Since 2012, House of Design (HoD) has provided robotic system integration for companies across multiple industries, including aerospace, precision machined components, medical devices, food products, electronics, and contract manufacturing organizations. Formed by engineers for engineers, HoD is focused on enabling organizations to implement automation with the highest return on investment. They aim to surpass customers’ expectations with easy-to-understand communication tools and by delivering projects on time while maintaining a commitment to excellence.

The Challenge

Driven by a passion for robotics and industrial automation, Ryan Okelberry, COO, and Shane Dittrich, CEO, founded House of Design to solve manufacturing problems. “We pride ourselves on disrupting industries,” says Okelberry. “It’s important to rethink how things have been done in the past. We want to give our manufacturer the opportunity to take control of their product again. We help organizations compete globally by tackling labor shortages and replacing repetitive, unfulfilling, and unsafe positions with an automated process. If we can solve a manufacturing problem with a robot, that is what we do.”

Chad Svedin, Project Manager, adds, “We get excited to help teams improve their work life. There’s so much that people should be using their minds and capabilities for but often can’t because they are stuck in tedious but required manual tasks. Automation and robotics replace those things and streamline workflows so teams can focus on scaling, producing more, and getting innovative.”

Their passion for enabling organizations led to explosive growth for the company. Spreadsheets, emails, and drive-by chats were no longer effective. Svedin recounts, “Two years ago, we were a company of 10 people. Today, we are more than 90 employees plus many outside vendors. When we were small, it was easy to just shout across the room, but as we grew, we needed a communication and collaboration tool that could scale with us.”

SUCCESS STORY FACTS

16,600+ hours saved over the past 3 years

$832,000 of cost savings in 3 years
They experienced major challenges within their machine shop:
- Machine shop manager gathering and accumulating the volume of custom parts fabrication requests from engineering and processing them manually
- Receiving custom parts and figuring out the responsible mechanical engineer
- Project delays caused by not working the right parts at the right time
- Not executing on estimated effort and delivery dates as planned
- No visibility into current workload in order to plan capacity for future projects

Additionally, with projects that can last anywhere from 3-12 months, they needed a collaborative work management tool to visualize project timelines. HoD customers wanted a traditional Gantt chart timeline view of the project at any given point. “This is important in identifying holdups in our processes. Our project timelines are planned and segmented per task — design, procurement, assembly, and testing. In the past, if we didn’t meet a project delivery deadline, it was difficult to identify which process or area of the business needed additional support to ensure completion by future projected deadlines,” explained Svedin.

As HoD grew, they needed a single source of truth to help them collaborate between clients, team members, and vendors. Their unique business model called for something adaptable and customizable. Okelberry shared, “We were using so many different tools. TSheets for tracking time, QuickBooks for accounting, Zendesk for service and support requests, Zenefits for HR. But as COO, what I needed was one place to tell me what’s really happening in our projects.”

The Solution

In 2014, House of Design was looking for a solution. They evaluated countless cloud-based project management tools and selected Wrike for its flexibility, resource management, interactive Gantt chart, visual workflow features, and other capabilities that would help them collaborate both internally and externally.

They’ve moved from managing work through individualized tools and methods to team workflow automation. Today, they use Wrike to streamline their workflows, act as a centralized knowledge base, and be a one-stop shop for onboarding, collaboration, continuous innovation, and more.
HoD uses Wrike’s collaborative work management solution for professional services to help them:

- Share project timelines visually in a way that delights clients and drives repeat business
- Centralize project management and collaboration onto one platform
- Establish a single knowledge base to keep teams aligned and streamline onboarding
- Leverage request forms to strategically manage and prioritize work
- Drive efficiency and accountability when collaborating with external vendors
- Allocate the right job roles and resources to schedule out projects, allowing them to forecast future work

“When we searched for a project management solution six years ago, the requirement was we needed a Gantt chart,” says Okelberry. “But with Wrike, we got so much more, and every year, we’ve just taken it a little bit further, continually seeking full implementation into our business. We’re using it everywhere. We’re using it in HR. We’re using it for safety observations. We’re using it for continuous improvement submittals.”

HoD quickly discovered that Wrike is more than just a tool to see who’s doing what when. “We also wanted Wrike to be the how,” explains Okelberry. So they created a House of Design knowledge base using Wrike. “All of our standard operating procedures are in Wrike. We say that ‘Wrike is our playbook.’”

To create this playbook, they detailed procedures and best practices for every department and team, from CAD to document management to purchasing and finance. “Whatever department we thought employees might have questions about, we documented it. Today our knowledge base has over 300 articles that capture what it is we do on a day-to-day basis,” says Okelberry. HoD also uses a request form that allows employees to submit a question that isn’t covered in their knowledge base. The form is automatically routed to the right department and personnel for the answer. The response is then documented and added to the knowledge base.

Once they implemented their knowledge base, HoD realized they could use the articles to develop work instructions and standard operating procedures into master project plans and blueprints. Okelberry explains, “We have a master task or a blueprint about designing a robotic end-of-arm tool. The robotic end-of-arm tool task will link you to four or five different knowledge base articles on things that you should consider when designing an end-of-arm tool for a robot. So if you’re a new engineer and you’ve never done that before, you can start to glean some of the experience from the more legacy engineers in the group that have taken time to say, ‘Hey, when you’re doing this, think about that, think about this, and then do your design.’ So Wrike has become a how-to tool as well. It’s also our engineering notebook.”
We’re taking the conversation out of our email streams, and we’re putting the conversation right where it needs to be, and that’s right at the task, right where it needs to be for collaboration. It’s helped us identify the intellectual property that we’ve developed. There’s no question on who was working on this, when were they working on it, and how involved they were, because all that is captured right there in the comments and the description. That’s our intellectual property confirmation right there. Wrike is the single source of truth.”

“We utilize Wrike for professional services in a number of ways,” says Okelberry. But there is one especially complex and frustrating manufacturing challenge that Wrike solves that really sticks out in Okelberry’s mind. “So you can imagine we have to take all these concepts, these virtual ideas of how we’re gonna build a robotic system, and then turn them into reality. And so how do we get all the parts we need? How do we buy these parts? How do we make all these parts? Where are these parts? And all those parts have to go through our manufacturing hub and our machine shop manager.”

HoD’s Machine Shop Manager, Mike Tischendorf, was getting swamped with thousands of part requests. Tracking was becoming a nightmare, and the process was a bottleneck. By implementing Wrike folders, request forms, custom fields, custom workflows, custom views, and dashboards, HoD has significantly reduced bottlenecks and project delays due to late sourcing of parts, and their machine shop is working more efficiently than ever before. They estimate that their machine shop manager is able to oversee 100% more parts through the fabrication process because of the implementation of Wrike at House of Design. Okelberry adds, “Mike has been instrumental in creating a better process in Wrike to help things run smoothly and efficiently and is considered one of our biggest Wrike power users.”

For the machine shop, HoD has created workload charts by team to view capacity and balance work. The machine shop manager is using “Effort” to estimate the time it might take to program and set up the CNC machine and then produce the part. They are using the “Time Log” function to record time to each task for future use. Estimating and recording this data is allowing their spare parts service function to know how much time to plan for making the parts.

Centralize project management and collaboration onto one platform

Svedin adds, “It all comes down to this anecdote. Like any team, we’ve had some tough adopters. One manager came up to us and said, ‘Chad, I get it.’ I said, ‘What do you get?’”
He goes, ‘I understand Wrike. It makes my life so much easier.’ Wrike makes his life easier because he can assign a task to somebody, and it’s done. He doesn’t have to go find someone around the shop, explain it, and keep tabs. He goes into Wrike, puts the details in the task, and he’s off to accomplish more. What used to take 10 minutes now takes 30 seconds, and with everything in one place, visible to everyone, it helps team members stay accountable.”

**Establish a single knowledge base to keep teams aligned and streamline onboarding**

Svedin explains, “We’ve really started to push the use of Wrike and use it to organize ourselves. For example, our onboarding process is done through Wrike. I mean, we even provide tasks to understand how we use Wrike through Wrike. We have an onboarding checklist for new hires that ensures our onboarding is streamlined and everyone understands our best practices. Even as we grow, we want our team to be able to do more, in less time, and have a great work-life balance.”

Okelberry adds, “With templates, we’ve been able to map out our projects with best practices so that we can scale at the rate of our businesses without sacrificing quality. That brings us to our engineering journal. Our engineers document the history and reasons why we make certain decisions on projects.” This ensures no learning is lost.

“The success and efficiency our teams see with Wrike is now giving them new ideas. Because of that, Wrike is gaining momentum within our organization. For example, the safety committee recently created a request for a process in Wrike for safety observations. If a team member sees a hazardous situation on the shop floor, they can simply snap a picture and fill out the form and it goes right to the safety committee. All in one place and so efficient!”

**Request forms streamline the intake process to strategically manage and prioritize work**

Svedin explains, “Before Wrike, our machine shop manager struggled with all the requests for needed parts. Mike tried to intake work through an Excel spreadsheet, with more than a dozen people providing information in a myriad of ways. It was messy, overwhelming, and inconsistent. On the other hand, trying to enter the data himself manually was time consuming and hard to maintain.”
Today, HoD uses Wrike request forms to manage parts and their flow through the entire fabrication process. Svedin says, “The manager has one funnel for requests that’s easy to manage. For example, he has 270 requests right now. With all the information he needs in one, orderly form, he can easily determine if we’ll make the part in our shop or work with an outside vendor. He can also use custom fields to track location, the quotes, rate, purchase order number, and dates. On parts we make on a consistent basis, having price and turnaround information in Wrike is very valuable to prioritization and negotiating.”

Okelberry says, “Before Wrike, when up against the clock and determining which of his tasks to tackle, we’d speak to each engineer individually to understand which parts requests were critical. Spending hours of time and getting a dozen different opinions wasn’t up to our standards of efficiency.

Today, with our requests and tasks in Wrike, we have the data to make decisions quicker and more confidently. We look at the workflow statuses and drill down information. We take that overwhelming list of 270 tasks and pare those down to the top 8-10 critical ones. Before, it would have taken hours to discern all this information, and now it takes 10 minutes and our strategic decisions are backed by empirical data. Our machine shop manager alone has been able to save 20+ hours of work a week, which averages out to saving over 1,100 hours annually.”

Drive efficiency when collaborating with external vendors

Okelberry says, “As a small business, we’re really trying to push the limit on how we can create efficiency in our workflows and predict workloads. Being able to forecast when engineers will complete tasks and then be able to take on more helps us know when to accept more work. We can also identify where there might be a lull in workloads to strategically fit in smaller projects. Without Wrike, we would have to be more reactive and address projects chronologically rather than strategically.”

As House of Design has grown, they’ve added contractors. For example, an outside IT agency helps resolve technical issues 20–30 hours a month. When the team has an IT issue, they use a Wrike request form to put in a service request. Those go to one person internally who manages requests and decides if it will be handled internally or externally. If it’s external, the manager will create a task in Wrike with a list of action items. As Wrike Collaborators, the IT team has access to everything they need to get the jobs done efficiently.
Okelberry continues, “In order to build our systems, we need parts. We fabricate some parts in house, and the rest are outsourced. We manage all external machine shop orders through Wrike tasks. Even though some orders go out to contractors, and because everything is done through Wrike, we’re able to track machine time, setup time, and programming time. We get live feedback as to how many hours and how many parts this one machine shop individual is producing for us.”

Sharing project timelines visually in a way that delights clients and drives repeat business is key. Like many businesses, HoD serves many different types of clients. Some want to know all the details, while others can get quickly overwhelmed by them. Svedin says, “Having the ability to be flexible to the client’s needs is critical. We love the ‘Snapshots’ feature of the Wrike Gantt chart. When we have weekly client meetings, we are able to take a snapshot of the Gantt chart that’s functional, scrollable, and zoomable. When clients want to see more, they can simply click and get all the information they need in a single glance. Clients love knowing that they can drill down into details or stay high level. The flexibility Wrike provides is a competitive advantage. Clients are pleased with how transparently we operate and manage their projects.”

Okelberry adds, “We’ll hear from customers things like ‘Wow. You guys have communicated your project better to us than anybody else,’ and the best part is that it’s no extra work on our side. Wrike is how we manage our projects internally, and clients simply get the benefits of it. Without Wrike, mapping out a timeline would be an extra step that an engineer would need to draw up and input manually. But with Wrike, it’s all a part of our routine and everything we need is there — automatically.”

**Managing capacity and scheduling resources**

Okelberry reflects on how Wrike has changed the way they think about tasks. “Out of the box, a task merely needs an assignee and start/end duration. With resource management, we are now asking that a role type (e.g., engineer, programmer, etc.) be assigned so that the appropriate manager can distribute the task to their team from a team backlog by role type.”

HoD uses the ‘Effort’ field to gain a better understanding of how much time the task will take over how long a time period. “Something might be needed in two weeks, but if the effort is only 20 hours, the manager could have deeper insight into the person’s task loading rather than just counting the number of tasks.”
They are currently testing their setup of Wrike workload and effort tracking. Okelberry elaborates, “The initial benefit we are seeing is that we have been assigning team tasks to the team managers for distribution and grouping those tasks by needed role helps the distribution of tasks. We look forward to doing even more with resource management for enhanced visibility of resource capacity and availability, as it’s central to our business.”

The Conclusion

Okelberry and Svedin are excited for a future of efficiency and automation powered by Wrike — and they’re excited to do more.

Svedin states, “Wrike has saved us thousands of hours. Between streamlining workflows, requests, our knowledge base, and collaborating externally, we really push Wrike to the limit. The commitment to grow with us and help us grow as a company is one thing that makes Wrike stand out.

We estimate that Wrike has saved us about 2 hours per week per employee for a total of approximately 16,600 hours over the past 3 years of implementation. Off an average hourly rate per employee, we estimate this to be over $830,000 in cost savings/increased productivity.”

Okelberry concludes, “Many of the processes we’ve implemented were learnings from Wrike’s user event Collaborate. We value how Wrike takes the time to help us better use templates and request forms. Request forms are the critical kickoff point to our successful projects. They put a task in the right spot and predefined with the right information. Wrike inspires us to think outside the box, which aligns perfectly with what we do every day — bringing the power of automation to help make work a better place.

We are in the business of automating manufacturing processes, some of which have never been done before. We would be doing ourselves a disservice if we weren’t trying to automate and streamline our own internal operations as we are doing so. Wrike is helping us to do this by automating our workflows the same way we help automate our client’s operations.”

Find out how Wrike can help your business

Free Trial Visit www.wrike.com