Orchestrate Complex Projects by Means of Simple Practices

CASE STUDY

businessmap

ULMA
HANDLING SYSTEMS

Industry

Material Handling and Logistics Automation

Size

400+

Platform Users

150+

Locations

Oñati, Spain; Polinyà (Barcelona), Spain; Aldaia (Valencia), Spain; Serris, France; Arnhem, Netherlands; São Paulo, Brazil; Lima, Perú

Specializing in

The design, production, and installation of material handling systems in installations, from small warehouses to complex systems.

Orchestrate complex projects by means of simple practices

If it is just about visibility, you might get away with any task tracker, but if you want to take it seriously, close the feedback loop and help teams make informed data-driven decisions, then Kanbanize by Businessmap is the obvious tool."

Introduction

Managing long-term projects that develop complex technical solutions, involve multiple teams of specialists, stakeholders and suppliers, is a challenge. ULMA Handling Systems has shown that the integration of Kanban practices in the project and portfolio management process allows keeping such projects under control and facilitates meeting their deadlines and requirements. This case study describes the steps the organization has taken and the key factors that have made it possible for them to successfully orchestrate large projects with high level of difficulty.

Context

ULMA Handling Systems develops comprehensive automated intralogistics solutions through an extensive range of solutions aimed at the field of Distribution and Automatic Manufacturing. The intralogistics solutions include the automation of the merchandise from its reception, transport, storage, classification, preparation of orders, until its dispatching. All this is managed by the U·Mind WMS (Warehouse Management Software), logistics software that integrates cutting-edge technology combined with cloud functionalities, which allows processing operational information together with the installation life cycle information.

They also design and develop complete baggage handling systems for the airport sector, and a wide range of modular products and solutions that meet the functional needs of any airport.

Their projects are characterized by the ideation and development of complex engineering solutions, strong delivery time constraints, involvement of different specialist teams (industrial engineers, software developers, technicians, etc.), a number of stakeholders and suppliers, meeting regulatory requirements, and very high product quality expectations. Typical project duration is between 1.5 and 2.5 years.

Managing such projects requires very good project management skills and discipline. Therefore, the UHS project managers are qualified project management professionals and use established processes based on PMBoK.
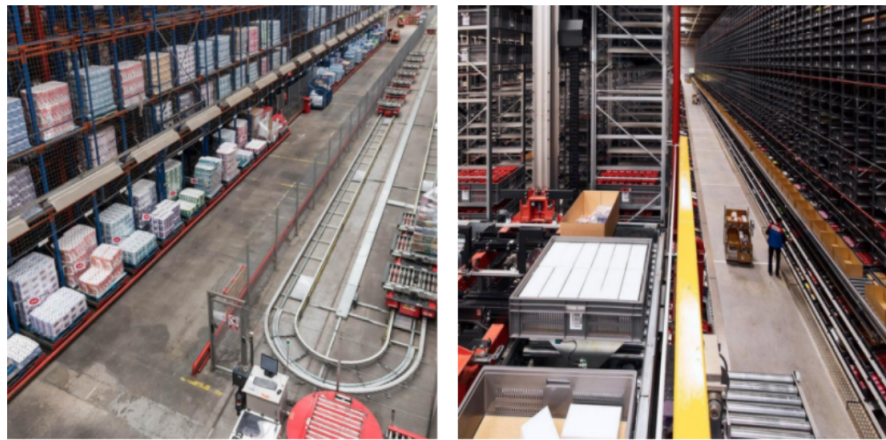
Challenges

You might think that the technical requirements of this type of projects should be specified and agreed in the beginning of their life cycle so that the engineering, development and production work can be properly conducted afterwards. This is far from the truth. Modifications to project scope and requirements occur in numerous occasions and in practically any phase of the project life cycle. Consequently, they affect many aspects of the endeavor: the technical solution, the completion of the project deadlines and milestones, budget requirements, agreements with suppliers, external developments, the internal workload and scheduled work of all stakeholders, as well as the planning of other projects. Completing milestones on time and avoiding unaffordable budget overruns is a challenge that had to be addressed.

By 2019 the organization had invested in creating the Project Management Office (PMO), providing the best training to their project managers as well as the necessary management tools.
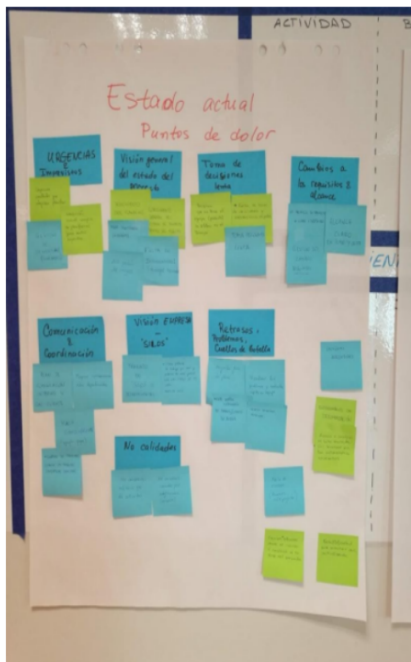
Nevertheless, they missed visibility in the overall project state as well as effective means of communicating unforeseen events and other issues related to the daily project monitoring. Their perception was that the decision making was slow and, hence, was increasing the delays.

Complicating the project management processes with additional rules and constraints would have worsen the situation. The individual workload was high enough already and supplementary requirements would have made project delivery slower, instead of accelerating it. Simpler management practices and greater cooperation between the business areas were needed.

The senior management of ULMA was committed to change this situation. They started their initiative for introducing Agile practices for project management in April 2019. As usual, they began with creating physical visual boards for project work, a board for each one of the 5-6 pilot projects and introduced the daily project team meetings. These practices facilitated the communication within the project teams and the overall understanding of the status of work.
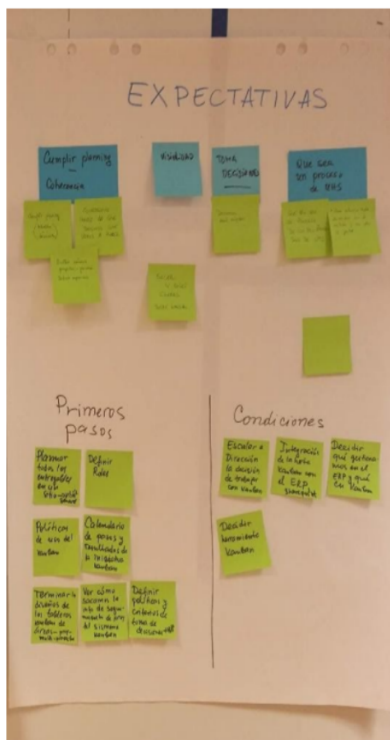
However, people were travelling to the places where the facilities were installed (in different cities, countries or continents). From out of the office, they did not have access to the boards and could not update them. Furthermore, some employees were working in several projects in parallel, i.e., their tasks were either visualized on different project boards or were not visible at all. It was very difficult to figure out what was the actual workload and assignments of the individuals as well as of the business areas. Hence, prioritizing work and handling dependencies between areas was hard. Moreover, people who were involved in different projects could hardly take part in the 15 minutes dailys and therefore, they simply rejected this practice.

Juanje Alberdi, CEO of ULMA in September 2019 summarized their situation and intent as follows: *"To increase our competitiveness, we need to improve our project management. This requires culture change as well. Therefore, we are interested in Kanban."*

Key Objectives, Concerns and Approach

In October 2019, UHS revised and updated their key objectives as follows:

- Obtain visibility in project status at all levels: business area, project level, multi-project level.
- Work in a coherent manner
- Speed up decision making.
- Meet project deadlines.
- All this by means of a process that is natural to UHS and owned by them, instead of an imposed method inappropriate to their culture and project characteristics.

Introducing a new approach to project management in a large organization conducting complex, long-term and big-budget projects is not trivial. Naturally, it rises a number of fears and concerns.

To get started it had to be decided whether to begin from a single area, project or a wider scope. Introducing the Kanban practices in various areas at once would have to meet and resolve the difficulties in all the areas at the same time, which might turn out to be difficult to handle.

On the other hand, starting with a single area would not provide the necessary visibility at the project level. Nor would it address the management of dependencies between different areas - a key issue when the organization is looking to reduce project delivery times and respond quickly to changes. Improving work management in a single area could result in local optimization without demonstrating improvement against company goals.

The selected approach had three principal elements:

· **Start with a few projects** - those whose members were enthusiastic about introducing the initial Kanban practices and willing to discover and clarify how they had to be appropriately adjusted to specific characteristics of the company's undertakings.

· **Ensure that all areas have good enough visibility** in their internal work as well as in the projects they are involved in, so that they can focus their attention on achieving the goals that are most important for the company.

· **Communicate the information about the progress** of the initiative through Barnekom – the internal communication channel at the company.

At that time, one of the top Businesses Agility thought leaders, Teodora Bozheva, started providing Kanban training to project managers, area managers, PMO members, and key project members. Both the CEO and the PMO Director participated, among others, in defining the approach for adopting Kanban practices for project management.

To facilitate access to the information from anywhere, UHS selected the Businessmap software platform as a work environment. In addition, the integration of the platform with their ERP facilitated the synchronization of data between the two systems, the creation of project cards from the ERP, and the reporting. Moreover, the work management solution collects flow-related data, the analysis of which provides a deeper understanding of the work process and capacity of the system. This facilitates data-based decision-making and the resolution of problems related to meeting project milestones.

Initial Solution

As soon as the Kanban training was delivered, UHS continued with designing the kanban boards for managing the work in the areas, at project level as well as at multi-project one. This solution addressed the following needs:

· **Provide visibility in the work status in each area** – see the work in progress and the pending one for all projects in which the persons are involved; know who is doing what and focus individual's effort on the right work item as to deliver the needed result on time and without stress; become aware of the actual amount of work in progress vs the capacity of the area; get fast feedback of the blockages and unforeseen issues that affect the normal workflow.
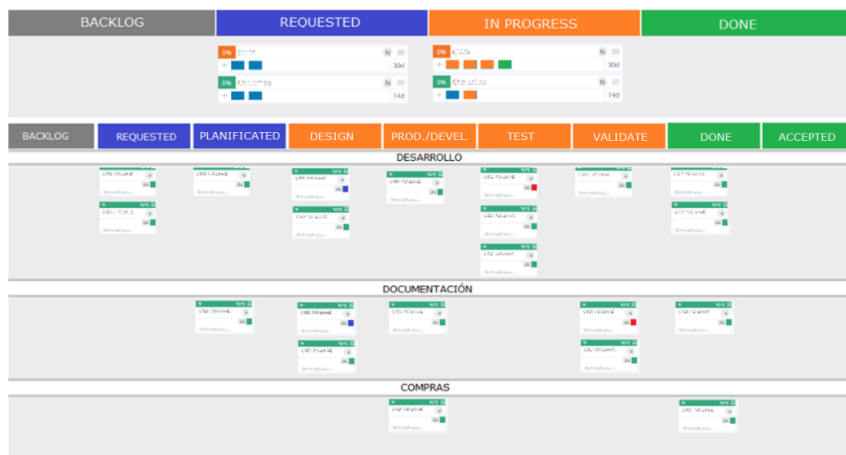
· **The board design** for each area has considered the specific characteristics of the types of work they do and the vocabulary of the company.

· **Develop the knowledge and capabilities** to adjust the board designs as to fit better the needs of the areas and the project management.

· **See the status of the project work** across its entire life cycle – visualize the points of handoff of deliverables between the phases and agree the right policies for handling it to ensure smooth and coherent working; get immediate update at project level of the impediments that occur in any of the areas; hence, take informed decisions quickly and cut project delays.
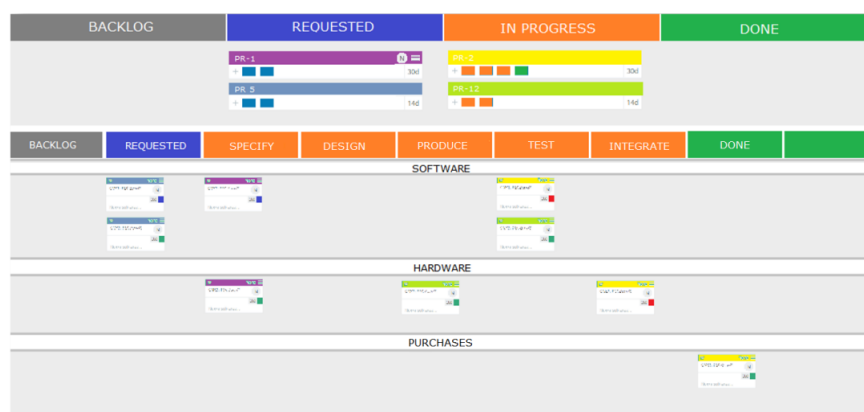
· **Extend the existing project management process** with policies related to workflow management, adding clarity and concrete guidance on how to address project challenges. Establish the foundations of a common decision-making framework focused on the project and the objectives of the company.

· **Integrating the digital work management solution with the ERP** for straight exchange of data and automatic creation of the tickets in the platform from there.

Businessmap was coaching the project managers and teams, helping them to ingrain the new habits into their routines. Following the Kanban principles of change management, they started from the current state of the processes, without introducing drastic changes in the management process or changes in roles or responsibilities.

Results Achieved within a Year

A couple of months after the effective beginning of UHS's initiative of upgrading their project management, the Covid-19 pandemic started. No need to describe how the halt of UHS's activities, those of their clients, providers, companies they purchase products from, as well as other project stakeholders affected the execution and planning of their projects. Meeting [new] deadlines and completing milestones became more important than ever. Obtaining fast feedback on the project status became crucial. Taking coherent decisions quickly became essential. So, the impediment turned into a stimulus, and an opportunity.

A year later UHS are rightly proud of the following achievements:

• **Get visibility in the status of project work at all levels**: area, project and multiple projects. Having clarity of the actual progress of the deliverables, the blockages and the associated risks allows the project managers and team members to act quickly and adequately and avoid further complications.

• **Availability of common shared information** to effectively manage dependencies between areas, between projects and such on external stakeholders and providers.

• **Have deeper understanding of the processes** through which the projects are executed. Their activity definitions are now complemented by an initial comprehension of the capacity of the systems that perform them, the real development times and the most frequent blocking issues.

• **Stronger belonging to a team**, whose members cooperate in the resolution of the problems that occur in the execution of complex projects. Strengthening the trust within the organization and the customer focus is the foundation for achieving greater competitivity.

• **Integration of the Businessmap Sofware Platform with the company's ERP** that provides continuous flow of correct data that are necessary for managing the projects and portfolio.

Key Takeaways and Next Steps

The following five factors were key to gaining the advantages presented in this case:

- The CEO, PMO director, and area managers have been leading and are directly involved in the initiative since the very first day. This has ensured that all actions have been focused on the needs of the organization, well aligned and agreed.

- Starting with the end-to-end (E2E) workflow management in projects, although involving most of areas of the company at once, has developed shared knowledge of the workload that is being carried out, the real capacity, the current oper-

  ation of the organization and the impact of the interrelationships (dependencies) between the areas on the results of the projects.

- Likewise, the visibility in the E2E workflow has reinforced the coordination between the areas and has led to the definition of pragmatic portfolio and project management policies.

- The use of the Businessmap software platform throughout the organization has harmonized the way of working and the management policies and criteria. The platform has also facilitated the visibility of work being done at different facilities.

- The integration of the platform with UHS's ERP has made possible to use Kanban and the Businessmap software solution for the management of projects of the size of those of UHS. When we talk about thousands of cards with dependencies between them and at various levels, creating them manually is unthinkable. In addition, exporting the Businessmap data to the ERP is essential for managing project costs.

The journey continues…

ULMA
HANDLING SYSTEMS

About Businessmap

businessmap

Businessmap is an Enterprise Agility solution provider aiming to discover new management ways and share this knowledge through amazingly powerful, easy-to-use tools and professional services.

Businessmap offers the most flexible software platform for outcome-driven enterprise agility. Its unmatched functionality consolidates multiple tools into one, enabling affordable deployment at scale, visibility across all projects/portfolios and alignment on goals, to deliver quality work faster. Pairing it with the proprietary consulting program delivers a tailored solution that ensures lasting value and exceptional ROI.

OUTCOMES AT SCALE

The most flexible Business Agility platform that helps your entire company align on goals & deliver faster.

Try for Free

businessmap