The systems and solutions that Pesmel produces are complex – and the projects themselves are complex, too. Good project management is essential in making sure that everything proceeds according to plan and without hiccups. *NewsFlow* spoke to **Teemu Kolkka**, general manager of the project department, about Pesmel's new project management tool, M-Files, and how it is improving things for Pesmel – and its customers.

Complex projects need top-class project management
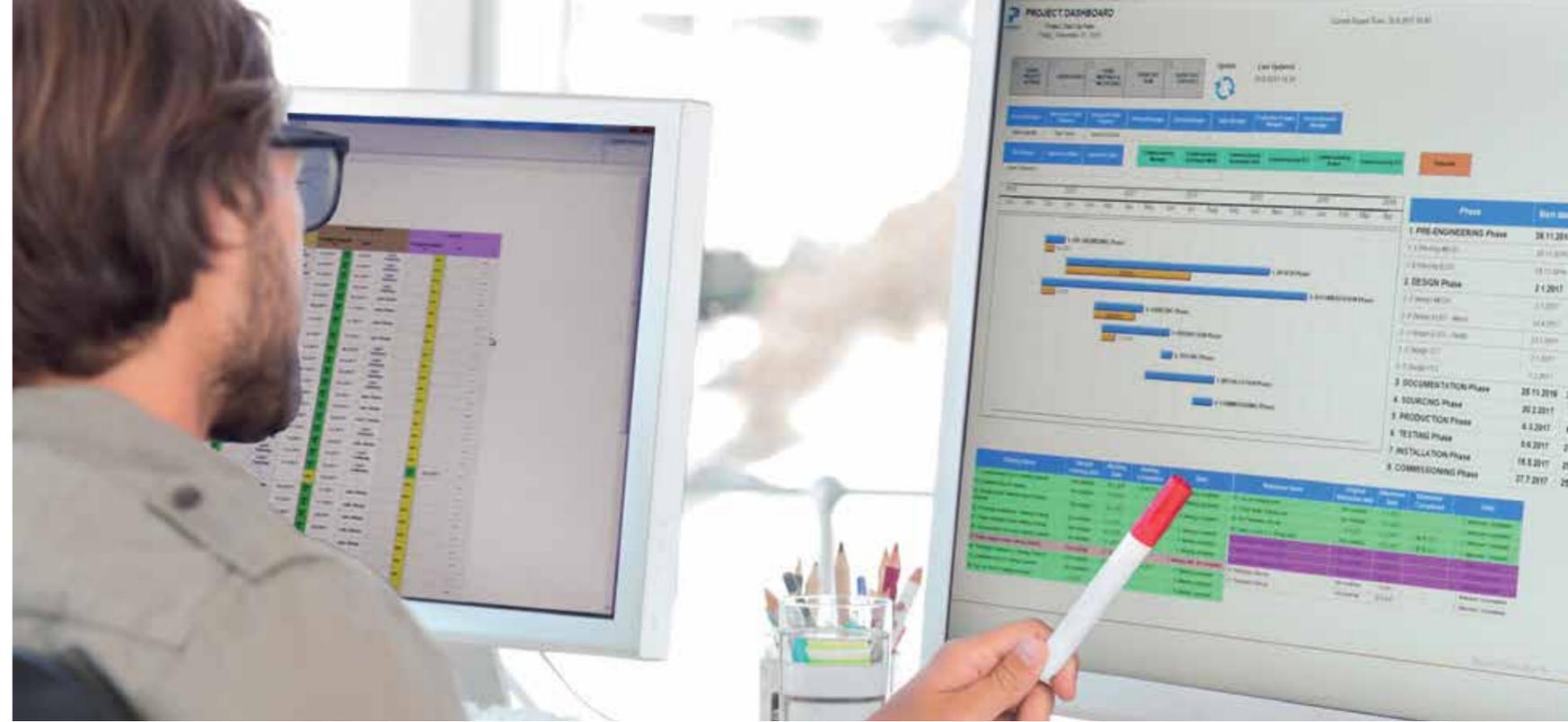
What kinds of projects are your team involved with?

My team work on delivery projects. We are divided between two sectors, paper and metal, and our customers are paper producers, converters and metal producers. Our delivery projects can be greenfield or brownfield projects, or revamps. My department deals with all the green- and brownfield projects, but some revamp projects are handled by the service team. All our greenfield and brownfield projects follow a standardised project model.

Can you describe how your project model works?

Projects all start with an internal kick-off meeting where the sales manager hands over the contract and concept to the project manager. We have a rule that this has to happen within seven days of the contract being signed or permission to start project being received.

We can see the current status of every element of every project, which really helps with keeping projects flowing.
– Teemu Kolkka

Next is the pre-engineering phase, which lasts about six weeks. In the first three weeks, we fix the general arrangement layout, start-up information and the scope of supply for the detailed design as a list of deliverables in M-Files. This also involves a customer kick-off meeting, where we visit the customer with the project team, we show them our project model, we agree on how we will communicate and exchange documents, and we settle the plan and schedule. After our own acceptance meetings for the scope, documentation and budget, we move to the design phase.

Then is the detailed engineering phase, which is divided into mechanical, electrical, and automation and ICT. From there it goes to purchasing, and after that comes manufacturing, monitored in M-Files by Deliverables and Works, with their progress and milestones in relation to the project schedule. There, we cut the steel and do the welding and so on, and that happens mainly in Estonia. We try to make our systems so they are modules, so that you can easily install and transport them. All systems from Pesmel are machine-tested, and we have a protocol for that. We can do full layout tests as well, depending on the customer need and complexity of the system.

Then we dismantle it, put it into containers or trucks, and ship it to the customer. That's basically the phases at our end. We can do the installation as well, or we can supervise the installation. Then we have the commissioning phase, and after that we can basically say, "Now you can start production." The whole process up to delivery can take from six months to two years.

Can you give us some examples of what a typical project is like?

Our two main types are packing lines and storage systems. Packing lines are typically the internal packing lines in mills. Customers usually want to improve quality and safety, speed up their packaging process, increase capacity, and find savings.

Storage systems are bigger investments, with more focus on construction. Storage can be intermediate, or for finished goods. They are automated warehouses that use conveyors or overhead cranes to move the goods. We've done systems for roll, bales, coils, and pallets, as well as some products from other industries. For storage systems, the idea is to minimise the footprint, so we build high, and we make it fully automatic and minimise handling. We can build single-lane, multi-lane and deep-lane systems. The project management for storage systems is also more complicated, keeping track of all the construction aspects.

Can you tell us something about your new project management tool?

We can have dozens of projects ongoing at a time, and our projects are complex, so excellent project management is essential. To manage all this and to handle all the documentation, schedules and workload, we need a good system. We noticed some years back that the way we were handling documentation was old-fashioned. We examined different documentation handling systems and did some studies and benchmarking, and we concluded that M-Files was the best choice.

We changed our documentation storage system to M-Files, which took a year and a half. And then we started to look at what else we could do with it. We ended up changing our CRM tool to M-Files, and then our project management. We started to implement all our different documents and schedules, which had all been static, so for example, a change made in the workshop didn't automatically come to here. We found that M-Files could do all of it for us.

M-Files has been customised for us a bit to fit our project model. We can see every phase of every project. It's all implemented here according to our process, with every checkpoint and milestone. In the first stage of a project, the project manager uses M-Files to build a project plan. First we put the main phases there, and then each phase has the work that needs to be done to complete deliverables, which are things we supply to the customer, along with the milestones and meetings, as a schedule. It is also possible to use offline and portable devices, which means you can take your key data with you when you travel to customer sites that don't not have internet access. This lets customers see in reality how the project execution is built up, what the actual progress is, or where open issues need to be agreed in order to move forward.

It can generate tasks automatically, and it also shows us who is doing what for every step. For example, who is doing the electrical and automation design, and how far they've got. Other nice features are that you can set alarms and the reporting features for different levels and needs.

What benefits has M-Files brought for you and for customers?

For us, the main benefits are visibility and automation. It centralises all the information in one place. It improves visibility in the entire project, right down to task level. We can see the current status of every element of every project, which really helps with keeping projects flowing. The automation means that information gets sent and moved automatically. Tasks can also be set automatically, which helps a lot with resourcing. And all the documents are connected to the system, so we can jump straight to the right design documents, maintenance manual, or spare parts list of that particular design (deliverable), for example.

For customers, it means that we don't need to reinvent the wheel. Everything stored in the system has metadata attached. We can create reports for customers easily by pulling metadata about any aspect of the project. So it's easier and quicker to keep them fully informed about the status of projects as well.

We've been using it like this for around eight months now, and we're really happy with it. It's really helping us move towards where we want to be as a company to improve our own project delivery chain for our customers. •