



Intel Adapts Process Mapping to Remote Work with See to Solve Flow™ and Accelerates Improvement

Actionable, “Living” Maps Bring Faster Issue Resolution, Deeper Process Understanding and Accelerated Learning

“These are not maps that you make once and then put them away. We collaborate and explore maps to get the big picture, then zoom in to understand details of hand-offs and troubleshoot issues.

With See to Solve Flow, it's much easier to get clarity on what's happening and resolve break points.

The whole point of the map is to visually drive continuous improvement and learning. With See to Solve Flow we improve faster.”

— **Maria Metzner**, Sr. Director, Supply Chain & Business Solutions,
Solidigm (Formerly Intel)

A Longstanding Commitment to High-Velocity Learning and Process Mapping

Among its many world-changing technologies, Intel has been highly regarded as a leading global provider of innovative NAND flash memory solutions for data centers. In December 2021, this business became a standalone U.S. subsidiary known as Solidigm, under SK hynix, combining Intel's long standing innovation in memory products and SK hynix's international leadership and scale in the semiconductor industry.

For the team at Intel, now Solidigm, a commitment to process excellence and continuous improvement is a part of the culture. "We want to be a high-velocity learning organization," says Maria Metzner, Sr. Director, Supply Chain & Business Solutions. "At the end of the day, the organizations that will win, are going to win because they can learn faster and better than their competitors."

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As part of this commitment, and prior to the Covid pandemic, the Intel team had worked for several years on mapping processes collaboratively. To do this, they had adopted a method based on mapping processes on a physical wall in a conference room using rolled out paper pinned to the wall and sticky notes to represent steps.

"The idea is to get what people have in their heads onto a map so everyone can see," explains Maria. "Because when you do this, you realize that what I thought was happening wasn't what you thought was happening. Then all of a sudden you get clarity on where things are breaking down, or where there are disconnects."

By early 2020, mapping processes in this way, in a physical room, had become an established approach relied on by Maria and her team, and a core part of their continuous improvement methodology.

The Challenge:

Remote Collaboration Demands a New Approach

In the Spring of 2020, when the Covid pandemic forced the shift to remote work, Maria and her team immediately started looking for a virtual solution with all the benefits of their established process mapping methodology. "We were used to being able to pop into a conference room and work with our physical process maps and sticky notes," says Maria. "All of a sudden, no conference rooms, no sticky notes, so I started looking at the solutions out there that could help us keep the same process but do it remotely."

What Maria found were a lot of software tools, but none that quite met her needs. “There are Visio maps, of course, and a lot of other cool tools like virtual white boards,” explains Maria. “But I couldn’t find anything that matched our set of requirements.”

As part of her research, she reached out to Steve Spear, co-founder of See to Solve and Senior Lecturer at MIT. She had taken his courses on high-velocity learning while at MIT’s Sloan School of Business and she had also worked with him when Intel had brought Steve in previously in an advisory capacity. “I asked Steve if he knew of a tool that would meet our requirements,” Maria says. “That’s when he told me about See to Solve Flow.”

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At that time, See to Solve was just ready for a customer to help with beta testing the new Flow tool, so the timing was perfect.

The Solution:

Actionable, Information-Rich Process Maps

In the Spring of 2020, with everyone working remotely due to the pandemic, Maria and her team at Intel started to explore See to Solve Flow to see if they could transition their paper-based process maps into the new tool as they tested out a new way of working. However, while they were enthusiastic about the potential of working with See to Solve Flow and helping to test and evolve the product, they also had rigorous standards and specific functionality they wanted.

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“There were three important things we couldn’t find together in any other solution,” explains Maria. First, collaboration was a top priority. People need to be in there together, in real time, exploring a process map together.” For Maria’s team, who are focussed on collective organizational learning, this aspect of a solution was

critical. “It’s a visual process to get everyone on the same page and know what we are all talking about. It brings clarity and it’s a way to visually facilitate continuous improvement.”

Second, the team needed a structured layout that mimicked their paper-based methodology, and made it easy to follow the flow of a process with clear “rules of the road” to guide consistency. As Maria puts it, “we wanted one color of ‘stickies’ on the vertical axis to represent the people - the roles we have in our organization - in clear ‘swim lanes’, then we wanted time along the horizontal axis, and we wanted plenty of space for a activity ‘stickies’ in another color with connected arrows to represent the process flow.” The metaphor of the physical process map with ‘stickies’ was Maria’s way of explaining succinctly what she was looking for in terms of structure to guide the mapping process and make interpreting the maps a consistent and intuitive exercise.

The third capability the team identified as highly important was the ability to zoom in and zoom out. With large, complex processes, they knew this capability would enable them to see the ‘big picture’ when that was needed, but also zero in on minute details as needed.

“When it’s time to get executives aligned, you want to see the big hand-offs between organizations,” Maria explains. “But then in order to make it actionable you need to be able to zoom in. Now an organization becomes a department. Zoom in again, the department becomes a team, then the team becomes a person. Being able to zoom in like this was something we were really looking for.” This capability would take them well beyond what they’d been able to do with paper process maps and the team was excited about this.

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See to Solve Flow checked all three boxes for the key requirements Maria and her team were looking for. Next, they set about selecting a first process map to test out the solution.

“Our first use case was a process that reoccurs every week. It’s a supply planning process a little like master production scheduling,” Maria says. A business architect on Maria’s team mapped out the process in See to Solve Flow then began using it to collaborate with business stakeholders on real-time process troubleshooting and improvement efforts.

The Result:

Collaborative ‘Living’ Process Maps Accessed from Anywhere

Program Achieves Faster Issue Resolution, Deeper Process Understanding and Accelerated Learning

The team’s first use case with See to Solve Flow not only replicated the beneficial aspects of their prior “in-person” process mapping methodology, but brought added benefit in several key areas.

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First, they were able to collaborate virtually easily and resolve issues more quickly. Once the map was made, the business architect would pull it up in a virtual meeting with all the stakeholders whenever a process issue came up. Red ‘flags’ on the process map showed everyone where the issue was. “We’d swarm around it,” says Maria, “figure out if it was a technical issue or a process issue, and get everyone on the same page as to what was going on and the next steps we would take to resolve the issue. We very quickly got alignment across multiple teams and stakeholders and resolved issues quickly.”

Second, the capacity to embed important details into the process map gave them new information-rich process maps that became the focal point for discussion and a deeper understanding of the process. “We really like that you can put a lot of information ‘into the arrow,’” says Maria. “These hands-offs are often where information is lacking and breaking points happen - in that hand-off between tasks. Seeing these in the map is really helpful.”

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Third, they gained new capacity for tracking issues that was also easy to communicate visually. Embedded with each red ‘problem’ flag on the process map, were ticket numbers and cross links to Intel’s ticketing system. “Everyone can see it on the map,” explains Maria. “It says to stakeholders ‘we heard you, it’s flagged in red, tickets have been entered, it got tracked’.”

Maria's team continues to build out new See to Solve Flow process maps. Right now the business analysts are the primary users of the process maps, but as new maps are built out, she sees adoption spreading organically to the business stakeholders of the processes.

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“Our vision is that these are living maps,” says Maria. “They are reflections of the best knowledge the organization has. We refer to them for understanding who does what, who needs what kind of inputs to do their part, what the downstream impacts of issues might be, and so forth. This is incredibly helpful to resolve issues and drive continuous improvement. When things change, we update the maps to reflect the new reality. It's a way to become a high-velocity learning organization.”

Key Results:

✓ **Easier collaboration resolves issues more quickly**

“We'd swarm around it and resolve issues quickly.”

✓ **Embedded detail provides deeper process understanding**

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✓ **New capacity for tracking issues**

“Everyone can see it on the map. If it's flagged in red, tickets have been entered. It says to stakeholders, ‘we heard you.’”

✓ **Visual process views facilitate communication**

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