

MCP CASE STUDY – WOOD WORKING



Playdale Playgrounds Ltd: Balancing workloads is child's play with Preactor

Playdale Playgrounds Ltd is a leading UK manufacturer of children's outdoor playground equipment. Employing more than 150 people, the company's main markets are local authorities, community groups and leisure operators. Rapid and substantial growth revealed the shortfalls of the company's existing planning processes, especially with regard to the management of its human resources at every stage. This is why Playdale turned to Preactor and RMS for help.

Playdale currently has 400 standard products that comprise between one and over 800 individual components with order value ranging from approximately £5k including installation up to close to £500k. Typical lead times are approximately 6-8 weeks from receipt of order to commencing on-site construction. The modular nature of the playground equipment's construction adds a significant number of possible permutations. For example, materials for towers can be timber, stainless steel or both. Links between towers can be ropes, chains; tunnels and slides can be plastic or steel; and individual components can come in a range of different colours and finishes.

Products can be supplied in kit form but the standard practice includes professional installation and maintenance by Playdale, both of which require accurate scheduling. The flow of business commences with a site survey in response to an initial enquiry. This generates an official inquiry/quotation that is submitted to the Design Office which then produces either a complete 2D or 3D plan as required which is supplied back to the customer. Once the order is confirmed, this is entered into Playdale's Sage 200 Enterprise Resource Planning (ERP) system

which generates the required Bill of Materials (BoM) information. This information is then fed to Playdale's Preactor 200 FCS system which generates the start date for the order which is then fed back to Sage.

Materials requirements according to plan are then generated by Sage and sent to Production. Preactor's role however is much greater than this. Unlike more traditional manufacturers, Playdale's primary challenges lie in optimising its human resource off-site both in terms of installation and maintenance. This means knowing when and where to schedule the company's installation teams and external subcontractors. However, when it comes to human resource, different workers not only have different skill levels, different teams also work at different rates – all of which needs to be planned effectively. It's no wonder that Mike Hutchings, Playdale's External Operations Manager, describes success as "ensuring that high volume of processes are Balancing workloads is child's play with Preactor completed at the right time so that finished components along with the appropriate installation teams are in the right place at the right time."

A key factor here is the huge potential variance in the volume as Hutchings explains. "Because we plan on a volume by product type mix, balancing the type of work over the space of a month is critical to success. £50k of work could be 1 long job or 50 smaller jobs. The same value of work to the company can tie up a few or many of our resources for either a short or long period of time. Prior to Preactor Playdale relied on Excel spreadsheets for its planning which was less than ideal. In fact, when Hutchings joined the company in January 2007, Preactor had already

Company and product

Playdale Playgrounds Ltd produces children's outdoor playground equipment.

Key challenges

- Different workers not only have different skill levels, different teams also work at different rates – all of which needs to be planned effectively.
- Inaccurate data
- Scheduling was a difficult and time consuming process at times of high volume.

Key Benefits

- Preactor was flexible and powerful enough to cover any area where planning, especially interlinked planning was required
- Company growth through the usage of Preactor
- Manage throughput effectively

System architecture

ERP: Sage 200

been in the company for a year. Despite being implemented correctly, the system wasn't delivering its maximum effectiveness due to the abilities of its then users. This shows the importance of having a project champion and someone who understands how to get the best from a manufacturing IT solution. At the time, every job had its own spreadsheet with the installation team names across the top and each date of the year on the left. All the orders were manually entered onto the spreadsheet with these being in different colours to represent the regional location the installation was based in; which allowed for logistical planning of the installation teams.

Hutchings describes the many reasons why this was less than ideal. "To begin with it took a considerable amount of time just to enter the information in the first place, much of it duplicate of that already in Sage. This always allowed for the possibility of mis-typed and inaccurate data. The very nature of our business is fluid – things can and do change often and we need to be able to respond, especially where we have site overruns. Because we work with a rolling 8 week planning window, every change meant manually updating each of the following 7-8 weeks. The spreadsheets also only showed one week at a time which didn't help in this respect, nor did it help when it came to trying to get an overview of a plan and what was happening." He continues, "The spreadsheets also didn't offer any possibility for our vital volume/product mix calculations.

More importantly, neither could they allow for the varying skill levels of our different installation teams. Visibility of current operations was limited at times and also restrictive when employing "what if scenario" planning. As a result of this lead times stretched out increasingly from 8 weeks which in turn affected every other area of the business." No wonder that Hutchings admits that scheduling was a difficult and time consuming process at times of high volume. While Hutchings had previous experience with implementing and seeing the benefits of transport planning and scheduling systems, his first year with the company was getting to grips with how it currently operated and dealing with the daily planning challenges. Staff changes in the company brought another team member on board that also had planning and scheduling experience and this combined with rapidly growing order volumes provided the impetus for Playdale to revisit its use of Preactor. This began simply at the level of Hutchings running Preactor alongside the spreadsheets in order to configure the system to work in the same way. After this was achieved there followed a few weeks of parallel running before the company switched exclusively to Preactor. It was at the stage that Hutchings began compiling a list of requirements about how ideally he wanted Preactor to work to meet Playdale's needs.

Once this was complete he contacted Preactor partner RMS Ltd with a view of making these an actuality. This again shows the value of working with an implementation partner that not only understands how a system works but also how a user needs it to work. Because of the extensive experience of Warren Roberts from RMS, this wishlist was quickly acted upon and a number of configurations and customisations made to Playdale's Preactor system. This in turn encouraged other users within Playdale to come back with specific requests on how they too ideally wanted Preactor to work, all of which RMS

was able to action. Unlike many manufacturers, the majority of Preactor's powerful yet flexible functionality is focussed around getting the best from Playdale's human resources.

Hutchings explains the key areas of additional functionality that now provide this. "We have 8 various options written to allow us to view the planning screen in different colours that highlight site regional location or the status of various operations. We have a commitment to 3 levels of customer contact prior to installation so we now have an option now that shows the status of all jobs in terms of how many customer calls they have had. This immediately means we can check no one has been missed. We have another option which highlights all the site hire and storage considerations per job. Depending on the size of the job we have to hire specific fencing, toilets or even portacabins. Just as importantly we need to know when to off-hire these as hiring equipment longer than necessary can add hundreds if not thousands of pounds in extra costs.

There is also an option which allows us to see at a glance the type of safety surface required for each job which again allows us to ensure the required subcontractors are kept informed in good time. All of the above can be also be accessed immediately should a customer or subcontractor call in wanting confirmation on a job status which can be critical when we have contractors already out on site." Perhaps the most significant example of RMS' expertise in delivering exactly what Playdale needed is the Histogram function that shows the all-important volume by product group mix on a week by week basis. Warren Roberts of RMS comments on this bespoke Histogram functionality. "It is one thing to configure a piece of software, it's another to be able to completely customise it to totally meet the customer's most exact requirements. Playdale's requirements are unique in our experience but because of the inherent flexibility of Preactor, we were able to develop a totally unique and bespoke element of functionality which they are very pleased with."

Quantifiable benefits are difficult to identify due to the significant ongoing growth of the company and the poor visibility of information prior to using the system but Hutchings attributes a significant part of the growth in the company's efficiency to Preactor. Daily planning tasks that took hours now take 10 minutes which in turn has freed up skilled resources that can be reinvested in improving efficiency elsewhere in the company. Looking at the business as a whole, perhaps the most impressive testament to Preactor's abilities lie in the fact that the company used to think £300k worth of product was a high volume month and difficult to handle efficiently.

Now thanks to Preactor the company routinely handles almost double this, and with much greater efficiency. Hutchings cites the example of Q1 of 2010. "We had such a sharp increase in volume that quite simply if we hadn't had Preactor, we would have struggled to manage the volume throughput effectively." It is therefore no surprise that he concludes, "Preactor has brought greatly increased efficiency and much more accurate planning resulting in major cost savings. Preactor assists us in running our business effectively at continued high volume levels.

Key Benefit

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"We can see and balance our entire workload at the press of a button and check at any time how we are doing in reality to make informed decisions" *Mike Hutchings, External Operations Manager*

Hutchings agrees, "Now we can see and balance our entire workload at the press of a button. More than that, we can check at any time how we are doing in reality against our projected plan and to make informed decisions on the basis of this. And, if we do move jobs around, unlike before with spreadsheets, we can see the implication of any decision and how it affects the entire business before the decision is made. This allows us to explore different responses and then make the best ones according to our particular requirements at that time."

Ongoing development has seen Preactor extend to many other areas of the company. At the heart of this was the recognition that Preactor was flexible and powerful enough to cover any area where planning, especially interlinked planning was required. Consequently Preactor now covers management of customer contact, co-ordinating installation subcontractors and aftersales service engineers.

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