How an engineering company reshaped its culture with Kanbanize
A Journey to End-to-end Flow

Industry
Engineering

Use Case
Product Development

Company Objectives
Introduce process improvements that stick within the company, offering both business agility and robustness.
Achieve alignment towards meeting customer expectations through a cultural shift.

Key Results
Developed a work breakdown structure to segment complex tasks into smaller, more manageable portions.
Created an advanced, automated workflow that aids task assignment and decision making, encouraging cross-team collaboration.
Gained real-time, company-wide visibility of all active projects and dependencies.
Encouraged acts of leadership at all levels in the company.
Created a culture of innovation, learning and continuous improvement.

“We have shown it is possible to let people be passionate about ideas they generate and run successfully on site, regardless of role.”

Introduction
Somabe is an industrial engineering company that designs and manufactures special machines. Each machine order is different and particular, and its development is managed as a project.

Six years ago the company was facing a number of problems:
- Tasks were assigned verbally and there was no transparency about their states.
- There was lack of awareness of the actual capacity of each department.
- Planning was based on ad-hoc effort estimates, fixed in the budget, and must-meet.
- Work was moving through the departments as a wave of large batches.
- Problems were resolved thanks to heroic personal efforts, which, at some moments, created tension between people.

The situation was clearly not sustainable. Something had to be done to become a stable and profitable business, capable of gaining customer trust and grow.

People had to take ownership of the process and make decisions concerning their work so they could act in a coherent with business objectives way.
In this situation, a change of management happened and Aitor Eguren, General Manager of Somabe, took the wheel of the company.

To improve this situation, at first, Somabe decided to adopt Scrum. For a certain period of time, this approach worked at the team level. However, a year or so later, Aitor started realizing that although they were organized in departments, they needed to manage the entire workflow to improve the project outcome.

At the same time, it was necessary to break down the machine in assemblies in order to be able to manage better their development and production and reduce the large batches.

Therefore, they needed to switch to Kanban. Said and done. They created new physical boards for each department and another one summarizing the entire workflow. Thus, they started visualizing the real status of each project and the work items that constituted it.

The benefit of Kanban quickly became evident. The method allowed all of the departments to start speaking the same language. Everybody was seeing the entire picture and their role in it. As a result, the communication between the different departments improved significantly.

From Physical Boards to an Automated Digital Experience

Visualizing their work on the physical boards at team level was useful and well accepted by the team. However, they needed to get a better understanding of:

- How their work really developed along the design and production chain?
- What was causing the delays?
- Which were the critical phases of the workflow?
- How to prioritize work items to ensure that they were processed on time and without interruptions?

Having a good overview of all the work was very exciting but it was also revealing the need for deeper improvements of the current work practices. Managing a change of this magnitude required a guidance of an expert.

After a course on “Project Management with Kanban” taught by Teodora Bozheva from Berriprocess, Aitor invited her to visit them and see if she could foster further improvements.

Software Criteria Fulfilled

- User-friendly and intuitive interface; highly customizable visualization; flexible but extremely easy to use
- Easy for adoption at every lifecycle stage by both technical and non-technical users
- Provides actual project status on the global level in real time
- Improves process efficiency, tracking and reporting
- Encourages and facilitates team collaboration
- Empowers individual contributors in the team to prioritise work and take autonomous decisions
- Helps to eliminate bottlenecks
- Supports the implementation of constructive feedback loops
- Provides profitable Total Cost of Ownership

Integrations Implemented

- SugarCRM
- Microsoft Dynamics NAV (ERP)
- Drools (BPM)
- CAD software (for design and engineering).
Teodora’s coaching gradually made the team realize that a proper control of the workflow was essential for a successful project management.

It was necessary to handle correctly the different work types, dependencies between work items, work in progress as well as to collect data to support the management decisions. Doing this manually for all the boards was too effort-consuming and error-prone.

Aitor spent quite some time studying different Kanban tools. Among all of them, Kanbanize distinguished itself the most, thanks to its automation features, powerful analytics module, and a wide variety of Kanban card features.

Somabe’s team was entirely dedicated to establishing sound project management practices. Their purpose was to ensure predictable deliveries and good quality of the machines they were producing.

The entire staff was involved in adopting new routines. Some daily meetings in front of the digital Kanban boards took longer than usual but it was important that everyone was on the same page, understood correctly the goal and acted coherently.

**Exceeding Customer Expectations**

Kanbanize brought a number of benefits to the organization:

- Easy creation of boards that visualized work at different levels and also facilitated the understanding of the work types at a team level and between departments.
- Visualizing task dependencies made people take care of the workload of their colleagues in addition to their own.
- The statistics, generated out of real data, became very helpful when planning new projects.
- Having a clear idea of the real capacity of each department was essential for resolving workload and planning issues.
- Obtaining an objective, data-based understanding of issues demonstrated that problems were due to processes, not people.
Portfolio Kanban Boards

When it comes to breaking down business silos, software platforms stand at the forefront in enabling organizations to share and collaborate across department units. Effective teams are made of individuals who align their personal goals with those of the team. This includes timelines and the ability to monitor progress together. All of this builds trust among team members, which is another key ingredient in working toward common goals.

One of the fundamental concepts in Kanbanize is the ability to break down work into smaller pieces. This is achieved via card links of a certain type. For example:

- A card can be a parent of many other cards
- A card can be a child of another card
- A card can be a relative of multiple other cards

Using these links types, Somabe achieved a hierarchical structure like this, where the top card is the parent, then there is a layer of two children, then another level of grandchildren and so on there can be unlimited layers of children.

This is the so-called Portfolio Kanban concept — when all the children Kanban Cards are moved to Done on the Team Kanban boards, the Kanban card on your Portfolio Kanban board should also be considered as Done.

Starting to manage the work by means of interconnected Kanban systems allowed Somabe to create a more streamlined workflow and minimize the wave effect. They quickly found a way to automate some of their routine actions with the help of the Business Rules Automation Engine or the so-called Runtime policies. Just a fraction of the actions that could be performed include:

- When a child card is started, mark the entire feature as started.
- When all children of a card are finished, mark the parent card as finished.
- When a card is created, and its assignee is me, change its color to red.
- When a WIP limit on the board is exceeded, post a message in Slack.

With only a couple of clicks through the administration panel, it becomes really easy to achieve a lot of the automated actions in every process.

“We decided to use Kanbanize because we find it so easy to design and modify our boards. This allows us to continuously improve our process at no cost of adapting the solution.”
The team refined their work process and developed a complex portfolio system for breaking down each client order. After being requested, a machine’s production process is broken down into 7 levels of portfolio Kanban boards containing a total number of 34 project boards.

**Tool Integration for an Automated Workflow**

It was clear since day one that Kanbanize had to be integrated with the existing technology stack at the company. As usual, it’s not reasonable to just switch from the existing process to the new one without making sure that the teams could continue to deliver. Establishing the project management basis disclosed the need to integrate the information management tools in order to increase the work efficiency. Therefore, that became one of the next objectives.

Currently, Somabe has bi-directional integrations between Kanbanize and their ERP (Microsoft Dynamics Nav), CRM (SugarCRM), project planning, BPM (Drools), and engineering tools. These integrations provide a seamless information flow between the systems while avoiding double work and possible human errors.

Entities are created in the original applications through an enterprise service bus, then mirrored in Kanbanize as Kanban cards. Once processed in Kanbanize the real information from each card is sent back to its origin in the relevant system.

As a summary, approximately 80% of all Somabe cards in Kanbanize are generated through the integrations, 10% are created through Kanbanize Business Rules Automation Engine and 10% are created manually by the users.

Kanbanize plays the role of a collaboration space that is in place to promote open communication where individuals can share and interact to help build trust. It offers a productive work environment to help achieve goals and objectives of individuals as well as those of the teams and the organization.

**Final Thoughts**

Implementing a new Lean process is not an easy task. Such a transformation requires a lot of knowledge and commitment from the management, as well as support and understanding from the teams.
Going towards a flow-based delivery method requires tooling that has to be built with a flow-based delivery method in mind. It is always a good idea to plan the baby steps first when starting a Lean Agile transformation. If there is no urgency, starting small is the Kanban way to do it.

Many people would expect to see percentages of increased productivity or economic results. What is more important for Somabe is that they’ve developed a deep understanding of their own organization, work processes, and purpose as a company. They now have the capability to reach the right goals, evolving as a team and fostering a culture of transparency and data-based management. A small company can also be a great organization!

Kanbanize
Kanbanize is a visual lean management platform that boosts team’s efficiency and productivity by applying the lean principles of the Kanban method to the way people work. The software helps companies design their workflow, create a manageable project breakdown structure for all teams, collaborate with others and track important metrics out of the box. Kanbanize eliminates the problems that are often faced in projects with many stakeholders or between distributed teams while promoting a healthy workflow with less waste and a leaner process of getting things done.

www.kanbanize.com

Somabe (Soraluze Makina Bereziak SLL) is a Spanish engineering company providing design and construction of high-quality machinery with a focus on the aluminum injection industry and its associated processes. With its extensive product portfolio, Somabe serves primarily the automotive sector. The company has displayed a remarkable growth trajectory. Their commitment to quality instrumentation and exceptional customer service have always been and remain the cornerstones of immense success.

www.somabe.com/en

Teodora Bozheva
Teodora is a software process improvement professional with more than 15 years of experience working with companies on getting better project, product and business results through effective processes. She is strongly focused on the customer’s business objectives. Teodora applies Kanban principles and practices, Lean Six Sigma and other models to integrate the organization’s processes in an efficient and manageable workflow. She supports companies in achieving a CMMI accreditation. Teodora was previously a Project Leader with the European Software Institute in the field of Agile Methodologies.

Sergey Erofeev
Sergey has gained more than 20 years of experience in software applications development and integration while working on large multinational projects. He has developed particular business know-how by taking leading roles in projects within various industries: ICT, financial, logistics, construction, manufacturing, healthcare etc. Sergey expertly develops scalable solutions that facilitate the workflow automation and reduce manual operations. He is able to merge customer and user needs with business goals, budgetary restrictions, and logistical considerations to meet project deliverables.

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