

# CASE STUDY | EKIDE **Agile Project Management with** Kanban at Ekide

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ekidegroup We are committed to the solution

#### Industry

Engineering

#### Use Case

Product Development

#### **Company Objectives**

Gain visibility of the projects in progress.

Achieve predictability through better capacity and demand management.

#### **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.

"Kanbanize is a very powerful software for managing projects with the Kanban method."

Miriam Olabarria, Industrial Engineer and leader in the improvement of project management at Ekide Group, Visión Artificial

### Introduction

Ekide Group, leading technology company, offers its services in three areas: Engineering and Manufacturing, Control Tools and Artificial Vision. Founded in 1990, it has managed to double its turnover in the last 4 years and already has multiple work centers: headquarters and 4 production plants in Spain, 1 in China and its last opening in Mexico, together with a commercial representation in the United States.

By developing its business so quickly, Ekide Group needed a way to manage all its projects without getting lost in the details and without slowing down its growth rate. The Kanban method and the Kanbanize tool have been the key elements to achieve this. Berriprocess Agility is accompanying them on their path to improve management and efficiency.

We talked to the amazing Miriam Olabarria (Engineer Machine Vision Industrial Design at Ekide) and Teodora Bozheva at the event Basque PM Day 2018 hosted at Mondragon University. They shared insights about the transformation process, the obstacles, the goals, and the results they managed to achieve. Join us to hear their inspiring story in the following pages and see how Kanbanize enabled Lean Project Management in Ekide!

### **Three Business Areas to Be Aligned**

Ekide Group has three main business lines and each one works with its own structure and processes. That is why it was important to establish clear management guidelines in each of them, and among them, always in tune with the company's general strategy.

• Engineering and Manufacturing

Design and manufacture of sets of high added value by integrating components in multiple materials for various sectors (electromedicine, rail, bus, automotive, nautical, etc.). They work for clients such as CAF, Irizar, Siemens, Seat, Grupo Antolín, Bombardier, etc.



Control Tools

This business unit is dedicated to the development of control tools for plastic and stamping parts. Some of its clients are Megatech, Faurecia, Gestamp, CIE Automotive, etc.



Artificial Vision

About 5-6 years ago Ekide inaugurated a new department. Machine Vision, as a field of artificial intelligence, is capable of capturing, processing and analyzing digital images captured from the real world in order to process them automatically according to different objectives. Maier Group, Vicomtech, Fagor Ederlan Group, Alcorta Forging Group are some of the companies that trust them in this field.

#### **Pain Point**

This new line of business has been very successful and demand began to grow rapidly. As a result of this, the work load increased more than usual and the first problems appeared with the development times of the products, the management of the multi-projects and the efficiency of the work.

#### Software Criteria Fulfilled

Complete management of all projects, sales, purchases, manufacturing in a very simple and clear way

✓ Very simple searches and with the possibility of extracting a lot of data

☑ The software is very intuitive, has a very short learning curve

☑ The possibility of exporting to an Excel file is very useful

Being able to create and save custom searches

✓ Provides real information in real time and Project Portfolio Visualization in a glance; very adaptable

☑ Easy to integrate

Simple to manage; highly customizable board design

✓Very adaptable

"There came a time when everyone was very busy and stressed, but at the same time, tasks were delayed. In some cases, we did not know where the work came from and the managers did not know how many more things the team was working on. "

#### Miriam Olabarria



## From Chaos to a Well-Oiled Machine

To solve these problems and recover their agility, Ekide Group needed, above all, to have shared visibility of all the projects in order to synchronize the management between the different specialties (mechanical engineers, software developers, workshop workers) and departments. In addition, management practices had to address the following aspects

- Offers Management
- Project Management
- Management of unproductivities
- SAT Management (Support and Technical Assistance)

When they started looking for a solution, they decided to contact Berriprocess Agility, a consultancy specializing in helping companies improve the management of their business with Kanban in the Basque Country. The first step in the Kanban method for Ekide Group was a practical training day of Kanban with Teodora Bozheva.

After finishing the class, they created a physical kanban board for hardware work and a virtual one for software.

The daily meeting in front of the board was the first team management practice with which they started. At these meetings, they analyzed the work and began to create a habit of exchanging information on current or potential problems associated with the work they carried out, discussing priorities and carrying out weekly planning. The people discovered the benefits of the method and quickly felt motivated to move forward in the adoption of Kanban in the Ekide Group.

In addition, the visualization of the work and the daily synchronization has turned out to be a very effective way for them to introduce new people to the team and the projects.

## Mature Project Management Requires Kanbanize

A few months after starting with Kanban, we began to see that the physical board did not respond to all the needs of project management. Difficulties began to arise to manage complex projects on a physical board. The daily meetings of all the team demanded more information, it was necessary to find a solution for the following problems:

- Difficult to visualize all the work in progress and the dependencies between tasks
- lack of planning and project management at the portfolio level
- lack of an adequate way to collect metrics and analyze their data
- need to define specifications of projects and tasks

To solve all this, and increase their agility, they decided to start using Kanbanize, a software tool to manage digital kanban boards. The first steps were organizational. They started by defining the workflow from beginning to end and adjusting the boards by departments (hardware, software and manufacturing).

Once they had the kanban boards ready in the Kanbanize tool, they began holding daily meetings in front of the boards projected on large screens in the office. Each team had its own meeting.

The next "feedback loop" that they introduced was the weekly planning meetings and the biweekly ones for the review of projects and offers.

Monthly they organized a meeting with Teodora about project management to review the workflow, analyze the data and make adjustments in the processes, if necessary. In this way, they have implemented all the Kanban cadences necessary to achieve horizontal and vertical coordination throughout the company.



Here we see all the boards and the management groups.



## **Project Management in Kanbanize**

The master project management board in Ekide is called General View (Fig.1). There you can see all the projects in each development phase. In Fig. 2 we see the structure of the Portfolio Kanban board – the columns are the phases that each project has to pass through and the swimlanes are Accepted, Development, Commercial Projects. Each card on that board is a project and the tasks associated with it are their child cards. We can see an example of a project card on the right side of the board in Fig.2.

#### **Unproductivity Management** 0 - VISTA GENERAL IMPRODUCTIVIDADES (ID: 39 Auto Abrir **(**)1 **(**)1 1 - FLUJO DE TRABAJO 2.1 - SOFTWARE **(**]1 2.1.1 - SOFTWARE DETA. 3 - DISEÑO MECANICO 07 4 - DISEÑO ELECTRICO 5 - MONTAJE MECANICO 6 - MONTAJE ELECTRICO 8 - COMPRAS 7 - FABRICACION 0.2 - ANTEPROYECTO **Offers Management** 0.1 - OFERTAS ₫4 **(**]1 9 - ASUNTOS **Technical Assistance** 10 - SAT Services Management

#### Fig.1 General view of the boards

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#### Fig.2 General status of projects

— EKIDE			Añadir Tablero   🗄
III 12 - AUTOMATISMOS	1	III 11 - CASOS	1
III IMPRODUCTIVIDADES	÷	🔲 0 - VISTA GENERAL	÷
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III 4 - DISEÑO ELECTRICO	i	III 5 - MONTAJE MECANICO	:
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III 0.1 - OFERTAS	₩21 ÷	III 9 - ASUNTOS	:
111 10 - SAT			₫2 :

Columns marked as tails (those with yellow triangles in the upper right corner) are used to smooth workflow, reduce waiting times and inventory, as well as to easily locate bottlenecks and solve them.

It is very important to mention that the flexibility and ease of use of Kanbanize were very useful when defining the specific boards for each department since their types of work and the corresponding flows are very different.

In Fig. 3 (on the next page) for example, we see the structure of the Mechanical Design team board. The board is different from the previous ones, since the process and its phases are different. Each team has designed its own kanban system that maps the phases through which the elements of work pass according to their type. This allows us to manage jobs with different flows, collect corresponding metrics and make better decisions.

#### Fig. 3 Mechanical design board

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	-			MECÁNICO		
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The possibility of seeing the status of projects at different levels facilitates the management of projects in several ways:

- The General View level (which encompasses all the projects Fig.) Provides an overview of the status of all projects, including indications of blockages, delays and risks associated with them. This view facilitates conversations about the dependencies between the projects, decisions about what to start and what to postpone, the risks associated with the projects, as well as the forecast of when a project could start and end.
- Operational levels (eg, Mechanical Design, Software) allow teams to focus on the important work they have to do to meet the expectations of the term and requirements clients. Again, the visualization of the blockages, errors, time that a card takes in course, and dependencies of other works, are key for the taking of fast and correct decisions, reducing the times of development and improving the internal organization of the work and the predictability of projects.
- The analysis of the causes for rework and blockages, their impact on time and cost on projects, and the definition of actions that prevent them from happening again, is something really important because it is a mechanism to establish in a natural way the culture of continuous improvement (kaizen) throughout the organization. For this Ekide Group has a board to manage and resolve precisely these issues (Fig. 4).

The obtaining of real data of the execution times of the works (represented by the cards) is an essential information for the planning of the projects since they substitute the theoretical estimations for forecasts based on real historical data and therefore more precise.

#### Fig.4 Board of Quality Matters

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AU) F	ASUNTOS - N	ASUNTOS - Puesto de N GOL	ASUNTOS - N	ASUNTOS Celula Industrial 2D N	ASUNTOS - N		
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### **Integration of Tools for an Automated Information Flow**

Kanbanize is an ideal tool for the operational management of projects.

However, for the business managers of Ekide Group it is important to know how their resources are used, their biggest investment. The management of the costs of the projects is carried out through your ERP and naturally the question has arisen: how do we transfer the information between Kanbanize and our ERP for cost management? By hand?

Another important issue that needed to be resolved is the generation of the cards. A project is broken down into hundreds of work items. Who defines all the cards in Kanbanize? Do you do it by hand copying the information that comes from the tool of creating mechanical drawings in addition to those that correspond to the development of software and other tasks?

They realized that it was important to integrate Kanbanize with the other management systems they use in the Ekide Group and for this, they turned to Berriprocess Agility again.

#### Integration with the RPS

The bidirectional integration between RPS and Kanbanize allows the following:

- Purchasing and supplier management for a project. For this purchase orders are generated and the orders status is displayed directly in Kanbanize
- Transfer of staff time imputations from Kanbanize to ERP. People allocate their hours dedicated to the cards in Kanbanize and the Integrator sends the imputations to the ERP for billing.

The integration between RPS and Kanbanize saved time and reduced management costs. Likewise, the correct use of Kanbanize allows them to estimate the budget based on real data.

In addition, the integration revealed that there were codes in the ERP that they did not even have to work on. Kanbanize allowed them to see the irrelevant work and eliminate this waste. With bidirectional integration, they realized that jobs were being carried out that nobody expected at the end of the chain. Thus, they managed to optimize their productive process and eliminate jobs that consumed resources and did not provide any value.

Resolving these issues, they got economic benefits and satisfaction from the management of the company. Likewise, the teams appreciated the opportunity to be able to focus on what they have to do without additional bureaucracy.

As a general conclusion, the transparency and automation of the flow of information had a positive impact on the process of project management, both from the organizational and economic point of view.

#### Integration with Autodesk Inventor Professional

Autodesk Inventor Professional is the tool for the preparation of the designs of the sets that are going to be produced.

The Integrator registers the information of the designs made in Autodesk Inventor as purchase orders for these designs in RPS and generates the corresponding cards in Kanbanize linking them to their projects.

This operation eliminates all the bureaucratic work, the time that this one had dedicated to it, as well as the possible errors that had happened if the work had been done manually. In addition, the cards are created directly with the corresponding dependencies to be displayed in the project correctly.

## What has been achieved?

When we talk about real results, Miriam listed a series of improvements that were achieved in Ekide Group:

- The visualization of all the work in progress, something that 1 year ago was impossible and now they are clear
- They have control of the phases of the projects
- Identify bottlenecks
- Determine the workflow of each department
- They get data from the boards, such as cycle times and cards terminated by panel. They use this data to start planning better.
- They have been able to detect blockages and defects in the process, looking for improvements as soon as possible so that the workflow progresses

From the point of view of the teams, we have achieved:

- Define the tasks to be carried out daily and weekly
- Know the workload of the equipment and the bottlenecks
- Daily meetings (feedback of ongoing projects)
- Detect blockages / rework

The boards guarantee a visualization of the process so that everyone has the same information about the status of the projects. The daily meetings they have established serve as feedback cycles to minimize deviations from the development of useful work. The teams easily detect the blocks and reworks just by seeing the movement of the cards on the board. All this significantly reduces development times, improves the coherence of the actions and the quality of the results.

At the operations level and from the managers' point of view, the improvement includes:

- Continuous monitoring of project tasks
- Effective management of project phases
- Real data for realistic planning

At Ekide Group they managed to establish a stable workflow for the entire Artificial Vision department. At any time, everyone knows the status of a project. With Kanbanize they see all the work requested and in progress; this helps them prevent equipment overload; the projects go smoothly from one phase to another without losing anything during the management of the work flow.

Project managers (PMs) value the gain of the:

- Prioritization based on clear and unified criteria
- Project planning and monitoring
- Predictability

In terms of project management, the improvement at that level is very significant, and shows that good practices can be scaled. Currently, before starting to work on a project, teams can prioritize and plan better. Basing its forecasts on real historical data, Ekide Group is more predictable, and this increases the confidence of its customers in the company.

The exception in this sense is in the projects of I + D that usually have a very long duration and very high level of uncertainty. Therefore, the next objective of the company is to introduce the management with Kanban to this class of projects.

## **Final Thoughts**

The case of the introduction of Kanban in Ekide Group is a very important case not only for the results they achieved, but for the learning and evolution that the organization experienced. Generally it is said that the transformation processes take several years, distract the staff with new work practices and cost millions of euros. That is not what happened in Ekide Group.

The approach of Berriprocess Agility made it possible for the Ekide Group's Artificial division to learn to self-organize without the constant help of consultants who did the management instead of themselves. Involving all the people in the initiative, they managed to turn the situation of chaos into a welloiled machine in a single year.

## **Final Thoughts**

As an innovative and successful company, at Ekide Group they know that in order to remain competitive, they need to preserve their agility despite rapid growth. The dedication of the whole team has paid off and together with Berriprocess Agility and Kanbanize they achieved a great improvement.

It may sound logical, but the opportunity to know everything that is in progress at all times and everything that should be done afterwards, is an almost impossible goal for modern companies. That allows Ekide Group to cut back

its development times, gain more predictability and the possibility of improving its processes continuously based on real data.

In a few months, they managed to convert the initial frustration of having a lot of work, to become a well-synchronized team capable of satisfying the client's demand, delivering faster products and services of higher quality and exceeding expectations.

#### Teodora Bozheva, Berriprocess Agility

"The dedication and involvement of Miriam Olabarría to help each of the people understand the why and how of the Kanban practices was essential for the progress of the initiative and the results achieved."

## 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



## Your company at a glance

Visualize your department or company workflows. Automate dependencies. Integrate with existing tools.

#### Get started for free



The trajectory of more than 25 years of Ekide is the reflection of effort, work, and business vision, making every opportunity profitable. It started as a project of three workers, and today,

of three workers, and today, more than 25 years later, Ekide is a more than a consolidated company, with more than 200 workers, surrounded by strong strategic partners and a leader in the engineering sector and in the development and manufacturing of new products. Ekide is proud of having made the most of each and every one of the opportunities that during these years have been on their way to success. www.ekide.es

## **berri**process

Berriprocess Agility is dedicated to helping companies improve the agility of their business with Kanban and the Kanban Maturity Model. The three pillars of our activity are:

- Certified Kanban training and high-quality workshops
- Coaching to adapt correctly what has been learned to the context of the organization
- Integration of the management tools of the company with Kanbanize (CRM, ERP, project planning, imputation of hours ...)

Our work in a company begins by making a diagnosis in order to understand their real management practices and the sources of internal (of their staff and stakeholders) and external (of their clients) dissatisfaction. Based on the findings, we define the most appropriate roadmap for the company. No two companies are the same, therefore, the solution we suggest is always tailored.

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