "The concurrent running of the jobs merged the elapsed times, thus reducing the runtime from more than 10 hours for the MRP job down to about four hours for the whole process."

Now jobs are orchestrated so that those that can run simultaneously do so, and those that need to run in sequence wait for the completion of one job before the next begins. "We put in a step at the end of the MRP job that kicks off the BI process directly instead of scheduling them separately," Buckner says. "We coordinated the two, so they don't bump into each other. The BI job would never start before the MRP job was done, even if the MRP process ran long. And if the MRP job only took two hours, then the BI process would start two hours early. Plants no longer have to wait to start production because the planning job has not finished for them yet, and one job chain can run a process for multiple SAP systems together."

Event Triggering, Calendaring, and Customizable Security

With RunMyJobs, Riddell has benefited from automation that not only saves time, eliminates manual work, and simplifies formerly complex processes, but also improves performance. The flexibility of the solution is another aspect that Buckner found useful. In addition to the BI process that starts automatically after the MRP process completes, Riddell uses RunMyJobs to trigger processes based on real-time events, such as for electronic data interchange (EDI) transactions. "When EDI files arrive from vendors, RunMyJobs sees the file appear and kicks off the process to deal with it immediately, as opposed to scheduling a job that wakes up every hour to look for something," he says. "This way, we can process transactions as they happen rather than having a built-in artificial delay."

The organization also uses the Redwood application on the financial side of the business to eliminate manual effort in scheduling. Riddell follows an accounting calendar of four 13-week quarters — that means every five to six years, the fiscal year is 53 weeks rather than 52. In the past, these tasks had to be scheduled manually to account for this. Today, sophisticated calendaring functionality helps to automate the financial close process. RunMyJobs automatically schedules end-of-month and end-of-quarter tasks based on this complicated calendar. "We put a calendar together that details all our close days, and then we can schedule tasks that are centered around that particular day," Buckner says. "So, if a certain job needs to run five days before the close, RunMyJobs can look up the close day, subtract five days from it, and that's the day that it automatically schedules that job to run. I have some jobs that run three times a day the entire week of the close."

Another way Riddell gained flexibility with the solution is by enabling self-service functionality for internal customers that allows them to access their own data or start jobs they are responsible for. In the past, they had to rely on IT, which meant sometimes jobs had to wait while IT completed other important work. The self-service functionality instilled a sense of ownership in internal customers

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Riddell

Headquarters: Des Plaines, Illinois

Industry: Sporting goods

Employees: 1,400

Company details:

- Founded in 1929
- Parent company is BRG Sports
- Ownership includes Fenway Partners and Ontario Teachers' Pension Plan (OTPP)
- Industries served include youth sports equipment and apparel; institutional/scholastic sports equipment and apparel; and collegiate and professional football equipment
- Its Riddell brand is the leading provider of helmets and shoulder pads worn by players of American football at all levels, from youth to professional

SAP solutions: SAP ERP, SAP Business Warehouse, SAP HANA database, SAP Enterprise Portal, and SAP Hybris

Third-party solution: Redwood Software's RunMyJobs

and made both the business and IT more productive. The application was configured to notify these internal customers when their process completed successfully, and only alert IT if there is a problem.

"We created a framework that allowed a more limited level of security for our controller, who normally performed her work in the middle of the night. That allowed her to access RunMyJobs and perform a simple task to trigger her process to run, without giving her capabilities that would allow her to modify or delete anything. She could kick off that one job, and when it finished, she would get an email letting her know it was done and she could immediately look at her updated numbers," Buckner says. "That saved a couple of us in IT a lot of sleepless nights waiting for her to call at 4:00 am to kick a job off."

This framework — allowing job owners to start their own jobs — can also be applied to other jobs. For example, job owners can be enabled to run BI extractions themselves during high-activity times, such as close week. "During closing, I often received many high-priority requests for BI extractions to be run immediately — and then again after some numbers were tweaked," Buckner says. "I used to get calls three or four times a day with requests to run extractions. The framework we put in place alleviates that by letting select owners trigger their own extractions."

Continuing to Explore New Features

To stay abreast of all the new capabilities that Redwood provides, Buckner says he often attends its online seminars to get insight into upcoming features or to pick up tidbits on how to maximize the use of RunMyJobs. "Listening to those types of coffee-break sessions are a big help in keeping me in-the-know about what's coming down the line," he says.

According to Buckner, moving to a SaaS-based solution with RunMyJobs was the right decision for Riddell, and he is excited to continue the relationship with Redwood into the future. "We have been very pleased with all of the products from Redwood so far," he says. "The way we can tailor the product to run the way we want it to and build our own processes and functions if we want — it has really helped make our lives a whole lot easier." ■