Learning Factories: Collaboration Platform

An efficient organization and coordination of resources, data, and processes within LCAMP OIC.

Introduction and Relevance

1

Communication Platform

For sharing updates on new developments like 3D-printed parts or new coding modules.

2

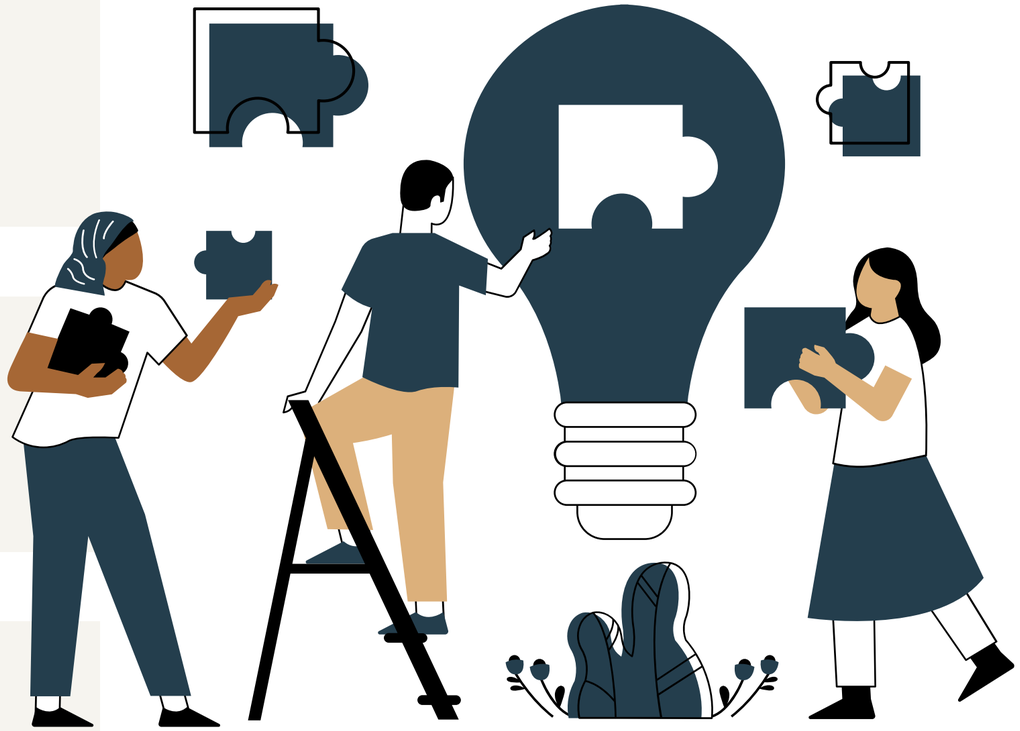
Logistics Platform

Managing inventory and facilitating internal requests and transfers of components.

3

External Purchase System

Enabling schools to purchase high-quality robotics components at affordable prices.



Goal

To streamline collaboration and make advanced robotics more accessible.

Communication Platform

Objectives:

- Build a vibrant community that **boosts creativity** and enables **seamless collaboration**.

Challenges:

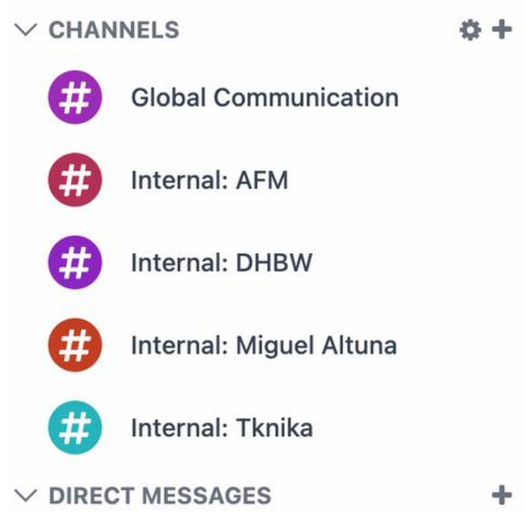
- **Isolated** projects and lack of immediate information sharing can **slow** down innovation.

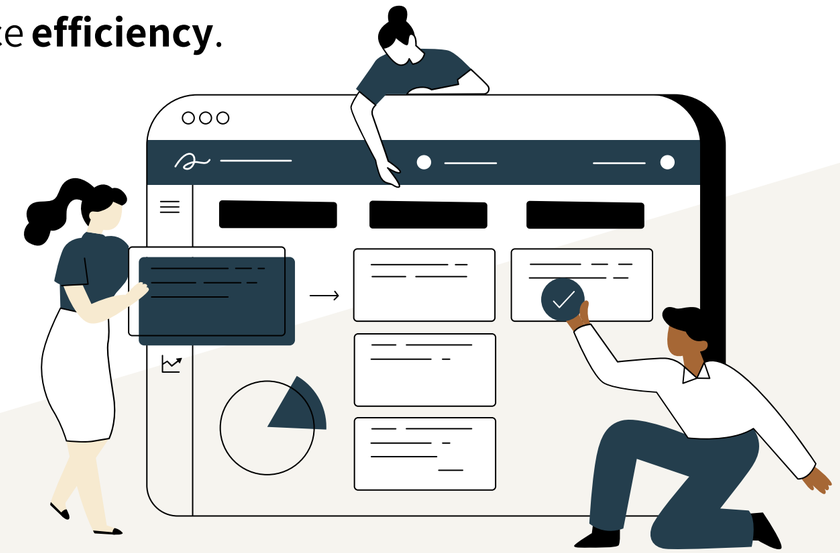
Solution:

- Community Building: Central hub for **sharing successes** and **brainstorming** collaboratively.
- Innovation Updates: Quick sharing of breakthroughs like **new robotics components**.
- Internal Coordination: Streamline **internal** resource management with digital tools.
- Logistics Integration: Connect discussions directly with logistical actions to enhance **efficiency**.

Benefits:

- Accelerates **innovation** by connecting international teams.
- Ensures all members receive **real-time updates** and can respond **promptly**.
- **Simplifies processes** from idea generation to resource allocation.





Logistics Platform

Objectives:

- Enhance efficiency in resource **distribution** and **production** capabilities among universities.

Challenges:

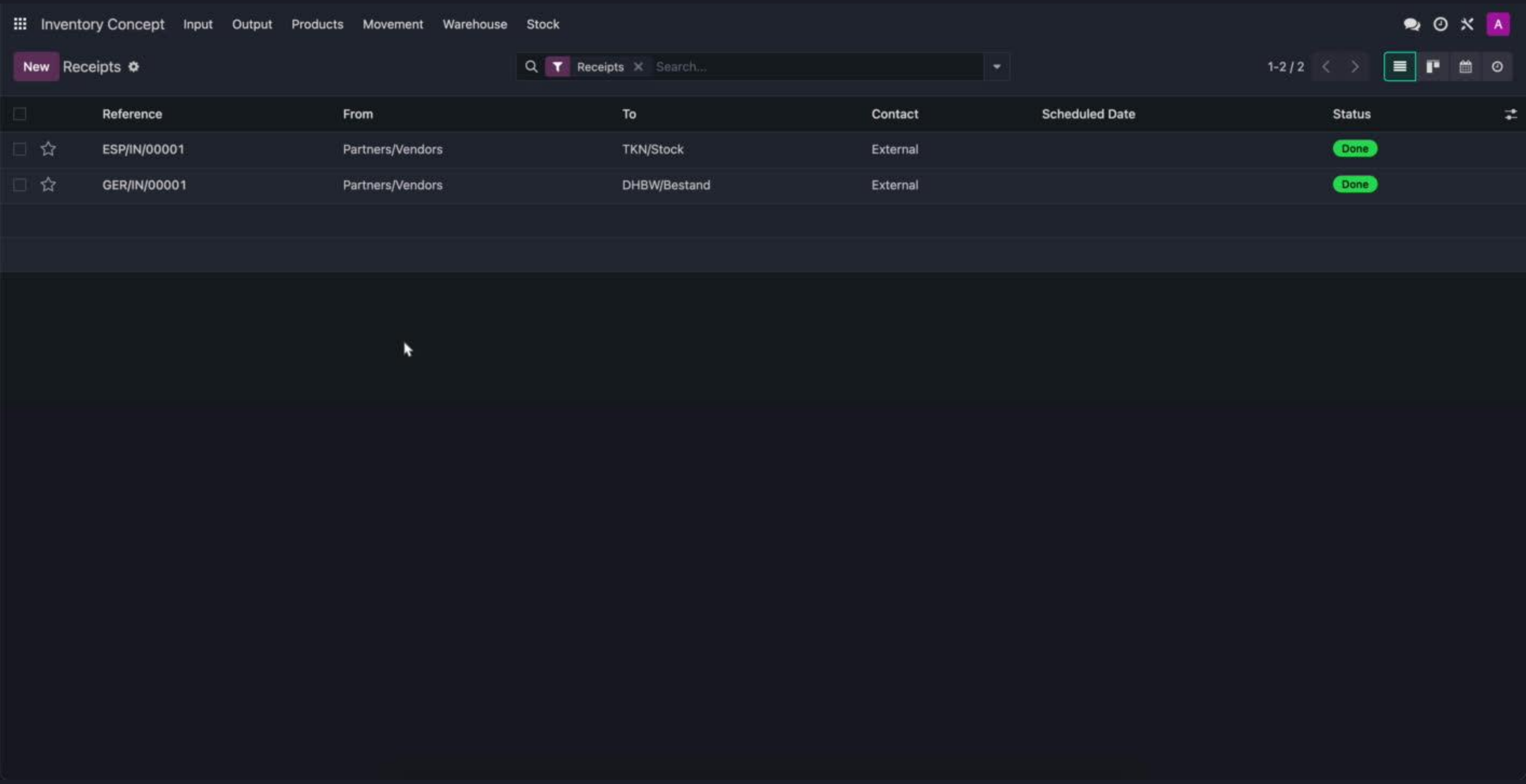
- Inefficiencies in **component procurement** and limited production capabilities can hinder project progress.

Solution:

- Bulk Procurement: Leverage **local purchasing** to profit from lower prices and improve supply chain efficiency.
- Specialized Production: Utilize **unique machinery and expertise** at certain universities to produce specialized components not available elsewhere.
- Internal Currency System: Implement a **currency system for transactions** within the network to simplify exchanges and value assessments.

Benefits:

- Reduced **costs** and improved **delivery times** through collective procurement strategies.
- Access to unique, high-quality **components** produced within the network.
- Streamlined transactions and clear valuation of components exchanged among universities.


Inventory Concept
Input
Output
Products
Movement
Warehouse
Stock
New
Receipts
Receipts
Search...
1-2 / 2
Reference
From
To
Contact
Scheduled Date
Status
ESP/IN/00001
Partners/Vendors
TKN/Stock
External
Done
GER/IN/00001
Partners/Vendors
DHBW/Bestand
External
Done

External Purchase Platform

Objective:

- Provide educational institutions with access to **affordable**, **high-quality** robotics **components**.

Challenges:

- **Limited access** to affordable and reliable robotics components can **hinder practical learning** in schools..

Solution:

- Direct Access to Components: Schools can **purchase** robotics parts **directly** from the platform, which are produced by universities known for their quality.
- Educational Kits and Tutorials: Offer **pre-assembled** kits and comprehensive **tutorials** linked via QR codes to facilitate easy learning and assembly.

Benefits:

- Educational Enhancement: Schools benefit from **hands-on learning experiences** with quality components, **enriching** their **STEM** curriculum.
- Reputation and Engagement: Universities **enhance** their **reputation** as centers of excellence and innovation, **attracting prospective students** and fostering early connections.

What could be added?

Share your thoughts and experiences.

Thanks for listening.